

M O N E T A R Y B U L L E T I N

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Published by:

The Central Bank of Iceland, Kalkofnsvegur 1,
150 Reykjavík, Iceland
Tel: (+354) 569 9600, fax: (+354) 569 9605
E-mail: sedlabanki@sedlabanki.is
Website: www.sedlabanki.is

Editorial staff:

Editorial Board: Arnór Sighvatsson, chairman
Ingimundur Fridriksson
Sveinn E. Sigurdsson
Tómas Örn Kristinsson
Tryggvi Pálsson

Others: Rannveig Sigurdardóttir, secretary
Elín Guðjónsdóttir

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Icelandic letters: ð/Ð (pronounced like *th* in English *this*)
 þ/Þ (pronounced like *th* in English *think*)

In Monetary Bulletin, *ð* is transliterated as *d* and *þ* as *th* in personal names, for consistency with international references, but otherwise the Icelandic letters are retained.

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

Introduction

The monetary stance needs to be tightened

Assuming that the policy interest rate remains unchanged, the Central Bank of Iceland's new inflation forecast shows considerably higher inflation over the next two years than it has previously forecast. The Board of Governors has therefore decided to raise the Central Bank's policy interest rate by 1 percentage point to 8.25% as of December 7. This is the sixth policy rate hike this year, to a total of 2.95 percentage points since May. At the same time, the Board of Governors has decided that the Bank's currency purchases aimed at strengthening its foreign exchange reserves will be discontinued at the end of the year. Subsequently, the sole purpose of the Bank's purchases will be to provide the Treasury with currency to service its foreign debt.

The Central Bank's last inflation forecast was published in June this year. At that time the outlook was that inflation would accelerate in the second half of the current year and the first half of 2005, then slow down around the middle of that year before resuming its upward trend in 2006. A reassessment of the outlook was made in *Monetary Bulletin* 2004/3, which was published on September 17. It found that the risk of inflation was lower in the short term, but greater in the long run. Contributing factors were the policy rate hike and the appreciation of the króna, which dampened short-term inflation. However, the prospects for faster domestic demand growth and developments in the domestic credit market suggested a wider output gap over the next two years than had been forecast in June, which in tandem with rising import prices would drive inflation further across the forecast horizon.

Since September, inflation prospects have changed substantially. Most indicators suggest that

domestic demand will grow even faster than was considered likely then. The scope of aluminium industry projects has increased, because of both new plans for the Norðurál smelter expansion and some rescheduling of Alcoa's Fjarðaál smelter project. Competition between credit institutions in the mortgage market has intensified after the banks challenged increasing lending activity by the Housing Financing Fund with offers of mortgage loans and refinancing of existing loans at lower rates of interest. These changes have greatly eased household access to credit and interest rates on indexed mortgages are at their lowest for a long while. The response has been brisk. Lending to households has soared and prices of larger housing have risen sharply. Finally, plans for tax cuts over the coming years have been confirmed, without specifying details of cuts in expenditure to offset them. There is a strong probability that the degree of fiscal restraint will prove insufficient. All these factors combine to create a more expansionary climate and stronger inflationary pressures than were expected when the Central Bank began raising its policy rate in May and published its last inflation report in *Monetary Bulletin* 2004/2 in June.

In this edition of *Monetary Bulletin*, domestic demand growth is forecast to grow much more rapidly than in June. Consequently, the output gap – i.e. production in excess of long-term potential – will be wider in 2005 and 2006 than was expected in the Bank's previous forecasts. Output is expected to exceed potential by almost 5% in 2006, instead of the 2% forecast in June. The widening output gap will drive inflation in the second half of the forecast period, if no action is taken.

It is important to underline that the forecast presented in this edition of *Monetary Bulletin* is based, as usual, on the technical assumption of an unchanged policy interest rate and exchange rate over the forecast horizon. It indicates the most probable rate of inflation if the policy rate and exchange rate prevailing in November 2004 remain unchanged. Alternative scenarios to the main forecast are also presented and show the importance of a prompt Central Bank response to the conditions ahead. With the increase in the policy rate announced above, the Central Bank has already taken steps to bring inflation down below the forecast rate.

The policy rate hike that has now been decided is exceptionally large. It must be seen in the context of recent rapid changes in the credit market and the approaching peak of investment in power stations and aluminium smelters, which according to revised plans will be reached faster and sooner than previously estimated. Another consideration to bear in mind is that, in spite of five rises in the policy rate totalling almost 2 percentage points from May to November, in real terms the policy rate in November (measured against the breakeven inflation rate on non-indexed Treasury bonds) is only marginally – if at all – higher than the natural real rate of interest, i.e. the real rate that is compatible with macroeconomic stability on average across the business cycle. Inflation expectations have been unacceptably high and have dampened the effectiveness of the Central Bank's policy rate rises. This, in turn, may have served to push inflation expectations higher. By raising its policy rate by more than usual in a single step, the Central Bank aims to ensure a higher expected real policy rate, through the dual effect of higher nominal interest rates and lower inflation expectations. This reflects the Bank's commitment to maintain a sufficiently tight monetary stance to contain inflation when the investments for the aluminium industry gain even more momentum.

On the assumption of an unchanged policy rate from this November, the outlook was for a rate of inflation well above the 2½% target in the period leading up to the review of national wage agreements in November next year. The inflation outlook over that period has taken a marked turn for the worse since the last forecast. If high inflation triggers further wage increases, prospects for 2006 will deteriorate

rate still further, which could make more rate hikes necessary that year. In order to have a sufficiently swift impact on inflation over this period, a prompt and timely response is needed.

As pointed out above, the Central Bank's policy rate in real terms has been at the boundary of what can be considered the natural real rate of interest in Iceland. In practice the financial conditions of deposit money banks (DMBs) have been easier. Their strong liquidity is reflected in monetary market rates that are below the policy rate. One reason for easy liquidity has been heavy inflows of foreign credit. The Central Bank's currency purchases and reduction in the reserve requirement in 2003 have also boosted liquidity in the market. The reduction in the DMBs' net liabilities with the Central Bank, in the form of repo transactions and their purchases of certificates of deposit, have offset increased liquidity to a large extent, but not entirely. More liquidity is inappropriate in the current climate, in addition to which the foreign exchange reserve has reached a satisfactory level. Also, the market perception has tended to be that, through its currency purchases, the Central Bank has actually been attempting to maintain a stable exchange rate of the króna, despite the Bank's announced aim. The effect of the policy rate on the exchange rate is an important channel in the transmission mechanism of monetary policy under conditions where access to foreign credit is easy, and it is important not to obstruct this channel, as explained in more detail in the section on monetary policy in the following chapter on Economic and monetary developments and prospects. Bearing this consideration in mind, the Bank has decided that its currency purchases with the aim of strengthening the foreign exchange reserve will be discontinued.

Plans for tax cuts have now been confirmed in the budget proposal. Lower taxes will increase households' disposable income even further, and stimulate private consumption. Thus a tight fiscal stance is vital. Fairly ambitious plans for expenditure restraint have been announced in the budget proposal. However, given the scale of pending economic activity the stance will not be tight enough, even if these plans were to be realised. Furthermore, the government's plans for expenditure restraint are phrased in general rather than specific terms, which on the basis of experience poses a risk of slippages. If this hap-

pens, the monetary stance will need to be tighter than otherwise, with the risk of stronger side-effects. The Central Bank will not flinch from its mandatory target of keeping inflation as close as possible to 2½%. It is probable that the Bank will need to take further action in the coming months in order to ensure that

the target is met. Such restraint will inevitably squeeze various business sectors, and households. But in the final analysis the cost of timely monetary measures will be less than if inflation is not kept under control.

Inflation outlook over the next two years has taken a turn for the worse

Long-term inflation prospects have taken a turn for the worse since the Central Bank of Iceland published its last inflation forecast in June this year. In particular this is the result of greater-than-expected growth in domestic demand. Since the June forecast, a number of factors have been driving demand growth. Planned investments for the aluminium industry have been stepped up even further, at the same time as household access to credit has been made much easier and long-term interest rates on mortgage lending have gone down. It has also been announced that proposed tax cuts over the next few years will be implemented, which will boost household disposable income even more and stimulate private consumption. The outlook is that these conditions will result in a far larger positive output gap than had been foreseen, which unless appropriate action is taken will fuel inflation in the second half of the forecast period.

I Overview of macroeconomic and inflation forecast

Assumptions of the current forecast

As usual, the inflation forecast is based on the technical assumption of an unchanged policy interest rate (currently 7.25%) over the forecast horizon and an unchanged exchange rate of the króna from the day of the forecast. It is based on the value of the Central Bank's effective exchange rate index on November 10, which was roughly 120, just over 3% stronger than assumed in the June forecast although this is the same value on which the March update was based.

Outlook for even faster growth of domestic demand than previously expected

The Central Bank's macroeconomic forecast is shown in Table 1. A sizeable upward revision has been made to the forecasts for domestic demand and GDP growth over the next two years, as explained in

detail in the main text. Private consumption is expected to increase by 9½% next year and national expenditure by 11%. GDP will grow by less than national expenditure due to heavy imports in connection with investments for the aluminium industry, but still by much more than output capacity with normal utilisation of production factors. If it turns out as forecast, GDP growth will be the highest since 1987. Investments for the aluminium industry will peak in 2006 but given the high level of investment in the previous year and a large positive output gap, GDP growth will slow down somewhat from 2005.

The inflation outlook over the next two years has deteriorated significantly

As a result of robust domestic demand growth, excess production capacity has been eliminated and the output gap has turned sharply positive, which will intensify over the forecast period. Higher inflation will inevitably result, even though the strong króna will continue to counteract domestic inflationary pressures in the short run.

1. This article uses data available on November 23, 2004.

Table 1 Central Bank macroeconomic forecast

	<i>Current forecast</i>			<i>Previous forecast</i>			<i>Change from previous forecast (percentage points)¹</i>		
	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
<i>Policy rate and exchange rate assumptions²</i>									
Central Bank policy interest rate (%).....	6.10	7.25	7.25	5.40	5.50	5.50	0.70	1.75	1.75
Foreign exchange index ³	121.5	120.0	120.0	123.0	124.0	124.0	-1.2	-3.2	-3.2
	<i>Billion krónur at current prices</i>			<i>Volume change on previous year (%)</i>			<i>Change since previous forecast (percentage points)¹</i>		
<i>GDP and its main components</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
Private consumption.....	496.8	562.6	621.8	7.0	9.5	6.8	1.5	3.3	1.6
Public consumption.....	225.2	244.1	263.1	1.3	3.1	2.5	0.8	1.1	0.5
Gross fixed capital formation	212.7	270.0	290.0	17.3	20.6	2.8	0.3	4.8	-3.7
Industries.....	131.1	177.2	189.6	29.3	29.3	2.3	-1.0	4.5	-5.0
Excl. power-intensive projects, ships and aircraft	79.7	86.9	92.7	9.3	4.3	2.0	1.8	-2.2	-5.0
Residential housing.....	56.5	67.6	74.0	13.0	8.3	5.8	1.0	4.3	2.8
Public investment.....	25.1	25.2	26.4	-18.4	-4.0	0.0	-1.4	4.5	-9.0
National expenditure	934.8	1,076.6	1,174.9	8.1	10.9	5.0	1.1	3.1	0.0
Exports of goods and services	314.6	340.5	371.4	6.5	5.7	8.9	1.5	1.7	2.9
Imports of goods and services	361.4	428.3	471.6	14.1	17.2	8.3	2.3	5.7	1.3
Gross domestic product	888.0	988.8	1,074.7	5.4	6.1	4.9	1.1	1.4	0.4
				<i>% of GDP</i>			<i>Change since previous forecast (percentage points)¹</i>		
Current account balance.....				-6.5	-10.4	-11.4	2.2	1.1	0.6
Gross national saving.....				18.2	17.1	15.7	2.7	1.6	0.2
Net external debt ⁴				101.7	105.5	111.8	-1.6	-3.2	-1.2
International investment position ⁴				-66.8	-69.9	-75.5	4.7	8.6	10.0
Output gap ⁵				1.7	3.7	5.0	1.0	2.2	2.8
				<i>%</i>			<i>Change since previous forecast (percentage points)¹</i>		
<i>Main labour market aggregates</i>									
Private sector wages, % change between annual averages				4.5	6.0	6.0	-0.5	0.5	0.5
Labour productivity, % change between annual averages				3.4	2.1	1.6	0.9	0.1	0.1
Unemployment, % of labour force				3.1	2.4	1.8	0.1	-0.1	-0.2

1. Change since *Monetary Bulletin* 2004/2. 2. Annual averages, assuming unchanged interest rates and exchange rate from the day of forecast.

3. Percentage-point change in index from previous forecast. 4. Net external debt and GDP are calculated at comparable SDR exchange rates.

5. As a proportion of production capacity in the economy.

The inflation forecast is shown in Table 2. Inflation is forecast at 3½% one year ahead. In June an inflation rate 4% was forecast for one year ahead, but over the one-year horizon corresponding to the current one-year forecast (i.e. up to and including Q3/2005), an inflation rate of 3% was forecast. Two

years ahead, inflation is also forecast at 3½%, while in June, inflation of only 2½% was forecast two years ahead. It should be noted that the June forecast horizon spanned only Q2/2006, while the current forecast includes Q4/2006, close to the peak of investments for the aluminium industry.

Table 2 Central Bank inflation forecast

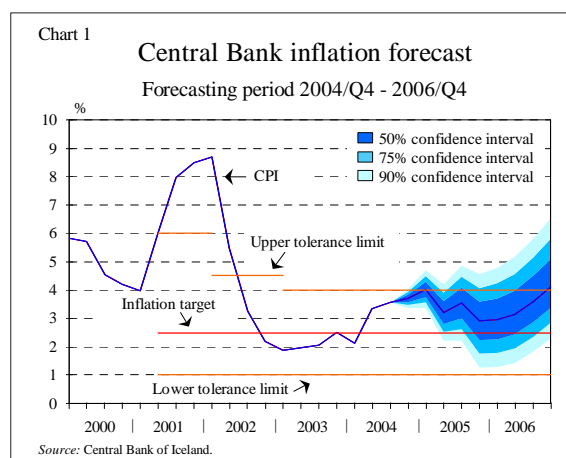
%	Percentage change on previous quarter	Annualised quarterly change	Change on same quarter of previous year
2002:1	1.0	4.2	8.7
2002:2	0.4	1.6	5.5
2002:3	0.2	0.7	3.3
2002:4	0.6	2.3	2.2
2003:1	0.7	2.9	1.9
2003:2	0.5	2.0	2.0
2003:3	0.3	1.1	2.1
2003:4	1.0	4.1	2.5
2004:1	0.3	1.3	2.1
2004:2	1.7	7.0	3.3
2004:3	0.5	1.9	3.6
2004:4	1.1	4.7	3.7
2005:1	0.7	2.6	4.0
2005:2	0.9	3.7	3.2
2005:3	0.8	3.2	3.5
2005:4	0.5	2.2	2.9
2006:1	0.7	2.8	3.0
2006:2	1.1	4.4	3.1
2006:3	1.2	5.0	3.6
2006:4	1.0	4.2	4.1

Figures indicate changes between quarterly averages of the consumer price index. Shaded area indicates forecast.

%	Change, year-on-year	Change within year
2001	6.7	9.4
2002	4.8	1.4
2003	2.1	2.4
2004	3.2	3.8
2005	3.4	3.0
2006	3.5	4.3

Shaded area indicates forecast.

Chart 1 presents the forecast and the estimated confidence intervals. The Bank evaluates the upside and downside risks to the forecast as symmetric one year ahead. However, there is an upside risk in the longer term.



It is important to remember that, as always in Central Bank of Iceland forecasts, an unchanged monetary policy stance is assumed over the forecast horizon. Indeed, the main task of monetary policy in the medium term will be to ensure that the potential overheating implied in the forecast does not materialise, and that the inflation target will be attained. In particular, the forecast serves the purpose of guiding the Central Bank in its monetary policy decisions rather than describing the way that the Bank considers developments are most likely to unfold in the coming years. In all probability the Bank's policy rate will be higher over the forecast period than assumed in the forecast.

II External conditions and exports

Fairly robust global growth and low inflation

In recent months international institutions have revised their growth forecasts downwards for this year and 2005. Nonetheless, GDP growth in the US is still forecast at just over 4% this year and 3½% next year. Rather slower growth is forecast in the euro region, at 2½% in both 2004 and 2005. After a spurt in Q1, growth in Japan slowed in Q2. Surveys of business and consumer confidence are upbeat and the outlook is moderately optimistic that, in the next few years, Japan will work its way out of the economic troubles that have beset it for the past 10-15 years. Growth in the developing countries has varied widely but on the whole it has been running high and outpaced the industrialised countries. The IMF now

Table 3 Main assumptions for developments in external conditions

	Current forecast ¹			Change from previous forecast ²		
	2004	2005	2006	2004	2005	2006
Marine production for export	7.5	4.0	1.0	1.0	0.5	-1.0
Prices of marine products	0.0	5.0	2.0	3.5	3.0	0.0
Aluminium prices	13.2	-2.7	-7.0	1.4	-7.7	-10
Prices of exported goods and services.....	2.7	2.4	0.2	2.5	0.1	-1.6
General import prices	3.5	2.0	2.0	1.5	1.0	0.5
Of which fuel prices ³	27.7	9.3	-2.2	10.2	25.6	5.8
Terms of trade for goods and services.....	1.0	1.3	-1.5	2.8	0.0	-1.7
Foreign short-term interest rates (%).....	2.3	3.5	4.0	-0.2	0.0	0.0

1. % change year-on-year, except for interest rates. 2. Change since *Monetary Bulletin* 2004/2. 3. Weighted average of petrol (20%) and crude oil prices (80%).

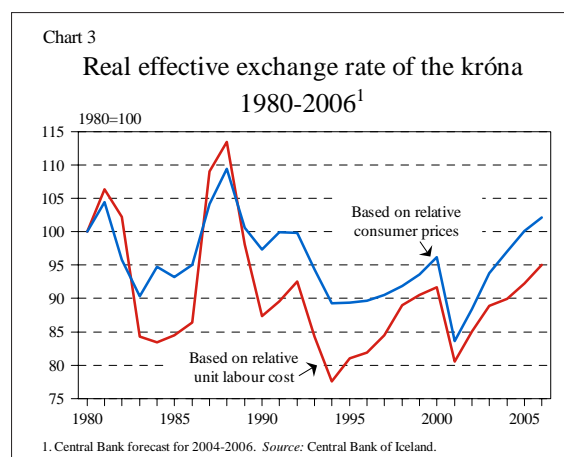
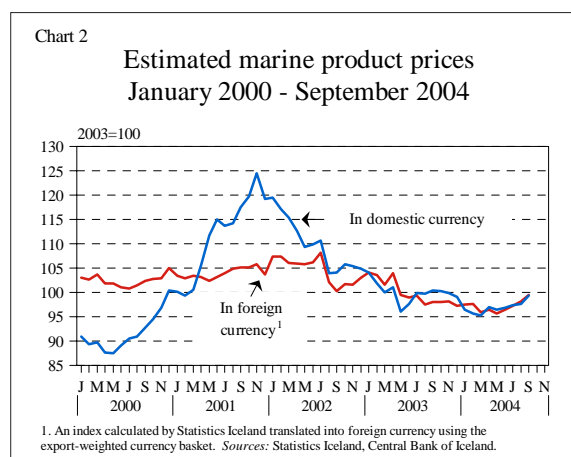
forecasts global growth of 5% this year and 4.3% in 2005. Although inflation has been kindled by higher oil prices in much of the world, it is generally expected to remain low in the industrialised countries, at around 2%. More details about the assumptions made for external conditions in the Central Bank's macro-economic forecast are presented in Table 3.

Slight rise in merchandise export prices

Prices of marine products, especially demersal products, have been climbing recently from the low at the beginning of the year. The current forecast assumes that marine product prices in 2004 will be broadly the same in foreign currency terms as in 2003. Aluminium and ferrosilicon prices have soared recently – the forecast assumes that, in foreign currency terms, aluminium prices will be up by more

than 13% from last year and ferrosilicon by 20%. Prices of other merchandise exports are expected to rise by 7% from 2003. Overall, merchandise export prices are expected to increase by almost 3% and prices of total exports by just over 4%. Over the next two years, marine product prices are expected to rise by a total of roughly 7% while aluminium will slip down. Total export prices will increase by 1½% next year but remain broadly unchanged in 2006.

The forecast assumes that the exchange rate index will be 1.6% lower on average than in 2003, but remains unchanged from November 10. This implies that, on average, the exchange rate index will be 1.2% lower next year than in 2004. The assumed global price and wage trends and the corresponding domestic developments as forecast imply that the real effective exchange rate based on relative CPI will

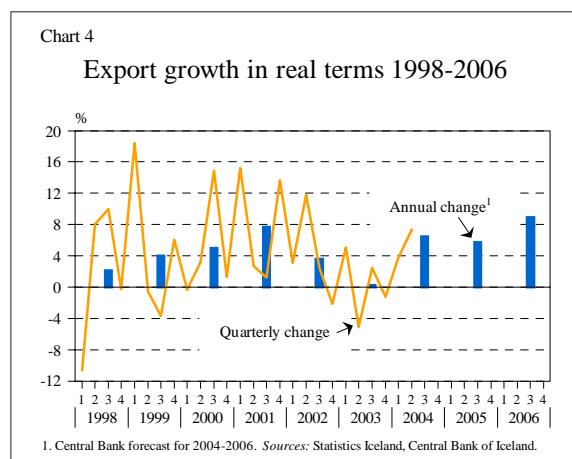


strengthen by just over 3% next year and roughly 2% in 2006. In terms of relative unit labour cost it will appreciate by 2½% and roughly 3% respectively.

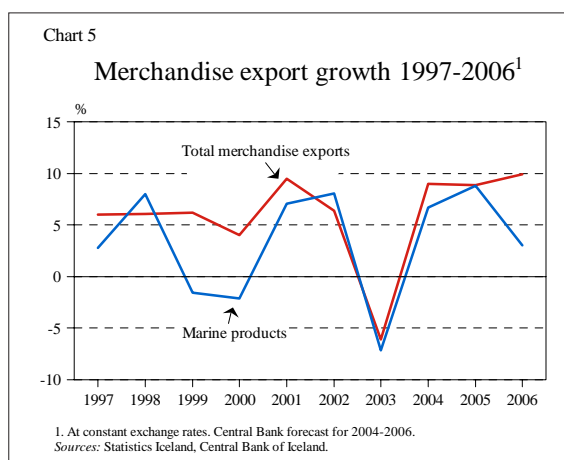
Export volume grows as well

The fish catch over the first nine months of 2004 was 14% down year-on-year. The main factor at work was a 19% contraction in the pelagic catch. The much more valuable demersal catch increased by 3% in volume terms. Statistics Iceland estimates that catch value, measured at constant prices, decreased by 0.8% over the period.

Statistics Iceland reports that marine product export value rose 5.9% year-on-year over the first three quarters of this year. On the basis of these data and an expected decline in the average domestic-currency price of marine products this year, the Central Bank forecasts that marine exports will grow in volume by 7.5% in 2004. Exports of aluminium are forecast to rise by 2% and ferrosilicon to contract by 4%, with increases of 18% in other merchandise exports² and 5.2% in services, at constant prices. Exports of aluminium are expected to increase by 31% in 2006 when the Norðurál smelter expansion is completed. Smelting facilities currently under construction will go on stream in 2006-2008. Growth of other merchandise exports and services exports is also expected to be robust over the forecast horizon.



2. In particular, exports of pharmaceuticals, medical equipment and food processing equipment. Growth forecasts are based on information from leading companies in these sectors.

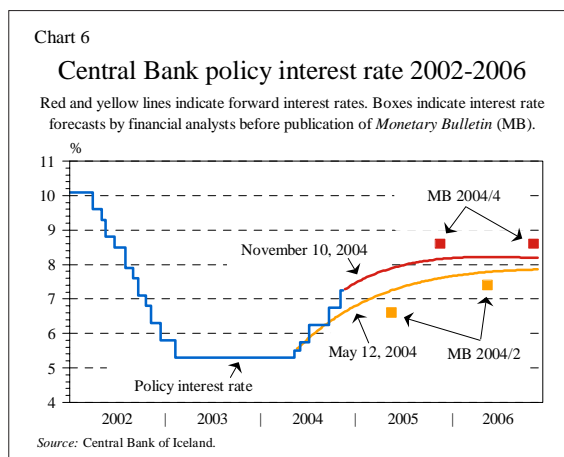


III Financial conditions

In *Monetary Bulletin* in September it was concluded that financial conditions of the economy were still favourable for borrowers, despite a slight tightening since the beginning of the summer, and unambiguously easier for households. Broadly speaking this finding is unchanged, despite a considerable rise in short-term interest rates since the spring and two hikes since September when *Monetary Bulletin* 2004/3 was published.

Central Bank policy interest rate hikes continue

Since the spring, the Central Bank has sought to tighten the monetary policy stance in response to surging demand, rising inflation and credit growth. On the back of the 0.5 percentage point rise



announced when *Monetary Bulletin* 2004/3 was published in September, the policy interest rate was raised by 0.5 percentage points in the beginning of November. This was the fifth policy rate hike this year, bringing the total increase to 1.95 percentage points.

In accordance with the Central Bank's declarations in recent editions of *Monetary Bulletin* that continuing policy rate rises could be expected, market agents clearly anticipate further increases. Indications can be seen, for example, from implicit forward interest rates that can be derived from the yield curve on non-indexed bonds. Given certain assumptions, market agents' expectations about the shorter end of the yield curve can be inferred from the forward rates. On the basis of this analysis, the market expects the policy rate to peak at about 8¼% two years ahead, which is somewhat above the prevailing expectations in mid-May when the Central Bank prepared its previous inflation forecast, reflecting an increase in the policy rate since then beyond what the market apparently expected at that time. The market appears to expect the policy rate to be raised by around 1 percentage point over the next two years, which is a rather flatter profile than was foreseen in June.

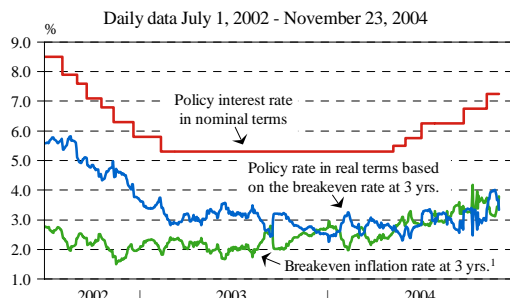
Interpretation of forward interest rates needs to take into account that they may also incorporate an investors' risk premium and therefore diverge from the market agents' actual expectations.³ It may be useful to incorporate information from the survey of financial analysts' evaluation of policy rate developments for the next two years into the analysis. On average, analysts forecast the policy rate to reach 8½% one year ahead, where it will broadly remain until the second half of 2006 (see Box 5). This is a marginally higher and steeper profile than can be read from forward rates, which is the opposite pattern to June.

Despite recent rises, the policy rate in real terms (calculated on the basis of the breakeven inflation rate defined as the spread between non-indexed and indexed three-year Treasury bonds) is only slightly

3. The risk premium may be seen as a premium that investors require due to uncertainty about future interest rate developments or for positions in securities that may later prove difficult to unwind. A further complication could be that the risk premia may vary over time.

higher than over the past half year, but rose in November after the Central Bank's latest hike. The interest-rate differential with abroad has widened and continued to bolster the króna – the exchange rate has been quite stable over the past year. Interest rates in foreign credit markets are still very low. The sluggish recovery among most of Iceland's trading partner countries probably implies that the increase in short-term rates will be modest in the near term. Icelandic businesses, financial undertakings and to some extent households as well are therefore likely to enjoy favourable financial conditions in foreign credit markets in the period ahead.

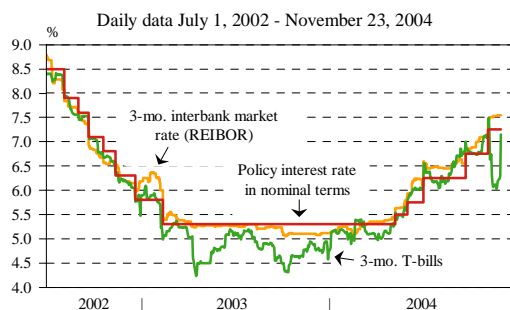
Chart 7
Nominal policy interest rate, inflation expectations and the policy rate in real terms



1. Defined as the spread between non-indexed and indexed three-year Treasury bond yields.
Source: Central Bank of Iceland.

Other short-term interest rates have not fully followed the rises in the Central Bank policy rate, and towards the end of November lay well below it. Average yields on 3-month and 6-month Treasury

Chart 8
Policy interest rate and other short-term market rates: Treasury notes and REIBOR



Source: Central Bank of Iceland.

bills were 6.4% and 6.9% respectively in the first half of November, marginally above their August averages of 6.3% and 6.5%.

Foreign short-term interest rates edge up from a historical low

Foreign short-term interest rates have edged up from their historical low, in pace with higher policy rates in the US, UK and several other countries. The most important factor is that the European Central Bank's (ECB) policy rate has still not risen, because Iceland's foreign exchange exposure is probably greatest against the euro. Thus higher foreign short-term rates are still not significantly affecting the Icelandic economy, except insofar as expectations of higher rates attract debtors towards longer-term borrowing even though long-term interest rates are higher at the moment. Since September there has been little change in foreign short-term rates, except that the US Federal Reserve raised its funds rate by 0.25 percentage points on September 21 and again on November 10. The ECB is not expected to raise its key interest rates in the next few months and the Bank of England's last hike was in March. In the current forecast, an average foreign short-term rate of 3½% is assumed next year, rising to 4% in 2006. This assumption is unchanged since the June forecast.

Chart 10
The Central Bank policy interest rate and T-notes

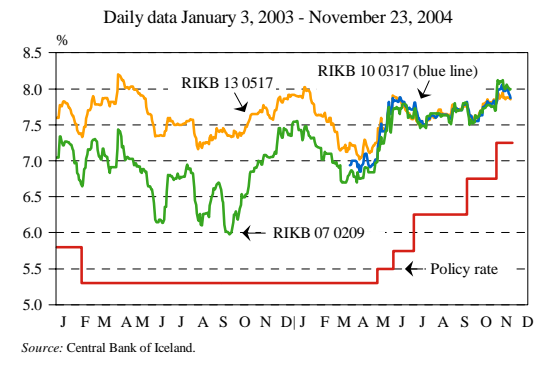


Chart 11
Yields on indexed long-term bonds

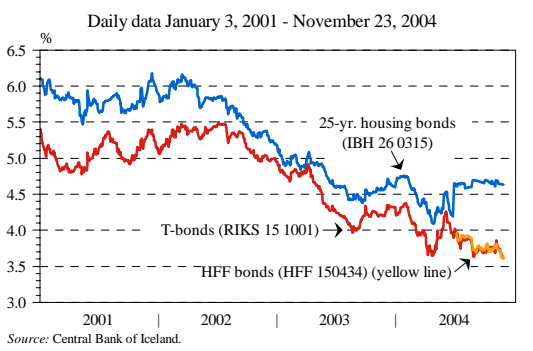


Chart 9
Domestic and foreign short-term interest rates and the interest-rate differential with abroad

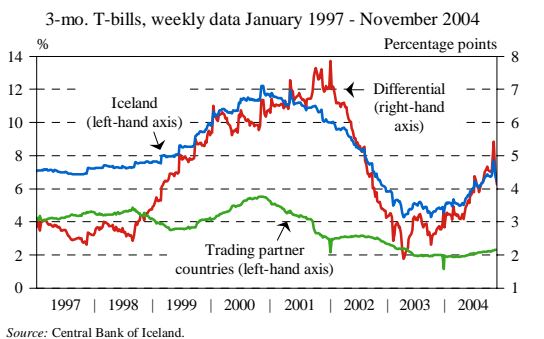
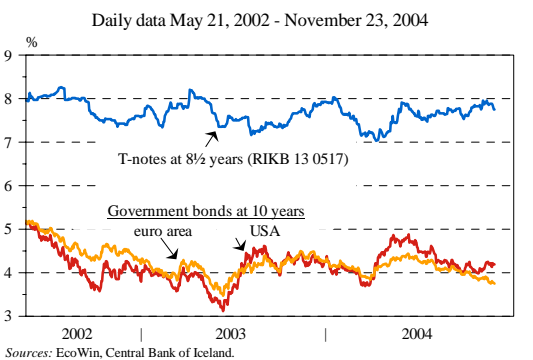
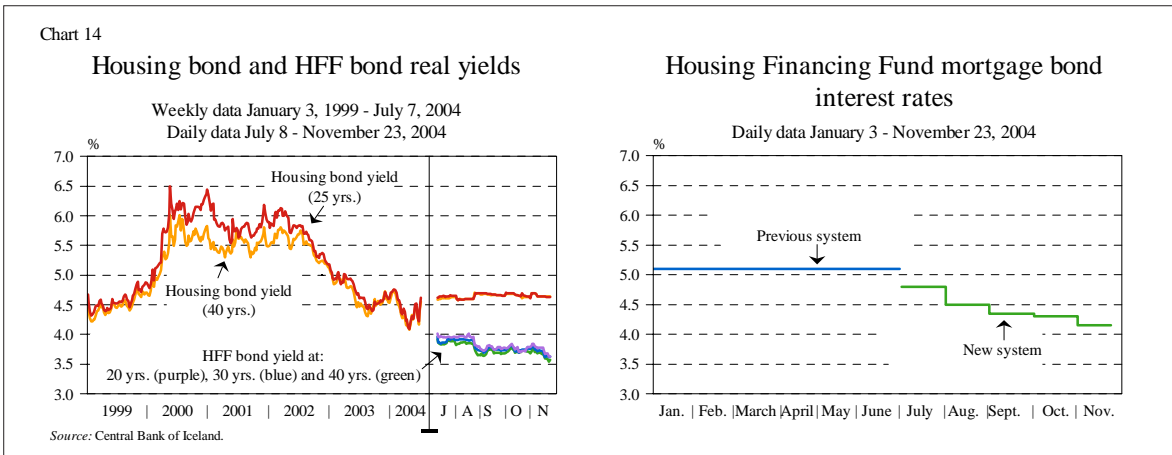
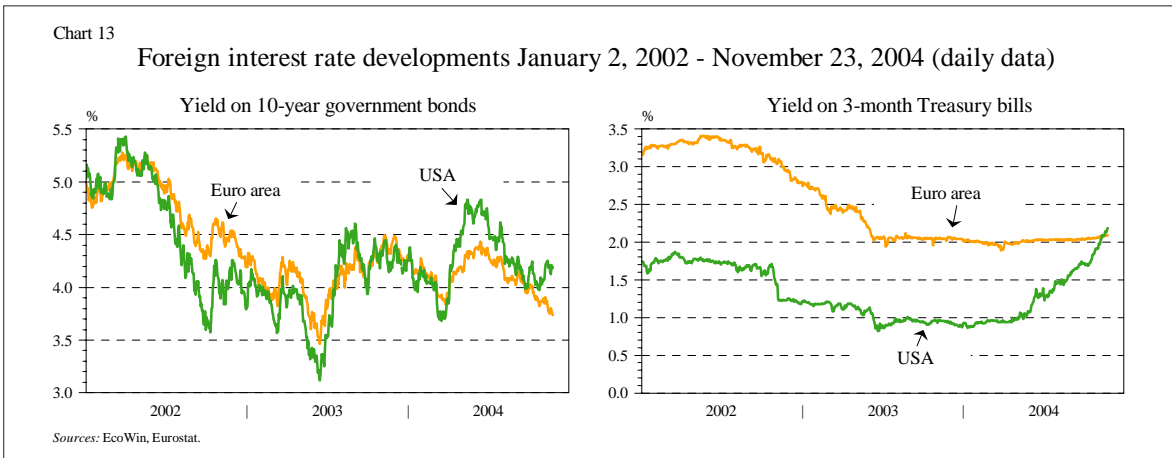


Chart 12
Long-term interest rates in Iceland and abroad





Non-indexed T-note yields rose in pace with the policy rate, but indexed and foreign long-term interest rates have fallen

Until the policy rate hike early in November, yields on non-indexed Treasury notes had remained fairly stable since the spring. They increased after the policy rate rise was announced, most sharply on notes with the shortest maturity. Towards the end of November, for example, the yield on six-year T-notes was roughly 0.1-0.2 percentage points above the average for the second half of September and all of October.

Long-term indexed bond rates, on the other hand, have shown a marked drop in recent months, which can be explained by changes in the housing loan market, i.e. the introduction of cash mortgages to replace housing bond mortgages and the banks' entry into the

housing finance market. Yields on Housing Financing Fund (HFF) bonds have been some 0.3 percentage points higher than on 10-year government bonds, which have hovered in the range 3.6%-3.8% in recent weeks.

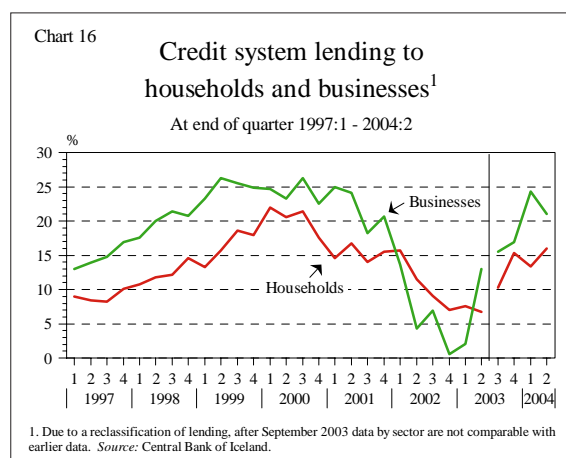
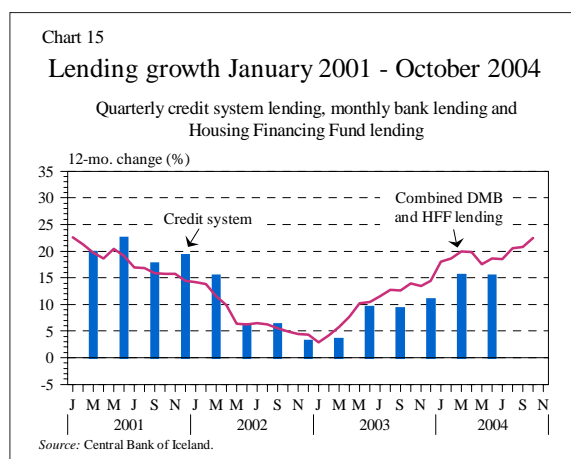
Foreign long-term interest rates have inched down over the past three months, continuing the pattern since the early summer. Rates on 10-year US T-bonds have been in the range 4.0%-4.3% for the past four weeks and corresponding Euro benchmarks in the range 3.7%-3.9%.

Non-indexed lending rates of commercial banks and savings banks have risen in fairly close line with the Central Bank policy rate, while indexed lending rates went down by 0.5 percentage points on average in the first half of September.

Credit and money continue to surge

The surge in credit is evidence of favourable economic and financial conditions. In recent months credit growth has continued to gain momentum. Lending by the credit system as a whole grew by 15.4% over the twelve months to the end of June. Data for the credit system as a whole until the end of September are not yet available, but an approximation of the growth rate can be obtained by adding lending figures for the deposit money banks (DMBs), HFF and pension funds. At end-September their twelve-month lending growth was 22%. Lending to the corporate sector showed particularly rapid growth, having increased by more than one-fifth at the end of June and by almost one-third at the end of September. Lending to households has also soared over the past two quarters. Annual growth in combined household lending by DMBs, pension funds and the HFF amounted to 14% at the end of September. Data for DMB and HFF lending are available until the end of October. Domestic lending by DMBs grew by more than 7% over the month and one-third over one year. To some extent, the increase in DMB lending is at the expense of the HFF, and perhaps the pension funds as well, although no data are available for the latter's lending in October. At the end of October, combined DMB and HFF lending had increased by slightly less than 23% in the space of a year.

Growth in broad money (M3) has been in the range 15-25% since spring 2003 and close to 20% over the past twelve months. Such strong growth is obviously incompatible with price stability in the



long run, even if the short-term link between money and inflation appears relatively weak.

Slight strengthening of the króna but equity prices have slipped recently

The exchange rate has been quite stable over the past few months. Changes in the exchange rate have therefore had little impact on financial conditions. The Central Bank's June forecast assumed an exchange rate index value of 124. The index was close to 122 when that forecast was reviewed in September and in recent weeks it has been near 120.

After falling in October, equity prices have climbed back in recent weeks and remain high by common measures. In mid-November, after the slide, the ICEX-15 index still stood more than 60% higher than at the beginning of the year and 150% higher year-on-year. In fact, ICEX-15 was almost 6% higher on average in the first three weeks of November than the average for August, so the position has changed little since financial conditions were last assessed before the publication of *Monetary Bulletin* 2004/3 in the beginning of September.

Increased supply of lower-interest mortgage loans has boosted household financial conditions

The bulk of household debt is fixed interest, indexed and long-term, while just over one-tenth consists of short-term debt or variable-interest loans that track changes in the Central Bank policy rate. Even though the lion's share of their long-term debt carries fixed interest, households can achieve considerably easier payment burdens by refinancing their stock of debt, if

the spread between the two is wide enough to offset refinancing costs over a relatively short period. Interest on the mortgage loans that banks have been offering households recently is 0.95 percentage point lower than the previous housing bond rates. The banks lent some 55 b.kr. in mortgages from the time they began offering new terms late in August until the end of October. A large share of those loans was used to prepay older HFF loans (see Box 1).

Corporate sector financial conditions are favourable and have changed little since September

Financial conditions of the corporate sector have shown little change since September. More diverse channels of finance are open to businesses than households, and are correspondingly more difficult to evaluate. A large amount of the stock of corporate

debt is foreign in origin and at the end of September more than 60% of companies' debt with DMBs was exchange rate-indexed. International interest rate and exchange rate developments therefore exert a strong impact on the corporate sector's financial conditions. Overall, no significant change can be discerned in international interest rate trends since the last analysis of financial conditions in September. However, in the US the federal funds rate has been raised twice by a total of 0.5 percentage points and is currently 2%. Short-term rates are still extremely low and on average have only inched up slightly since September, while long-term rates have trended downwards. At present, corporate spreads are considerably lower than 1-2 years ago, which may benefit Icelandic businesses. In the US, corporate spreads have fallen by 1-1½% from their peak in 2002.

Box 1 Main changes in the housing market in 2004

Major changes have taken place in the Icelandic mortgage market this year. The state Housing Financing Fund (HFF) has expanded its activities and the commercial banks have captured a share of the market.

The HFF's maximum loan amounts were raised in the beginning of the year and again in October. In total they were increased from 8 m.kr. for housing in the secondary market and 9 m.kr. for new housing to 11.5 m.kr. for either category. The combined ceiling for main and second mortgages has also been reset at 13 m.kr.

The format of HFF bonds was changed in July. Loans are now disbursed to borrowers in cash, instead of the old tradable housing bonds. Interest rates are fixed but reflect market yields at the time the mortgage bonds are issued. They are in an annuity format with a maturity of 10, 20, 30 or 40 years and two due dates per year. Interest rates on mortgage loans had come down to 4.15% at the end of November, compared with 5.1% on the housing bonds that they replaced.

At the end of August, the commercial banks responded to the changes in HFF terms by offering CPI-indexed mortgages at a lower rate of interest (4.3%) and a loan-to-value ratio of up to 80% (relative to market prices) or 100% (of fire insurance value), whichever was lower. As a rule these loans are indexed

with a maturity of 25 or 40 years, and carry a fixed rate of interest (in some cases with five-year review clauses), which had come down to 4.15% at the end of November. Since these loans are not confined to housing purchases, they can also be taken for refinancing and mortgage equity withdrawal. Some savings banks and pension funds have responded to this competition by lowering their interest rates and raising their loan-to-value ratio.

The HFF's increase in its maximum loan amounts in October was made earlier than planned, and its loan-to-fire insurance value ratio was increased from 85% to 100%. In turn, the banks began offering 100% loans, although these are subject to various restrictions and differ in a number of ways from the 80% loans on offer. For example, their maximum amount is set at 25 m.kr., while 80% loans are unlimited. Another requirement is that they are only used to finance housing purchases, and the borrower's debt service capacity is put through a more stringent evaluation process. From August 23 to the end of October the banks had disbursed mortgage loans amounting to more than 50 b.kr. A large proportion of the new borrowing has been used to prepay older loans from the HFF, whose market share has contracted recently.

Table 4 Changes in financial conditions since September 2004

	4 weeks to August 30	First 3 weeks of November	Sectoral impact ¹			
			House- holds	Export and traded goods	Financial undertakings	Other business
Policy interest rate in real terms ²	3.1	3.8	-	-	-	-
Short-term interest rates ³	3.2	3.0	+	+	+/-	+
CPI-indexed domestic interest rates (yield on 40-year HFF bonds) ⁴	3.8	3.7	+	.	+/-	.
Average non-indexed domestic bank rates.....	12.1	12.6	-	-	.	-
Average CPI-indexed domestic bank rates.....	8.0	7.5	+	+	.	+
Foreign short-term interest rates (3-month T-bills) ⁵	1.9	2.1	-	-	-	-
Foreign long-term interest rates (10-year T-bonds) ⁵	4.2	3.9	+	+	+	+
Exchange rate index.....	121.7	120.0	+	-	+/-	+/-
Equity prices ⁶	3,216.6	3,401.0	+	+	+	+

1. '+' indicates more favourable financial conditions, '-' less favourable, '+/-' ambiguous and '.' not applicable. 2. Deflated by 3-year breakeven inflation rate. 3. On three-month T-bills. 4. HFF = Housing Financing Fund. 5. Weighted with euro 2/3 and US dollar 1/3. 6. ICEX-15 index. Sources: EcoWin, Iceland Stock Exchange and Central Bank of Iceland.

Buoyant equity prices imply easy corporate financial conditions. Even after a considerable downturn in equity prices in recent weeks, the ICEX-15 index is still around the same level as in September and much higher than at the beginning of the year.

On the whole, corporate sector financial conditions have changed little. Domestic short-term interest rates have risen, but so have inflation expectations, and foreign interest rates are still very low and are hardly likely to increase rapidly in the near future.

Financial conditions of financial companies marginally tighter

In the September analysis, the financial conditions of financial companies were deemed marginally tighter than in the spring. In November, the policy rate was 1 percentage point higher in real terms than the average in the first half of September, based on the three-year breakeven inflation rate. Financial companies have been lengthening the maturity of their foreign borrowing in recent months, which increases their debt service burden, but this has been offset by the downward trend in long-term interest rates in the past few months. The banks' funding appears to be smooth and their interest rate premia have probably gone down recently, if anything. Recent equity offerings have also been well subscribed.

IV Domestic demand and output

When the last macroeconomic forecast was published in the beginning of June, no data were available for GDP growth during the current year. The national accounts for the first two quarters have subsequently been published and were at hand when the outlook was assessed in September. They show that GDP growth and national expenditure this year are heading beyond what was forecast in June. Private consumption growth in H1/2004 was the highest for five years and gross fixed capital formation is soaring, especially in business investments including the power and aluminium sectors. However, in spite of rising exports, foreign trade made a negative contribution to GDP growth – as it did during the last three quarters of 2003, albeit on a smaller scale now. GDP growth in the first half of 2004 was 5½%, and with broadly the same pace expected for the second half, the forecast is that GDP will grow by just under 5½% over the year as a whole. Growth is expected to remain robust for the next two years.

Table 5 Indicators of demand in the first three quarters of 2004

<i>% change from year before unless otherwise stated</i>	<i>Q1</i>	<i>Q2</i>	<i>Q3</i>	<i>In 2004 (period)¹</i>	
Grocery turnover, in real terms	3.8	3.4	4.3	3.9	Jan.-Oct.
Payment card turnover, in real terms ²	9.8	9.8	4.9	7.4	Jan.-Oct.
of which domestic	8.9	8.6	4.0	6.3	Jan.-Oct.
of which abroad.....	27.3	29.1	18.4	25.2	Jan.-Oct.
Car registrations, increase in number	35.8	28.4	19.5	26.2	Jan.-Oct.
Cement sales, volume change (tonnes).....	65.4	48.5	37.1	44.1	Jan.-Oct.
General imports, volume change	23.7	18.7	13.6	13.6	Jan.-Sept.
Imports of consumer goods, volume change	14.5	15.3	14.5	14.5	Jan.-Sept.
Private motor vehicles.....	24.4	24.2	24.6	24.6	Jan.-Sept.
Consumer durables, e.g. household appliances.....	21.7	19.4	16.3	16.3	Jan.-Sept.
Consumer semi-durables, e.g. clothing.....	10.7	9.9	8.8	8.8	Jan.-Sept.
Food and beverages.....	13.8	11.8	10.5	10.5	Jan.-Sept.
Imports of investment goods (excl. vessels and aircraft), volume change.....	36.9	38.3	23.8	23.8	Jan.-Sept.
Gallup confidence index	18.0	-11.7	5.5	2.1	Jan.-Oct.
Current situation.....	66.1	13.8	23.1	29.1	Jan.-Oct.
Expectations six months ahead	2.4	-22.3	-3.5	-9.3	Jan.-Oct.

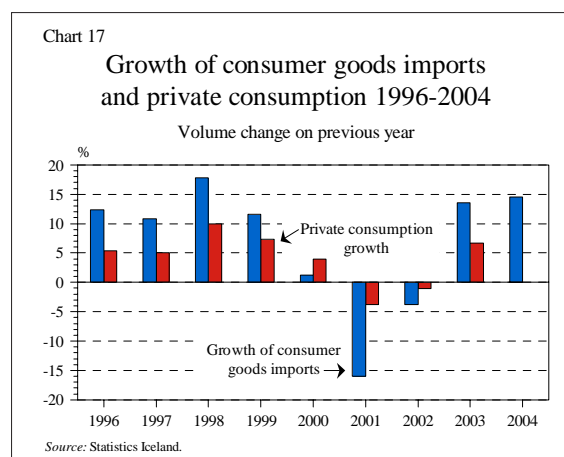
1. The first column shows the year-on-year change in % and the second column the period for which data are available. 2. Payment cards of households (which account for the bulk of payment card turnover) and of businesses. Sources: Cement distributors, Federation of Trade and Services, Housing Financing Fund, Land Registry of Iceland, Motor Dealers' and Services Federation, Statistics Iceland and Central Bank of Iceland.

Private consumption

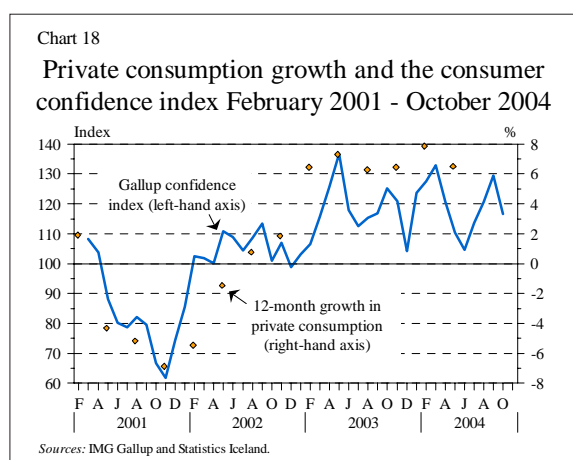
In June the Central Bank forecast 5½% growth in private consumption in 2004. The outlook now is for a considerably larger increase. Private consumption grew by 7.2% year-on-year in the first half of 2004. For the June forecast to hold, second-half private consumption growth must not exceed 4%. Such a sharp slowdown seems unlikely in light of indications for Q3 and easier access to consumer loans. The increase in motor vehicle registrations has slowed slightly, but imports of consumer goods grew at broadly the same rate in Q3 as early in the year. In Q4 the impact of greater credit supply and lower mortgage interest rates will stimulate private consumption further.

As pointed out above, greater supply of credit to households at lower interest rates implies a considerable easing of their financial conditions. This may prove to be a crucial factor, because recent private consumption growth has been sustained by ongoing household debt accumulation and the heightened wealth effect caused by rising asset prices. Real wages rose 1.4% year-on-year over the first ten months of 2004 and employment has apparently contracted (see later). However, the most recent labour

market data suggest that labour demand has been picking up in the last quarter of the year. Per capita real disposable income is estimated to increase by 3% year-on-year in 2004. Growing private consumption during the year is therefore clearly not only driven by increased disposable income, but by households' expectations of higher future earnings and easier debt service, the result of lower interest rates and longer debt maturities – at the same time as assets have gained value, increasing their mortgageability.



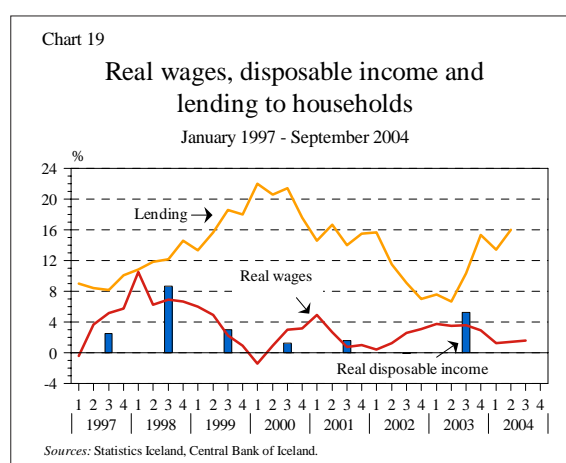
Households are fairly optimistic about the future, judging by Gallup's consumer confidence index. Although this index has dipped twice during 2004 it is still running high. Such a climate makes households more willing to increase their debt – as shown by the 14% growth in lending by the main pillars of the credit system, i.e. DMBs, the HFF and pension funds, over the twelve months to the end of September. Growth picked up even more speed in October, since at the end of the month the twelve-month growth in household lending by DMBs amounted to 30%.



Besides easier access to credit and lower interest rates, households have been given added incentives and scope for borrowing because of rising housing prices, especially in the Greater Reykjavík Area. According to the Land Registry, the twelve-month rise in price per m² of residential housing in and around the capital was almost 14% in October. Prices of detached housing have increased the most in recent months, rising by more than one-fifth over twelve months and 6% in the past three months. It can be inferred that the banks' new mortgage loans are having an effect here, since unlike HFF loans they are only capped by collateral coverage and an evaluation of the buyer's debt service capacity. Bank housing loans facilitate mortgage equity withdrawal because, contrary to HFF loans, they do not require a property transaction to take place. The more that housing prices rise, the more equity that households can withdraw. Another factor is the wealth effect – both housing prices and equity

prices have soared during the year, although the latter partly unwound in October.

All these factors highlight the prime conditions for private consumption growth at the moment. While the primary school teachers' strike may have acted as a temporary brake, the growth drivers probably weigh heavier, so there are no grounds to expect significantly lower private consumption in the second half of 2004 than in the first half of the year. Private consumption is now forecast to grow by 7% over the year.



Outlook for buoyant private consumption over the next two years

On a two-year horizon, it seems beyond doubt that private consumption will continue to grow rapidly. Private consumption is forecast to grow by 9½% in 2005 and just under 7% in 2006. Many factors are at work. Households have responded promptly to the banks' mortgage loans and most indicators suggest that they will continue to refinance their debt in the years to come and lengthen the maturities of their outstanding debt when they do so. The repayment burden on outstanding debt will therefore ease considerably. Households will be left with more disposable income after debt service and probably spend most of it on private consumption.

If forecasts for the current year hold, private consumption will have increased altogether by 14% in real terms in 2003 and 2004. At the same time, household housing debt will grow by almost 10% in real terms. Household housing wealth has risen by even more in real terms, or 22%. This hefty improvement

Box 2 The impact of the banks' new mortgage loans on private consumption

As described in Box 1, major changes have taken place in mortgage supply this year. In the spring, the Central Bank produced an in-depth analysis of the economic impact of plans by the Housing Financing Fund (HFF) to offer a 90% loan-to-value ratio and raise its maximum loan amounts.¹ The study assumed an increase in the maximum loan amount from 9.2 m.kr. for secondary market housing and 9.7 m.kr. for new housing to 15.4 m.kr. for both categories, an increase in the loan-to-value ratio from 65-70% to 90% of purchase price (and from 85% to 100% of fire insurance value), a requirement that the loan would be on a first priority pledge, and shortening of the maturity of maximum loans from 40 to 30 years. Certain assumptions need to be changed before the same methodology can be applied to evaluate the impact of the commercial banks' recent mortgage loan offers. The banks do not specify absolute loan ceilings, so this restriction does not apply, but set a maximum loan-to-value ratio of 80% of purchase price (except in the case of 100% loans, which are capped at 25 m.kr.). Bank mortgages are also limited to 100% of fire insurance value (but this can be exceeded for 100% mortgages by buying extra insurance cover). The banks insist on a first priority pledge for their new loans, which are generally for a term of 40 years.

In its report, the Central Bank assumed that the average mortgage term would be shortened from 34 to 29 years. The commercial banks' new mortgage offers, however, are not likely to result in a shortening of the

average mortgage term, since bank mortgages are for 25 and 40 years, like previous HFF loans, and not for 30 years as the new HFF loans were expected to be. Shorter maturities have a constrictive effect, since other things being equal they will increase the debt service burden and thereby dampen private consumption. The new bank loans do not have this effect, so they will probably serve to ease the debt service burden, despite increased borrowing. Since these loans can be used for refinancing without a housing transaction taking place, they are likely to lead to even longer maturities.

The HFF's planned changes in its lending arrangements were expected to leave only 2.5% of homebuyers' debt service capacity unused (compared with 7% previously) due to loan ceilings and priority pledge requirements. Virtually no such scope can be expected to remain now, since the 100% fire insurance value factor will probably cap mortgages in most cases, regardless of whether the loan-to-value ratio is 80% or 90%.

The report expected that the average amount of new loans would increase by roughly 5%, corresponding to a 2½% rise in average household debt at the new equilibrium level. At a cautious estimate the new bank loan offers will increase the average amount of new loans by around 7½%, in particular since housing transactions are no longer a precondition for borrowing.

On the basis of these assumptions, and allowing for the transmission of the new loans through disposable income, interest rates, access to credit and the wealth effect, the outcome is that private consumption will grow over the next three years by a total of 1½-2 percentage points more than would otherwise have been the case, and that the main impulse will be delivered during the first year under these new arrangements.

1. Central Bank of Iceland, *Efnahagsleg áhrif breytinga á fyrirkomulagi lánsfjármögnunar íbúðarhúsnæðis* (The economic impact of changes in housing financing arrangements), report to the Minister of Social Affairs, June 28, 2004.

in their equity will drive households' capacity and propensity to spend over the forecast period. A substantial part of the expected growth in private consumption over the next two years can be traced to greater household wealth. The new mortgage arrangements have played a major role in this trend. At a cautious estimate, the new arrangements will boost private consumption by 1½-2 percentage points

more than otherwise over the next two years. Besides being transmitted through higher housing prices and thereby driving up household wealth, the changes in the mortgage market are reflected in easier access to credit and lower long-term interest rates, and have an indirect effect on disposable income (see Box 2).

Labour demand is also poised to firm up over the forecast period (see the analysis of the labour market

below). Labour participation and employment should rise and wage drift, which has been subdued recently, is likely to increase. Income from employment should increase faster over the next few years than in the recent term. Other effects will be delivered in 2005 by cuts of 1 percentage point in personal income tax and 2 percentage points in the higher-income tax surcharge, coupled with a 5½% increase in the tax-free personal allowance. In 2006 the income tax rate will be reduced by a further 1 percentage point, and the personal allowance will be raised by 5%. Child benefit will also go up considerably in that year. All told, lower taxes and faster-growing income from employment will cause disposable income to increase faster in 2005 than this year. Per capita real disposable income is expected to grow by almost 4% in 2005 and 2½% in 2006.

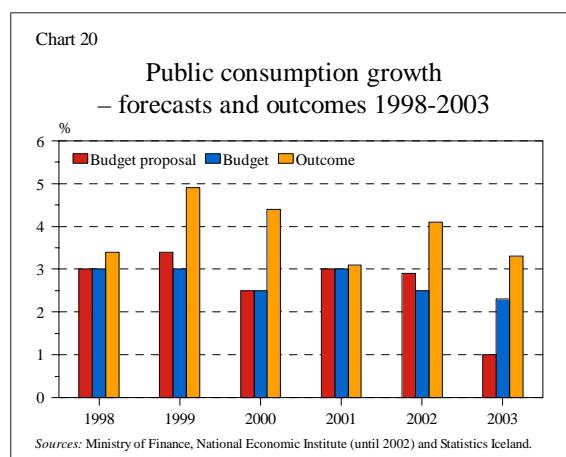
According to the current forecast, private consumption will increase at a considerably faster pace than in the June forecast of just over 6% in 2005 and just over 5% in 2006. Most of the difference lies in the new credit market climate and the associated wealth effect, as described above, while plans to step up investments for the aluminium industry by even more than originally envisaged will also have an impact (see later).

Public consumption

Public consumption looks set to increase by roughly 1½% this year, broadly in line with the assumption in the Ministry of Finance's national budget from the beginning of October. However, the current figure incorporates the effect of the teachers' strike, which will reduce public consumption expenditure in 2004 and increase it in 2005. It should be pointed out that revised accounting procedures make this year's expenditure figures exceptionally difficult to interpret.

According to estimates in the budget proposal for 2005, underlying public consumption growth will amount to 2%. The Central Bank forecast assumes a rather larger underlying increase, at 2.5% in all, divided between local government (3.0%) and central government (2.3%). One reason for deviating from the budget proposal assumptions for underlying public consumption growth is that expenditure figures for the year seem to indicate that both outlays and

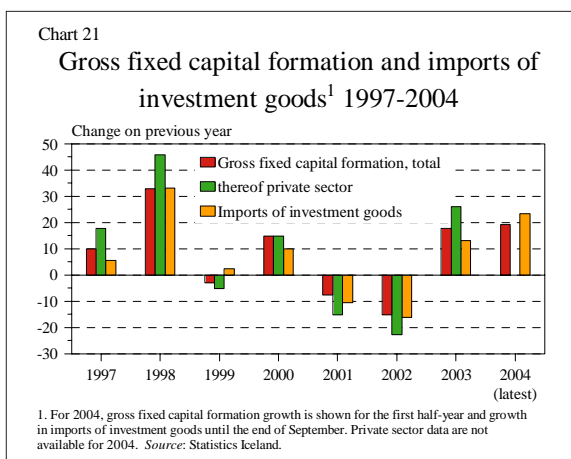
revenues will overshoot the estimates made this autumn. Also, it seems a rather unrealistic target to keep the increase in public consumption growth to within 2% in 2005 and 2006 when substantial output growth is expected, especially given that public consumption by local government has increased more than 5% annually on average since 1998, and almost 3½% by central government and the welfare system. Furthermore, the budget proposal's general 1% cost-efficiency demand for most government agencies must surely be regarded as quite weak, since it is a complicated matter to fulfil such decisions. Finally, public consumption growth has tended to be underestimated at this time of year in the past, by an average of 1.2% over the period 1998-2003, as shown in Chart 20. Thus the Central Bank forecasts that public consumption will increase by just over 3% in 2005 and 2½% in 2006.



Gross fixed capital formation

Growth of gross fixed capital formation is firmly shaped by the increasing momentum behind investments in power stations and the aluminium industry. In June the Central Bank forecast that gross fixed capital formation would increase by 17% in 2004, which appears likely to hold. In the first half of 2004, gross fixed capital formation grew 19% year-on-year. The rate in Q3 was probably broadly the same, although the increase in imports of investment goods has slowed down. No breakdown of quarterly data is available showing the respective shares of business-

es, public sector and households in gross fixed capital formation, but it is clear from Treasury expenditure figures that public sector investment has been shrinking over the course of the year and the current forecast assumes a contraction in the second half. Business investment, on the other hand, is soaring, due to construction of power stations. Most indicators also suggest that residential housing investment will increase by at least as much as in 2003.



Investment is forecast to grow by more than 20% in 2005 and almost 3% in 2006. Next year's investment level is far higher than was forecast in June, while the figure for 2006 is somewhat lower. More investment in 2005 is largely the result of new plans for aluminium-related projects and increased housing investment, partly driven by the new domestic mortgage market climate and its impact on housing prices, which provide a further stimulus to invest. The lower investment level in 2006 than forecast in June is primarily caused by the higher level next year.

Business investment

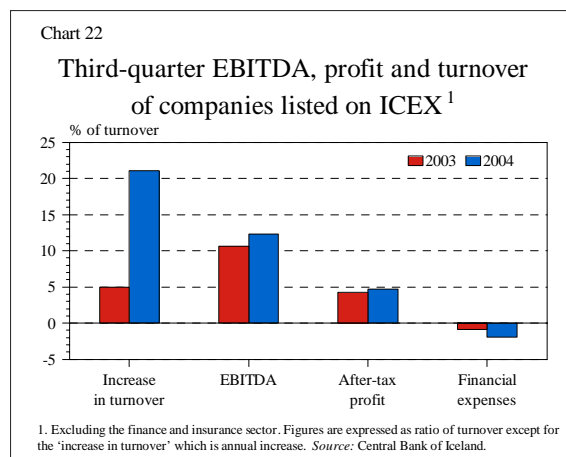
The changes in the forecast for businesses' gross fixed capital formation this year and in 2005 are largely explained by investment in power stations and aluminium smelters. These projects are now in full swing. Work is in progress on the Kárahnjúkar hydropower station in east Iceland and geothermal stations in Hellisheiði and Reykjanes (southwest Iceland). Construction of Alcoa's Fjarðaál smelter in Reyðarfjörður and the Norðurál smelter expansion has begun. Total investment on these projects will be

as much as 250 b.kr. In 2004, the total investment will amount to 38 b.kr., which represents 18% of total gross fixed capital formation over the year, and almost one-third of total business investment.

Investment in these projects will peak over the next two years, at 86 b.kr. in 2005 and more than 80 b.kr. in 2006. Further expansion at Norðurál is the main change that has occurred in aluminium-related investments. Norðurál now plans to expand to 122 thousand tonnes per year (tpy), instead of the former 90 thousand tpy (see Box 3). The additional investment spurred by this 32 thousand tpy expansion is expected to amount to 10½ b.kr. and will be made over the next two years.

There are various indications that increases in investments by other sectors have been increasing and will gain pace next year. The investment index, compiled from a survey conducted twice-yearly by IMG Gallup for the Central Bank and Ministry of Finance (most recently in September), is at its highest value since these surveys were launched in September 2001. Indices of profits and staff numbers show the same pattern. To some extent this optimism may be connected with projects related to the aluminium industry investments, e.g. among transport and consulting companies. Heavy investment has also been made in various services and the hotel and catering sector in recent times, accounting for roughly one-fifth of business investment in 2003 and increasing this year.

Vigorous growth has characterised the activities of companies listed on Iceland Stock Exchange (ICEX) this year. Nine-month interim results from 28



Box 3 Revised plans for smelter and power station construction

In the past few weeks the scenario for investments in aluminium smelters and power stations has changed in two respects. Norðurál has decided to boost its production capacity by more than previously planned, with an additional investment of just over 10½ b.kr. spread over 2005 and 2006. Alcoa has also revised the cost and development schedules for its aluminium smelter in Reyðarfjörður, east Iceland. While estimated total cost has not changed substantially from previous plans, investment will be stepped up next year with a corresponding reduction in 2007. Overall, the scale of investment in these projects will increase considerably in 2005 and slightly in 2006, but contract in 2007.

In the beginning of November Norðurál concluded an agreement with Suðurnes Heating (Hitaveita Suðurnesja, HS) and Reykjavík Energy (Orkuveita Reykjavíkur, OR) on expanding its smelter at Grundartangi, west Iceland, by 32 thousand tonnes per year (tpy) over and above the 90 thousand tpy expansion that had already been agreed. When this new capacity goes on stream in autumn 2006, total production capacity at the smelter will be 212 thousand tpy. Talks are also in progress with the same utilities on further power sales to boost Norðurál's production capacity by a further 8 thousand tpy in 2006.

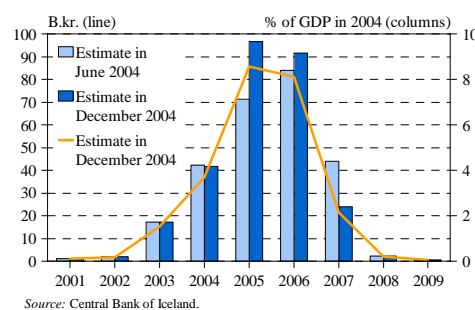
Norðurál is also mulling a further 40 thousand tpy expansion over the period 2007-2009. If this project materialises, the smelter's total capacity could increase to as much as 262 thousand tpy towards the end of the present decade. Preparations and talks with OR and other authorities are under way and a conclusion is aimed for within 4-6 months.

Estimated cost of the expansion that has already been agreed is 7.5 b.kr., of which 4.5 b.kr. will be invested next year. The manpower requirement during construction will increase by an estimated one-third, or 140 man-years, compared with earlier plans.

The bulk of power for the plant will be supplied by HS. Geothermal harnessing that it is currently undertaking on the Reykjanes peninsula will provide up to 100 MW. Since this figure is some way above previous estimates, there is more scope for power sales to Norðurál than originally assumed. HS's power station at Svartsengi will be expanded by 20 MW with an investment estimated in the region of 3 b.kr. Total investment in the additional 32 thousand tpy capacity at Norðurál and harnessing the power to supply it is estimated at 10½ b.kr., while the total cost of expanding Norðurál from 90 to 212 thousand tpy is put at 32 b.kr., and the extra power facilities at just over 20 b.kr.

Aluminium and power sector investments:
total investment cost 2001-2009

Construction of Fjarðaál smelter, expansion of
Norðurál smelter and related power facilities



companies listed on ICEX⁴ show turnover increasing by more than one-fifth year-on-year, and improved EBITDA of almost 13% compared with 11.5% in 2003. Profit after taxes remains broadly unchanged even though the companies' financial items are much more negative than last year. Cash from operating activities has grown by almost one-third year-on-

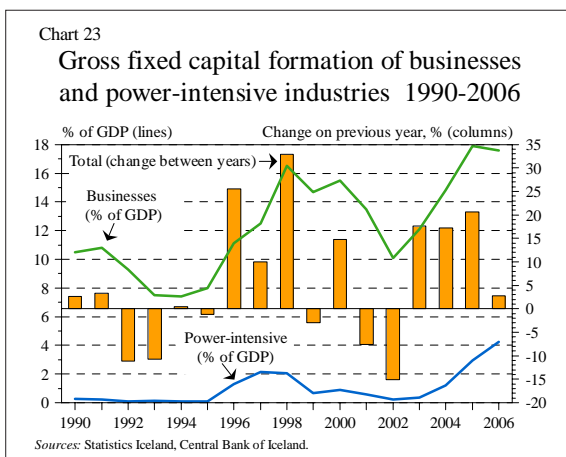
4. Excluding financial institutions and insurance companies.

year. Profitability is up in all sectors apart from fisheries, where EBITDA has shrunk from almost 22% to 18% and profit from 10% to 7.4%, due to negative financial items.

Corporate sector financial conditions have been very favourable for a long while, especially interest rates on foreign borrowing. Foreign short-term rates are still close to their lowest point for half a century and premia have generally been heading downwards,

as mentioned above.⁵ Despite a lack of information about average interest terms of Icelandic businesses, they are clearly easy from a historical perspective, since lending to the corporate sector has been soaring. Lending to businesses by the main pillars of the credit system, i.e. DMBs, the HFF and pension funds, increased by 18% over the twelve months to the end of September. Such intense growth, along with other indicators, suggests sizeable levels of investment.

The Central Bank forecasts that business investment will increase by more than 29% in 2005 but only just over 2% in 2006, as a result of the base effect of huge investment in the preceding year. According to the forecast, gross fixed capital formation in 2006 will equal roughly 27% of GDP. Over the past two decades this ratio has measured around 20%, although it reached 25% in 1998 and 2000. In the 1960s and 1970s, however, it ran at around 30%.

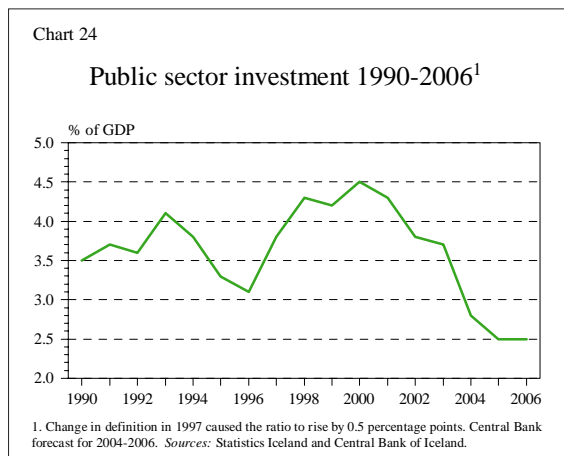


A substantial share of business investment is directly connected with projects for the aluminium industry, as mentioned earlier. Business investment excluding projects for power-intensive industry, ships and aircraft is expected to grow by only just over 4% next year and 2% in 2006. According to the forecast, some 30% of gross fixed capital formation in 2005-6 is connected with construction of aluminium smelters and power stations.

5. In the US, corporate spreads have dropped by 1-1½ percentage points from their peak in 2002.

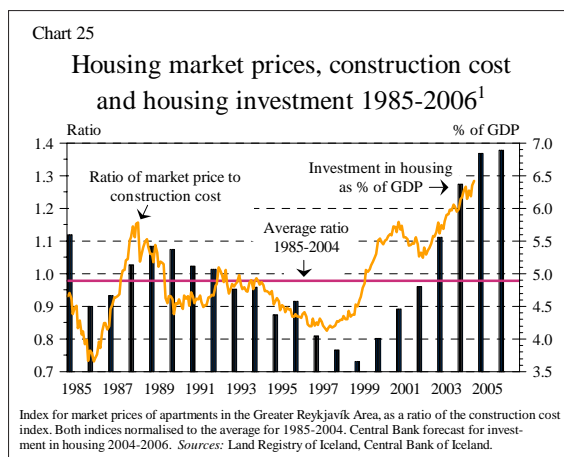
Public sector investment

Plans to cut back construction programmes which focus on relatively large and clearly delimited projects are more credible than general plans for trimming down public consumption. Thus the present forecast follows the investment plans described in the budget proposal and the reports accompanying it, and the long-term plans of municipalities, even though this produces a fairly low figure for public sector investment compared with recent times. Public sector investment is expected to contract by more than 18% this year and 4% in 2005, and remain unchanged in 2006.

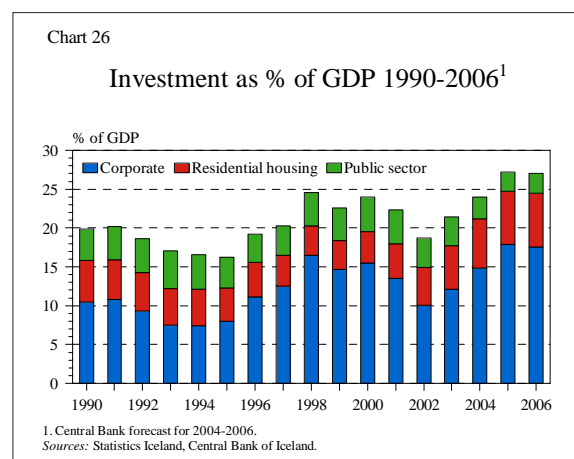


Residential housing investment

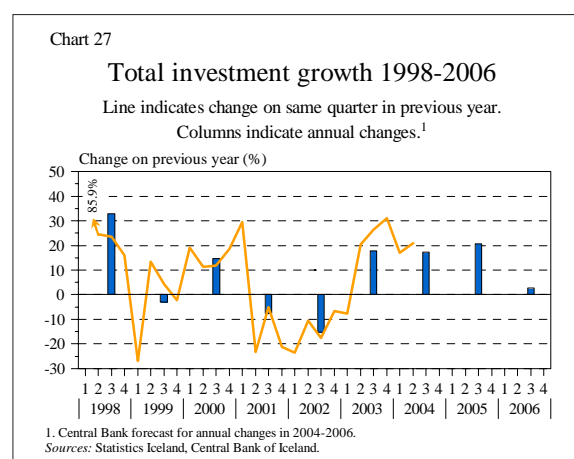
Residential housing investment was depressed in the second half of the 1990s. In spite of rapid growth in disposable income over the period 1997-1999, gross fixed



capital formation did not begin to increase on any scale until around the millennium, after a considerable rise in housing prices, but since then housing investment has been steadily growing as a proportion of GDP. As Chart 25 shows, the rise in housing prices in excess of construction cost has been one of the main drivers of residential investment. Housing prices in the Greater Reykjavík Area have outstripped the increase in the general price level almost continuously since 1997, by a total of roughly 50%. Residential housing investment grew in step with the widening gap between construction cost and market prices. In 2003, housing investment rose by 13% at constant prices and amounted to 5½% of GDP.



Developments this year have followed the same course. While disposable income will grow more slowly than in 2003, housing prices have continue to



rise rapidly. In October, the cash price of apartments in the Greater Reykjavík Area had increased by almost 14% year-on-year. Easier access to mortgage loans and lower interest rates have driven housing demand and the overall impact could be hefty, as explained in Box 2. Prices are therefore likely to continue upwards, spurring more construction in the years to come.

Housing investment is forecast to increase by 13% year-on-year in 2004. However, this estimate is partly based on more fragmentary information than was at hand when the HFF was the sole provider of the bulk of housing loans. It is known that the banks have captured a large share of the HFF's lending, but no breakdown is available showing how these funds are allocated, i.e. to refinancing, secondary market purchases, new housing or renovations, nor how much has been lent to construction contractors.

Investment in housing is forecast to grow by more than 8% in 2005 and almost 6% in 2006. This forecast assumes growing real disposable income over the next two years and a strong impulse to housing demand from easier credit and lower interest rates. Housing prices will therefore continue upwards for some time although the pace will slow down over the forecast period. Unlike many metropolitan areas in other countries where prices have also been soaring in recent years, the Greater Reykjavík Area still has a relatively large amount of undeveloped land. This should reduce the probability that the prices will spiral to the extremes sometimes seen elsewhere. When the gap between market prices and construction cost begins to narrow again, the incentive for investment will diminish and it will shrink back. Assuming that the policy interest rate remains unchanged, this is unlikely to happen over the next two years – but demand developments may be sensitive to the interest rate trend.

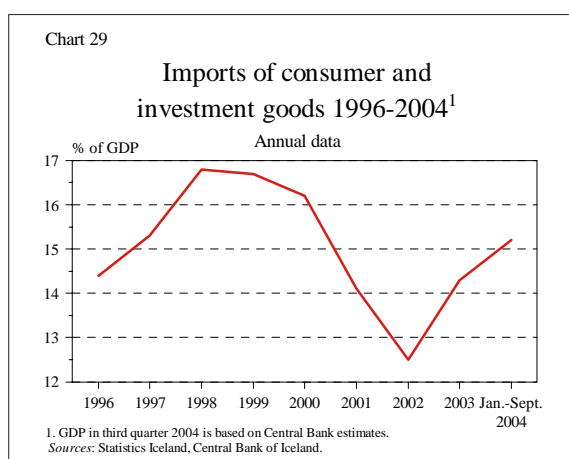
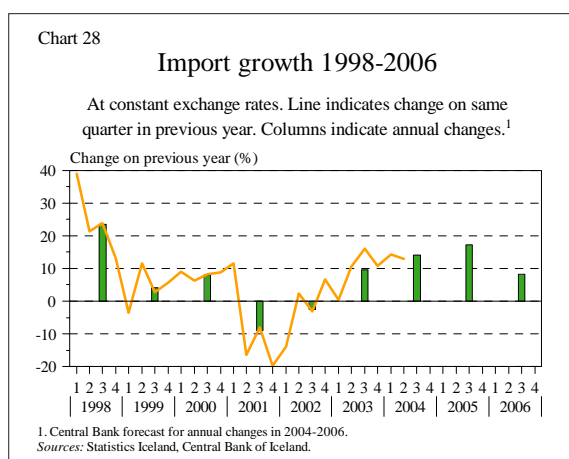
Imports

Brisk rises in private consumption and investment this year are reflected in the fastest import growth since 1998 (see Chart 28). The relatively strong króna and upbeat outlook for economic growth over the next few years have stimulated imports, in particular of consumer goods. A large proportion of investment good imports is probably associated with projects for

the aluminium industry. This component will grow even further over the next two years.

In June, the Central Bank forecast import growth of almost 12% in 2004. According to the national accounts, growth ran higher in the first half of the year, at 13½%. Merchandise import data for Q3 indicate a marginally lower rate of growth than in the first half, although it was still robust. Imports of consumer goods have been growing at a steady rate of 14-15% so far this year, while imports of investment goods have decreased for the time being, but will presumably pick up again when investments for the aluminium industry gather pace.

The service account for Q3 is not available at the time of writing, but in the first half of the year tourism expenditures rose by 26% year-on-year at constant prices, and travel and transport expenditures by almost one-quarter.



Judging by developments in the first half of the year and an economic climate conducive to private consumption growth in the closing months, imports will probably increase by rather more in 2004 than the Central Bank forecast in June – the current forecast is just over 14%. Growth will speed up in 2005, to 17%, with increases in private consumption driven by the wealth effect and easier credit climate, and in imports for the aluminium industry. In addition, the króna is expected to be on average rather stronger in 2005 than this year. Sizeable import growth of more than 8% is therefore forecast for 2006, although imports will grow at a slower rate than in 2005.

GDP growth and the output gap

In June, the Central Bank forecast output growth of 4¼% in 2004. Growth was considerably faster in the first half of the year, at 5½%. Based on the most recent data, output for the year as a whole is expected to remain broadly in line with that trend, at just over 1 percentage point more than was forecast in June.

If the above forecast for increased national expenditure and external trade developments holds, output growth next year will be just over 6%, which is 1½ percentage points more than was forecast in June. At the same time, national expenditure is expected to increase by almost 11%, or more than 3 percentage points beyond the June forecast. This would be the highest rate of national expenditure growth since 1987. Firm growth is also expected in 2006, at just under 5%, which is half a percentage point more than forecast in June. The forecast increase in national expenditure remains unchanged.

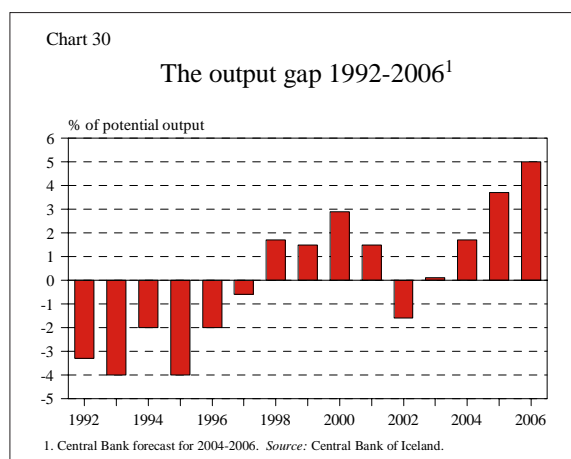
Outlook for rapid build-up of macroeconomic pressures in the coming years

Growth over the next two years will obviously be well beyond the production capacity of the economy. According to revised assessments of demand and production capacity in recent years, the estimated output gap has been revised downwards to 1½% in 2001 and the slack in 2002 to 1½%, closing completely in 2003.

Output growth outstripped the estimated growth in potential output again this year. On the basis of the assumptions in the macroeconomic forecast, includ-

ing an unchanged exchange rate and policy rate, the economy is heading for a substantial positive output gap over the next few years, at almost 2% in 2004, almost 4% in 2005 and roughly 5% in 2006, which is 1-3 percentage points more than forecast in June. A number of reasons underlie this large change, e.g. lower long-term interest rates and easier access to credit for households, which affect both private consumption and investment, as pointed out above. Demand for housing has increased and is driving up housing prices, which in turn spurs investment in residential housing. Greater housing wealth, lower interest rates, higher loan-to-value ratios on mortgages and increased scope for refinancing – and thereby mortgage equity withdrawal – all boost private consumption. New details of the Norðurál smelter expansion have also been taken into account, and its production capacity is now assumed to increase by 122 thousand tpy instead of 90 thousand tpy. Furthermore, the króna is stronger in the current forecast than it was in June.

The role of the output gap forecast two years ahead is to be able to assess the demand impulse to inflation. Given the heavy investments for the aluminium industry at the same time as household credit has become much more accessible, the wide output gap shown here appears quite plausible. As it happens, an output gap of a similar size has been recorded several times, e.g. almost 5½% in 1980 and 4½% in 1987. A tighter economic policy stance than assumed in the forecast will narrow the output gap and thereby ease inflationary pressures.



V Public sector finances

Substantial overshoot in central government revenues and expenditure in 2003

Higher inflation and more economic activity than assumed in the budget for 2003 generated much more tax revenue last year than had been forecast. Instead of a projected 3% increase year-on-year, the outcome was over 8%. Interest revenues were lower than estimated, possibly due to cautious accounting principles. Privatisation of the state's remaining shares in Búnaðarbanki and AVI (Iceland Prime Contractor) also brought the Treasury 11 b.kr. more than their book value.

Expenditures also far outstripped the original budget estimates, since significant outlays were decided, some of them in an unusual supplementary budget in March. Regular expenditure was supposed to rise by 4% according to the budget, but the outcome was 11%. Just over half a percentage point of the overshoot can be traced to higher inflation, but the rest to additional outlays.

According to data from Statistics Iceland based on the national accounts for 2003, Treasury revenue increased from 33.0% to 33.6% of GDP, and outlays from 33.6% to 35.4%, the highest ratio since at least 1980. By this yardstick, the Treasury deficit increased from 0.6% to 1.8% of GDP.

Outlook for Treasury revenue and expenditure overshoot in 2004

In the budget for 2004, the Treasury surplus was estimated at 6.7 b.kr. Regular revenues were supposed to rise by just over 5% from the estimate given in the supplementary budget for 2003, in pace with price developments and GDP growth. No privatisation proceeds were expected during the year. Regular expenditures (i.e. with written-off tax revenues and pension fund contributions close to average) were expected to decrease by ½%, implying a reduction of 3% in real terms. Extensive cutbacks in government spending were announced, focusing mainly on transport and communications, the welfare system and general employment affairs, the areas that had risen most in 2003. As a proportion of GDP, regular expenditures were supposed to decrease by almost 2 percentage points to broadly the same level as in 2002. Regular revenues aimed to increase in pace with GDP growth.

The regular supplementary budget proposal currently before parliament adds 8 b.kr. to estimated revenues, mostly from VAT, corporate income tax and capital income tax. Tax revenues are expected to grow by almost 11% from 2003. Estimated interest revenues are 2 b.kr. lower than the budget figure due to more cautious accounting principles, but will still rise by 2 b.kr. year-on-year. This reduction probably heralds lower tax revenue write-offs in the future. Revenues excluding privatisation proceeds are expected to be 10% higher in 2004 than in 2003, while the budget aimed for 5%.

New expenditure authorisations in the supplementary budget amount to 6 b.kr., in addition to existing unused authorisations which will be invoked to the tune of around 1 b.kr. The largest item is a 2 b.kr. increase in outlays on the health service and 3 b.kr. to the welfare system, in particular unemployment insurance and mortgage interest rebates. Consequently, expenditures are scheduled to increase by 2½% year-on-year instead of the ½% decrease assumed in the budget. However, as a result of greater output growth and higher inflation, revenues and expenditure are expected to decrease as a proportion of GDP. The rise in revenue and expenditure forecasts compared with the budget figures is broadly the same as the increase in nominal GDP over and above the underlying budget assumptions. Thus the ratio of revenues and expenditure to GDP is still expected to decrease by the same amount as assumed in the budget.

Tax revenues until the end of September were 15½% higher than for the first nine months of 2003 and expenditure 6-7%, after adjustment for changes in Treasury accounting principles. If this rate of increase is sustained until the end of the year, both revenues and expenditure will overshoot their respective targets, but the regular Treasury balance will be broadly as planned. Other indicators suggest, however, that the overshoot on expenditure could be somewhat greater than on revenues. If so, the regular Treasury result will be lower than aimed for.

Main features of the budget proposal for 2005 are tax cuts and across-the-board cost restraint

The two main features of the budget proposal for 2005 are tax cuts and across-the-board cost restraint. Personal income tax will be reduced from 25.75% to

24.75% and the tax-free personal allowance will be raised by 3%, which corresponds to a 5.6% increase in the tax-free income ceiling if municipal taxes remain unchanged. Further tax cuts are planned for 2006 and 2007. Targets are set for the real growth of public consumption and current transfers of no more than 2% and 2.5% respectively per year until the end of the government's term of office (in 2007). According to the budget proposal the Treasury surplus will increase from just under 8 b.kr. in 2004 to more than 11 b.kr. in 2005, or from just under 1% of GDP to just over 1%. The national accounts presentation will produce a larger surplus improvement, rising from 0.8% of GDP in 2004 to 1.6% in 2005.

Revenues are set to increase by 5½%, or 1½% deflated by GDP prices. As a matter of caution, no privatisation proceeds are assumed for 2005. As a proportion of GDP, revenues will decrease from just over 33% to roughly 32%, partly due to the 5% GDP growth forecast by the Ministry of Finance. The cut in the personal income tax rate means that Treasury revenues from this source will remain broadly unchanged despite an estimated rise in economy-wide wage earnings of more than 8%. Nominal revenues from taxes on goods and services will increase by 8½%, which is a cautious estimate given the Treasury forecast of nominal year-on-year increases amounting to 9½% for private consumption and 11½% for national expenditure in 2005.

Expenditures are scheduled to rise by 4½%, or ½% deflated by GDP prices, but come down from just over 32% of GDP to just under 31% in 2004 and 2005 respectively. Construction projects to the tune of roughly 2 b.kr. will be deferred, mostly within the current transport infrastructure programme. Outlays to other areas will remain broadly unchanged or increase in line with mandatory requirements for service levels, for example in the education and health sectors.

Tax-cuts and long-term programmes

The budget proposal for 2005 is presented with a medium-term programme for 2006-2008. This forecasts that planned income and other tax cuts will bring down tax revenues as a proportion of GDP by 0.8 percentage points in 2004 and 2005, and by 1.2 percentage points each in 2006 and 2007, then leave them unchanged in 2008. On the basis of these ratios,

the tax cuts can be estimated at just over 30 b.kr. per year by 2007. Household disposable income and consumption will increase correspondingly. Since Treasury revenues from indirect taxation have amounted to around 28% of household disposable income in recent years, some 10 b.kr. is likely to be returned to the Treasury in the first-round effect.

The government is intent on keeping the increase in total central government expenditure, deflated by GDP prices, within ½% and 1% in 2005 and 2006 respectively. Central government construction activity will be kept to a minimum. Due to output growth, expenditure as a proportion of GDP will decrease by 1 percentage point. Expenditure is expected to increase again when investments for the aluminium industry slow down in 2007-2008 and postponed central government investment plans are relaunched. Child benefits will increase stepwise in 2006-2007 by a total of almost 2½ b.kr.

The Treasury surplus in 2005 and 2006 is expected to amount to roughly 1% of GDP, followed by deficits of 1% and 1½% in 2007 and 2008 respectively. Accordingly, net Treasury debt should decrease from 19½% of GDP to below 16% over the period 2003-2006. The debt ratio will then rise again to 18½% with the deficits in 2007 and 2008, according to Ministry of Finance's assumptions.

Local government finances have improved

Estimates suggest that local government finances will be much less volatile than Treasury finances. Statistics Iceland figures for 2002 and preliminary figures for 2003 show municipalities to be in balance in both years. The Ministry of Finance forecasts that this will continue over the period 2004 to 2006. Local government revenues and expenditure should decrease relative to GDP, from 12.8% to 12% between 2003 and 2006. Their tax revenues will grow in pace with GDP. Financial income will drop from the sizeable levels recorded in 2002 and 2003. The Ministry of Finance forecasts 2% annual growth in the municipalities' public consumption. This is at odds with the trend in recent years, which has been characterised by growing local government activity that drove up their private consumption by an average of just over 5% annually over the period 1998-2003.

The Central Bank forecasts stronger public finances than in the budget proposal, despite higher public consumption expenditure ...

The budget's plans for restraint are targeted at most central government agencies. Such a general remit complicates the implementation of cutbacks, particularly in a robust growth climate. Tax cuts also create uncertainties, partly involving taxpayers' responses to them.

The Central Bank forecasts that national expenditure will grow faster in real terms than projected in the budget proposal, by up to 3½ percentage points more in 2005. Accordingly, Treasury revenues from private sector spending will grow by much more than Treasury costs, leaving a stronger balance than projected in the budget proposal. However, this is entirely due to automatic stabilisers within the tax system, and not to active public sector economy policy measures. In such an expansionary climate, these automatic stabilisers have a much sharper impact than the additional public consumption assumed in the Bank's forecast. The Treasury surplus in 2005 could therefore amount to 5-10 b.kr. more than estimated in the budget proposal. On a national accounts basis, the Treasury surplus could run at 20 b.kr. more each year in 2005 and 2006, according to the Central Bank forecast. As a proportion of GDP, this surplus would be comparable to the one at the peak of overheating in 1998-2000.

The Central Bank's macroeconomic forecast assumes that underlying growth in public consumption at the local government level is 3%, but because of the primary school teachers' strike this will end up as a contraction of roughly ½% this year. Higher charges and real estate valuations that have been announced for the new year will boost local government finances relative to these estimates, but will be offset by higher costs under wage agreements with teachers.

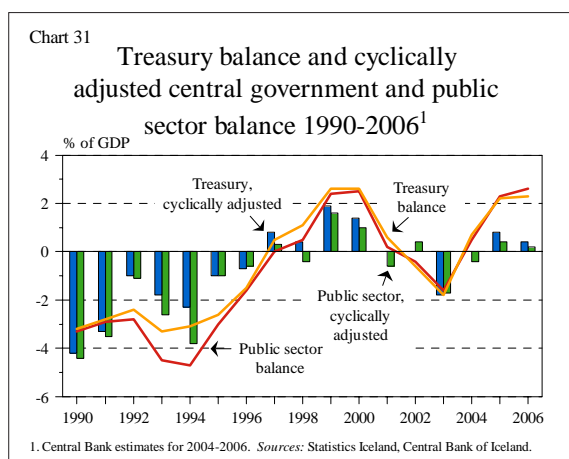
Despite assumptions of higher public consumption, the outlook for local government finances over the next two years is somewhat brighter in the Central Bank's macroeconomic forecast than in the budget proposal. However, the surplus will be well within ½% of GDP for both years, since local government tax revenues are not as cyclically sensitive as Treasury revenues. Surpluses on operations and investments can be expected to produce some reduc-

tion in local government debt, which was estimated at just under 7½% of GDP at the end of 2003.

... but the cyclically adjusted public sector result is considerably weaker than during the last expansionary episode

Rather than looking at the measured surplus, a more relevant measure of the fiscal contribution to economic policy implementation is the cyclically adjusted surplus. In an upswing, public sector revenues automatically increase, as pointed out above. The Central Bank's macroeconomic forecast shows a weaker adjusted surplus for central government and the public sector as a whole than does the budget proposal, even though the Central Bank forecast indicates a higher measured surplus.

Chart 31 shows the Treasury balance against the cyclically adjusted balance of central government and the public sector as a whole. Treasury revenues are assumed to increase by 1.1% for each 1% rise in GDP. Lower unemployment benefit payments during an upswing are also taken into account. Local government finances are less dependent on the economic cycle. Measured in this way, the Treasury appears to move into balance in 2005 after hefty outlays in 2003. The cyclically adjusted surplus will be 0.8% of GDP, which is considerably less than the estimated 1.6% national accounts basis figure used in the budget proposal, or the 2.2% surplus forecast by the Central Bank. The corresponding cyclically adjusted surplus for 2006 would be 0.4% of GDP, compared with a nominal surplus of 2.3%. The public sector result develops along broadly the same lines.



The cyclically adjusted result is considerably weaker than during the expansionary episode in 1999 and 2000, when it lay in the range 1½-2% of GDP for the Treasury and 1-1½% for the public sector as a whole. This is a cause of some concern, because public sector cost restraint proved insufficient at that time.

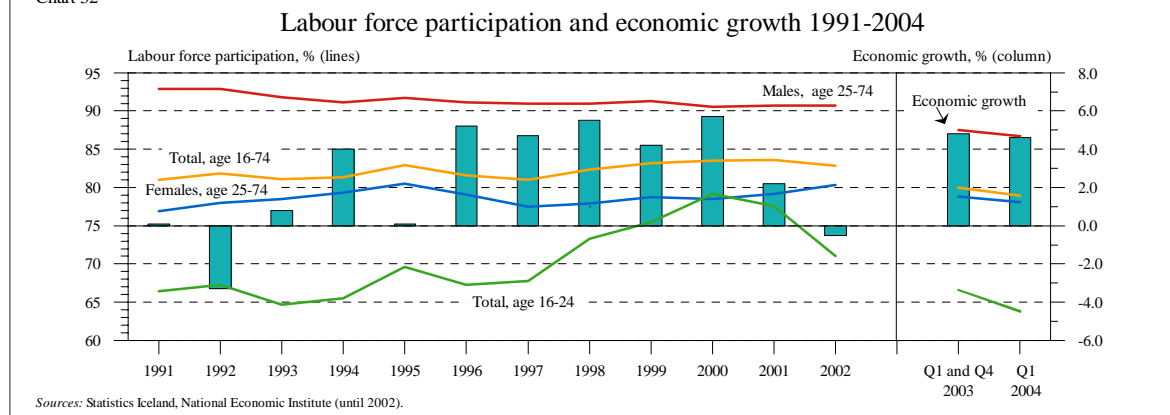
VI Labour market and wage developments

Employment continued to contract in Q3

According to Statistics Iceland's labour market survey, labour market participation contracted by 1.6 percentage points year-on-year over the first three quarters of 2004, mainly due to a reduction in the number of employed. Participation fell sharpest in Q3, by 3 percentage points compared with Q3/2003. However, longer average working hours, primarily among males, caused total hours worked (average actual hours multiplied by the number of employed) to contract by only 1.1%.

The reduction in the number of employed is largely the result of many young people (age 16-24) leaving the labour market. Almost two-thirds of the reduction is accounted for by this age group. The number of employed women of all ages has also fallen, mainly in regional Iceland. Changes in the composition of the group outside the labour market give some indication of what the leavers are doing. According to Statistics Iceland's survey, 9,700 people joined the group outside the labour market over the first three-quarters. Students are the most populous group, accounting for 45%. Their number has increased by 15%, which explains lower participation by the youngest age group. Almost 40% of those not active in the labour market are disabled or sick, and their number has grown by nearly 17%. The largest relative increase (almost 60%) is among people on maternity or paternity leave, who account for 10% of those outside the labour market.

Chart 32



Employment is slower to recover than at the start of the last upswing ...

As Chart 32 shows, labour use also contracted after GDP growth picked up at the end of the last downswing in the first half of the 1990s.⁶ However, GDP growth was slower at that time than it has been for almost two years. Changes in labour participation by young people and women in pace with changing demand is a familiar pattern; such flexibility has been one characteristic of the Icelandic labour market. Participation by younger people rose sharply during the last upswing. For example, the participation rate for 16- to 24-year-olds increased from 65% in 1994-1995 to 79% in 2000, but dropped to 64% in the first quarter of this year.

... and imports of labour have increased

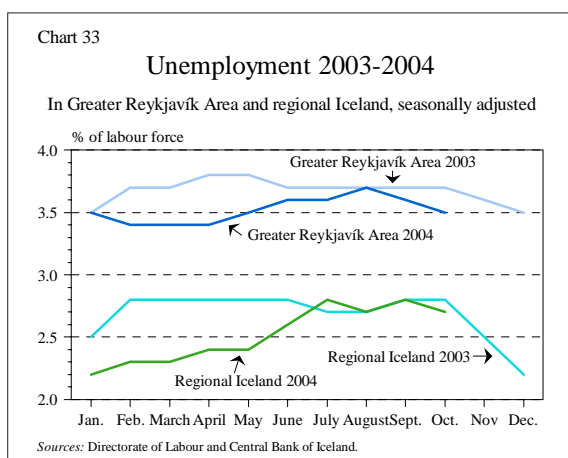
More labour has been imported to work on the Kárahnjúkar power station than was generally expected. Use of foreign labour increased in specific sectors during the last upswing, but large-scale involvement of foreign contractors in projects for the aluminium industry has exacerbated this trend. More

employers apparently prefer to retain a core of workers in their companies and import others to handle the largest peaks, rather than outbidding rival companies for staff, with accompanying wage drift and higher wage costs. This is particularly noticeable in the construction and contractor sector. It remains to be seen how pronounced this trend will be in other sectors, if and when labour shortages emerge – foreign labour already plays a significant role in service industries in the Greater Reykjavík Area. More active monetary policy with an inflation target may also prompt companies to rationalise operations or import labour instead of offering higher wages in competition for employees in the hope that the extra wage costs can be passed on through prices. Labour imports ease demand for domestic labour and constrain wage drift that otherwise might attract more people to the labour market. This could explain the recent low labour participation rate among young people.

Little change in unemployment, but more companies plan to recruit

Unemployment over the first ten months of 2004 averaged 3.2%. Seasonally adjusted unemployment increased in May and peaked in August, but has gone down slightly in recent months. The main reason for higher unemployment during the summer is probably an unusually low supply of vacation relief jobs. Job creation programmes in 2003 may also have resulted in more students being entitled to unemployment benefit this year. In addition, summer closures of kindergartens make it difficult for students with young children to take on summer jobs.

6. Comparable data for the labour force are not available for all the years shown. Over the period 1991-2002, Statistics Iceland conducted labour market surveys twice a year, in April and November. As of January 1, 2003 continuous surveying was introduced, with the results published on a quarterly basis. The two survey formats were not allowed to overlap in 2003, so the time series was broken. Since most labour market aggregates are subject to seasonal changes, a survey that is limited to two periods of two weeks a year, in April and November, can scarcely be compared with one conducted over the whole year. The most effective comparison is between the findings of previous labour market surveys and data from Q1 and Q4/2003, as is done in Chart 32.



Unemployment will come down – the question is, how fast?

There are indications that unemployment will fall in the near future. Major construction projects are being launched near population centres in both east Iceland and the Greater Reykjavík Area, and the largest growth in jobs recently has been in and around the capital, where the majority of unemployed live. The result should be some adjustment of the mismatch between labour supply and demand that has persisted for the past few years. From August until October, vacancies increased by 144% year-on-year, and the Greater Reykjavík Area's share of total vacancies grew from 20% to almost 40%. With more jobs on offer in the Greater Reykjavík Area this spring and summer, seasonally adjusted unemployment has fallen there.

Another possible sign of a drop in unemployment in the near future is that average hours worked have increased so far this year, most noticeably in Q3. Longer working hours by those in the labour force could foreshadow recruitment to meet a growing labour requirement.

An IMG Gallup survey of employee numbers in September, commissioned by the Central Bank and Ministry of Finance and sampling the 400 companies with the highest turnover in Iceland, shows some rise in the staffing index since February. The proportion of companies expecting to recruit more staff over the next six months rose to almost 31% from just over 28%. A similar number forecast an unchanged number of employees six months ahead.

In the current macroeconomic forecast, unemployment in 2004 and 2005 is expected to remain very close to the June forecast. In 2006, unemployment is forecast to drop to 1.8% in spite of more imported labour, since the output gap will have turned sharply positive by then.

Wage changes in line with the cost estimates in wage agreements

Price competition among businesses and more imported labour still appear to be holding back wage drift in sectors where excess demand is present or forming. According to the Statistics Iceland wage index and results from the Institute of Labour Market Research, little wage drift appears to have followed the scheduled pay increments under private sector wage agreements in the spring and summer. Private sector wages have risen by 4.9% so far this year according to the Statistics Iceland wage index. There has also been a longer lag in recording scheduled wage rises than was expected in the Central Bank's June forecast.

The forecast for changes in wage costs in 2004 has therefore been revised downwards by half a percentage point, to 4½%. On the other hand, the forecast rise for 2005 and 2006 has been revised upwards since June, to 6% each year from 5½%. Higher costs in 2005 are mainly caused by the lag in wage changes this year, while increased private consumption and lower unemployment will drive wage drift and therefore raise wage costs in 2006.

The Statistics Iceland labour market survey implies a substantial increase in productivity in 2003 and the emerging picture so far this year suggests sizeable gains as well. The Central Bank's forecast for labour productivity growth this year has been revised upwards by almost 1 percentage point, to 3.4%, with a slower rate in 2005 and 2006. Unit labour costs in 2005 and 2006 are forecast to rise by 3.9% and 4.3% respectively.

VII External balance and prospects for exchange rate developments

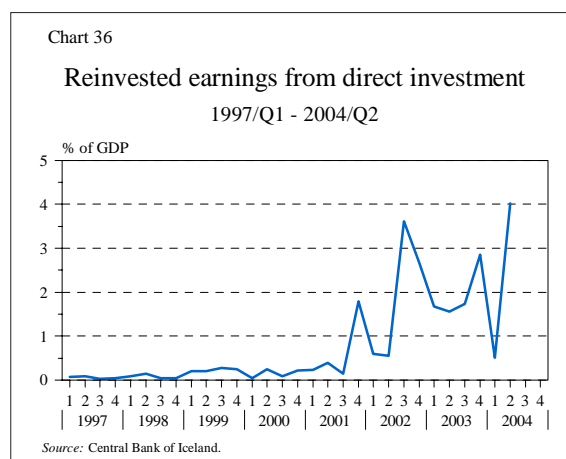
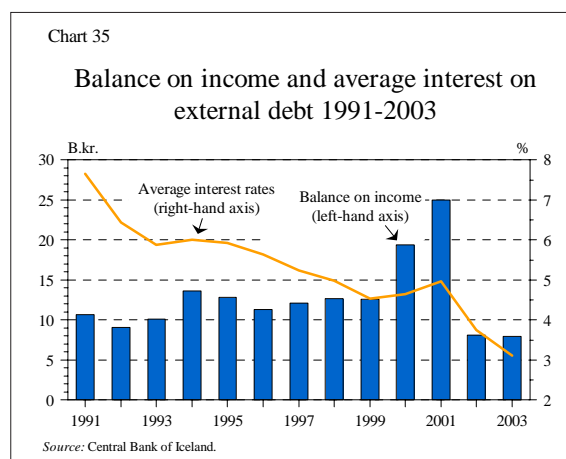
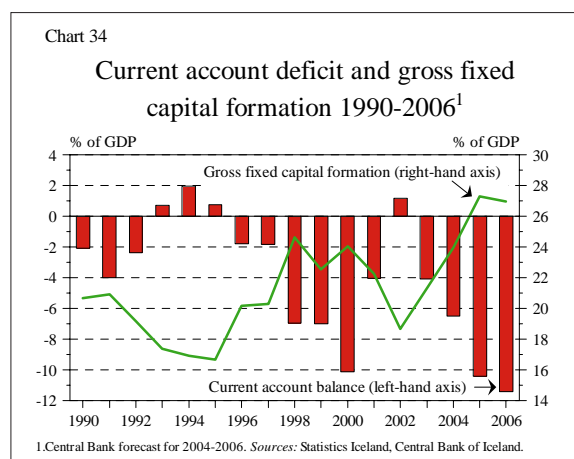
Outlook for a substantial and widening current account deficit in the coming years

The current account deficit is heading for 6½% of GDP in 2004 and the balance on income for a deficit of 10½ b.kr. Direct imports connected with investments for the aluminium industry are expected to equal 2.3% of GDP this year, 4.1% in 2005 and 4.3% in 2006. The current account deficit is forecast to widen further, to 10½% in 2005 and 11½% in 2006. The forecast deficit for 2006 has been revised marginally downwards since June, in particular because more aluminium exports are now expected that year. After allowing for their macroeconomic impulse, an estimated 40-50% of the current account deficit over the period 2004-2006 can be attributed directly or indirectly to investments for the aluminium industry.

Iceland's external debt will therefore increase considerably over the period, to the equivalent of 112% of GDP at the end of 2006. Interest rates on Iceland's external debt are expected to rise over the next two years, and judging from current foreign interest rates and historical developments it cannot be ruled out that they will go up by more than assumed in the current forecast, which would mean a further rise in external debt service. Great uncertainties also surround the development of other components of the balance on income, especially reinvested income (see Box 4).

When the smelters that are currently under construction go on stream, exports of aluminium will

surge. In 2008, when all the investments incorporated into the forecast are completed, aluminium exports will be around 165% higher in volume terms than this year. The current account balance can therefore be expected to improve when the ongoing investments are completed. Nonetheless, a deficit will remain which, as a proportion of GDP, could be equal to at least half of the deficit forecast for 2006. Clearly, closing that gap and rebalancing external trade will call for either more exports or less imports, or both. This adjustment could take place through a contraction, or at least through a sustained period when domestic demand will increase more slowly than exports. A weakening of the króna could then become an unavoidable part of the adjustment process.



Box 4 Balance on income

The current account balance measures the difference in value between exported and imported goods and services. When this value is negative, as has frequently been the case in recent years, the deficit is financed either with increased external debt or by depleting foreign assets. The main subcomponents of the current account are the balance on goods, which measures the difference in value between exported and imported merchandise; the balance on services, which measures the difference in value between exported and imported services; and the balance on income, which measures the difference between inward and outward compensation of employees, equity investment income and interest payments. Another subcomponent of the current account is current transfers, which mostly consist of contributions by central government to international agencies and development aid, but also include insurance compensation.

Table 1 shows the development of the balance on income since 1998. Employee compensation receipts are far higher than expenditures because wages paid to Icelandic workers at the NATO base in Keflavík are classified as being paid from abroad.

The table reveals that equity investment income has soared, from a negligible figure in 1998 to roughly 18 b.kr. per year in 2002 and 2003. Equity investment income consists of both dividends paid on equities owned by Icelandic residents and reinvested earnings from companies (including subsidiaries and branches) located abroad in which residents own a holding of 10% or more. The latter item has shown by far the most growth in recent years and is headed for a very high figure this year. It has made a substantial contribution to reducing the negative balance on income in 2002 and 2003 compared with preceding years. A similar effect is likely in 2004. However, this item is highly volatile, especially in the short term. Its quarterly values fluctuate very sharply (see Chart 36). In Q1/2004 reinvested earnings amounted to just over 1 b.kr., but in Q2 they measured 8.7 b.kr., equivalent to 4% of GDP for that quarter. If foreign companies owned by residents produce heavy losses, investment income can turn negative.

Outward equity investment income is much steadier. The lion's share is accounted for by profits of foreign-owned metals manufacturers in Iceland.

Balance on income, liabilities and assets 1998-2004¹

<i>In b.kr.</i>	1998	1999	2000	2001	2002	2003	2003/Q1-2	2004/Q1-2
Balance on income.....	-12.6	-12.6	-19.4	-24.9	-8.1	-8.0	-6.8	-4.4
Receipts.....	8.5	9.3	11.6	16.9	27.9	28.8	12.5	17.5
Compensation of employees	4.7	4.9	5.5	5.8	5.4	6.2	3.0	2.8
Equity investment income.....	0.6	2.1	2.6	7.8	17.6	18.2	7.5	11.2
Of which reinvested earnings.....	0.5	1.4	1.0	5.1	14.7	15.9	6.3	9.7
Of which dividends	0.2	0.7	1.6	2.7	2.9	2.3	1.1	1.5
Interest payments.....	3.1	2.3	3.5	3.4	4.9	4.4	2.1	3.5
Expenditures	-21.2	-21.9	-31.0	-41.9	-36.0	-36.7	-19.3	-21.9
Compensation of employees	-0.3	-0.3	-0.8	-0.5	-0.7	-0.5	-0.3	-0.4
Equity investment income.....	-2.3	-0.8	-1.6	-0.3	-1.1	-4.6	-2.5	-4.2
Interest payments.....	-18.6	-20.8	-28.5	-41.1	-34.2	-31.7	-16.5	-17.2
Foreign liabilities less FDI	409	512	723	938	902	1,152	994	1,357
FDI.....	32	35	42	71	63	75	62	82
Total foreign assets	152	244	316	422	395	677	480	842
USD/kr. exchange rate.....	69.32	72.35	84.47	102.95	80.58	70.99	76.38	72.49

1. Data for assets and liabilities show the position at the end of the period. *Source:* Central Bank of Iceland.

Interest payment expenditures are the largest single component of the balance on income. As the table shows, this item is very volatile. It is determined by the volume of Iceland's foreign borrowing and the interest rates on those liabilities. Foreign liabilities have increased sharply in recent years, more than tripling from the end of 1998 to the end of 2003. Nonetheless, interest payments on foreign borrowing were only 70% higher in 2003 than in 1998, due to falling foreign interest rates over that period. This item will probably rise in the near future since foreign interest rates are likely to head upwards.

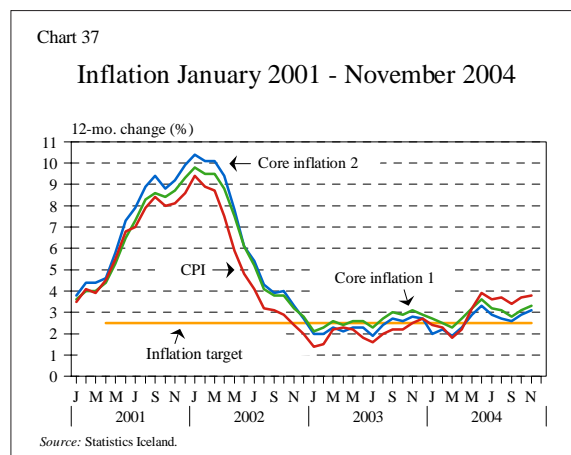
The hefty growth in external debt of the economy reflects not only the widening current account deficit, but also large-scale foreign investment by Icelandic residents. The table reveals a surge in foreign assets over the past few years – by 344% from the end of 1998 to the end of 2003. Foreign assets of Icelandic residents amounted to 842 b.kr. at end-June 2004, of which 147 b.kr. were direct investments and 695 b.kr. investments in foreign marketable securities, derivatives and other financial assets.

VIII Price developments and inflation forecast

Price developments

Inflation increased in Q3, but by less than was forecast in June

Inflation has been heading upwards in recent months and the twelve-month rate of increase in the CPI measured 3.8% in November. This is the seventh consecutive month that inflation measures more than 3.5%. Inflation in Q3 averaged 3.6%, which is 0.4 percentage points less than was forecast in June. Around half of this forecasting error can be attributed to a one-off reduction in the owner-equivalent rent item in the housing component of the CPI, which was not foreseen in the June forecast.



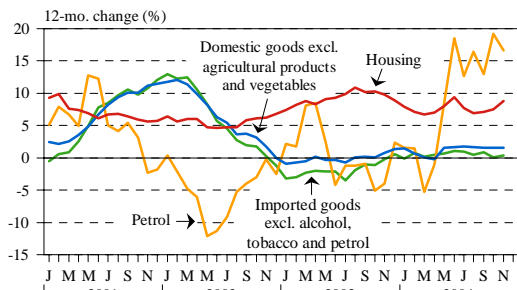
Statistics Iceland publishes two indicators of underlying inflation. The rise in Core index 1 (the CPI excluding agricultural products, vegetables, fruit and fuel) measured 3.3% in November, and has been 3% or above for the past seven months. Core index 2, which furthermore excludes changes in prices of public services, rose by 3.1% over the twelve months to November, and the annualised increase has hovered around 3% for the past seven months as well.

Inflation still explained by rises in a few components

Inflation is still confined to relatively few components. Most of the increase in these components is driven by demand, but part by direct cost pressure. The clearest indicator of demand pressure is the sharp rise in housing prices in the recent term. Of the 3.8% rise in the CPI over the past twelve months, 1.3 percentage points are explained by the housing component. Underlying indicators of demand pressures can also be discerned in various merchandise components, both domestic and imported. Higher energy prices, on the other hand, are an example of direct cost pressure. Some 0.6 percentage points of the increase in the CPI are explained by higher petrol prices, which are transmitted quickly from global markets to domestic prices. The rise in public services prices has also outpaced CPI inflation as a whole. More than two-thirds of inflation over the past twelve months is attributable to higher prices of housing, petrol and public services.

Chart 38

Components of the CPI
January 2001 - November 2004



Source: Statistics Iceland.

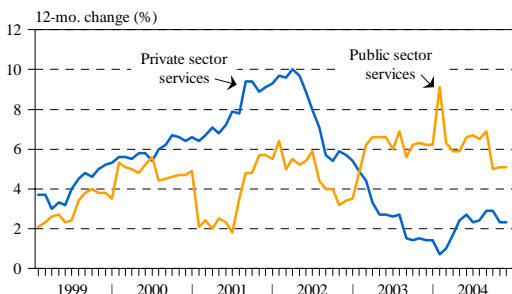
Excluding these components, price increases have been moderate. In the beginning of November the twelve-month rise in private sector services was 2.3%, in imported goods excluding alcohol and tobacco 2.5% and in domestic goods excluding agricultural products and vegetables 1.6%.

Public services prices have risen by double the increase in other services prices

Prices of public services have risen by more than 5% over the past twelve months, which is double the increase in other services. User charges for public sector services appear to be rising, but it should be borne in mind that their price increases lagged behind the private sector over the period 1999-2002. If the drop in Treasury revenues resulting from tax cuts is met to some extent with higher user charges for public serv-

Chart 39

Prices of services
January 1999 - November 2004



Source: Statistics Iceland.

ices, their prices can be expected to go on rising faster than the general price level.

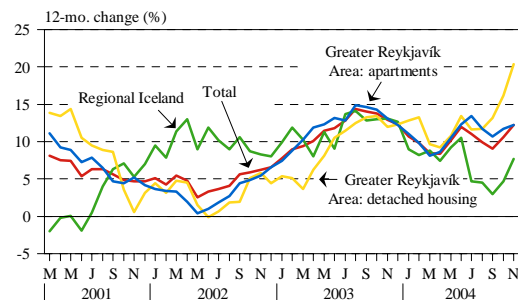
Housing price inflation picks up again

Increases in market prices of housing have continued almost unabated since April. During the summer the increases slowed slightly, but when the impact of tougher competition in the housing loan market and lower mortgage interest rates began to filter through in early autumn, housing prices rose strongly (see Box 1). In November, the twelve-month rise in the housing component of the CPI had reached 8.8%, driving the CPI up by 1.6%.

Housing prices have risen fastest in the Greater Reykjavik Area over the past twelve months, but have also increased considerably in regional Iceland. Market prices rose by an average of 12% nationwide, but just under 8% in regional areas. The sharpest increases have been in detached housing and larger residential properties, at just over 20% over the past twelve months, compared with 12% for apartments over the same period. In the past four months, prices of larger residential housing have increased particularly briskly, averaging 2-3.5% per month.

Chart 40

Market prices of housing
March 2001 - November 2004



Source: Statistics Iceland.

Higher fuel prices explain much of the rise in import prices, but the currency appreciation has not yet been transmitted to some categories of imported goods

Prices of imported goods rose by 2.5% over the twelve months to November. Excluding the impact of petrol, which went up by 16.6%, imported goods prices rose by 0.4%. Although inflationary pressures, driven by mounting domestic demand, have largely

been reflected in housing price rises until now, goods prices appear to have risen marginally in excess of what changes in the exchange rate and foreign prices would warrant. The import-weighted effective exchange rate of the króna had appreciated by 3½% over the twelve months to October, but by different amounts depending on the currency. For example, the króna appreciated by more than 10% against the US dollar, 2% against sterling and 1½% against the euro over this period. In November, the króna appreciated further against the main currencies.

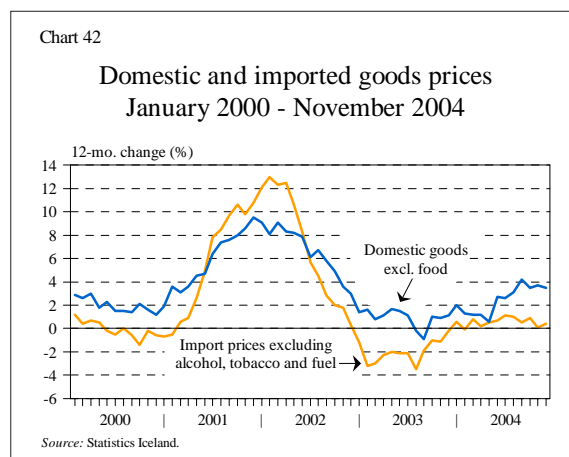
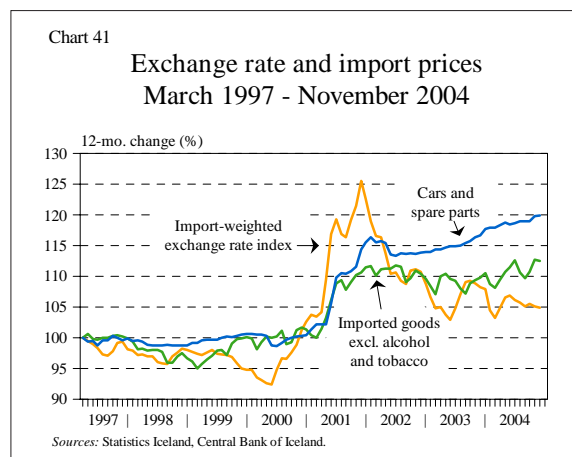
In the beginning of November, prices of imported food and beverages had come down by 0.3% over twelve months. The bulk of Iceland's food imports are from the euro area, the UK and the US. There is no question that prices of imports from the US should have fallen due to the slide in the dollar. According to the Harmonised Index of Consumer Prices (HICP) for the European Economic Area, food and beverage prices in the euro area and the UK have decreased by 0.2% and 0.7% respectively over the past twelve months. Changes in prices of imported foods from these areas are likely to be broadly in line with changes in retail food prices in the respective countries. Bearing exchange rate developments in mind, pressures on imported food and beverage prices should be downward in the near future.

Prices of imported motor vehicles rose by 3.4% over the twelve months to September. At the same time they went up by 1% in the euro area and down by 0.3% in the UK. Given the appreciation of the króna, car prices might have been expected to rise by considerably less than they actually have. Falling

prices may even have been warranted this year. Rising prices of new motor vehicles are probably an indication of growing demand.

Sizeable rise in prices of domestic goods excluding food

Domestic goods compete with imports and their price trends are generally broadly comparable, although fluctuations in the exchange rate have a weaker impact on domestic prices. Over the past twelve months, prices of domestic goods as a whole have risen by less than imports. Primarily, this is because domestic food prices, excluding agricultural products, have increased little or even fallen. Apart from food, domestic goods have risen more, which may point to a stronger demand effect where imports impose less restraint. The annualised increase has been in the range 3-4% so far in 2004 and was 3.5% in November. Over the same period, import prices excluding alcohol, tobacco and fuel rose in the range 0.5-1%.

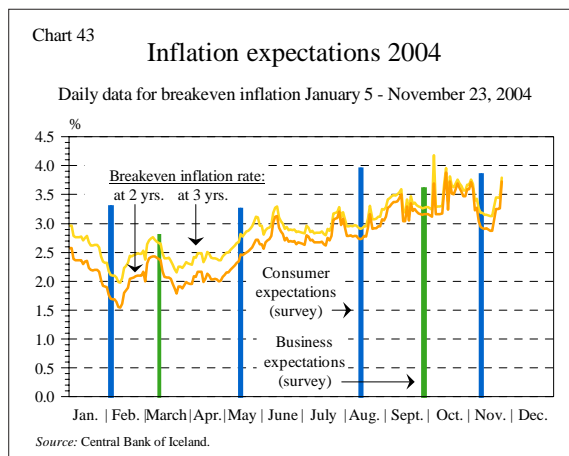


Inflation expectations still rising

Inflation expectations have risen in the autumn. In August, inflation expectations (measured in terms of the spread between non-indexed and indexed three- and five-year Treasury bonds) averaged 3% and 3.4% respectively, but in the first half of November measured 3.3% and 3.7%, and had been even higher in October. Financial market analysts forecast higher inflation over 2005 than they had expected in the beginning of September. In the most recent survey (see Box 5) their average forecast is for 3.5% inflation over 2005. The lowest value is 2.7% and the

highest 4.9%. In a survey for *Monetary Bulletin* 2004/3 in September they forecast inflation of 3.2% on average. The highest value was 3.5% and the lowest 3.0%.

In a survey of business confidence conducted in September by IMG Gallup among Iceland's largest companies in terms of turnover, their inflation expectations twelve months ahead had increased significantly over the preceding half year. They forecast 3.6% inflation, compared with 2.8% in a survey conducted in February. In a survey of household inflation expectations produced by IMG Gallup for the Central Bank four times a year – most recently in the beginning of November – households forecast average inflation of 3.9% over the next twelve months, which is marginally down from the previous survey in August. However, the median rose significantly, from 3.1% in August to 4% in November. The standard deviation went down from 2.3% to 1.9%. These findings can be read as indicating that inflation expectations are on the increase among the great majority of households, but fewer expect very high inflation.⁷

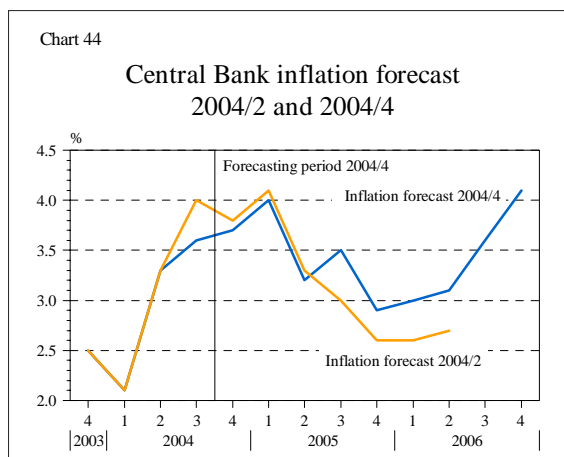


7. The high standard deviation and low median in the earlier survey suggest that a small proportion of the sample expected much higher inflation than the great majority of respondents.

Inflation forecast

Inflation some way above the target two years ahead
Monetary Bulletin 2004/3 in September included an assessment of the Bank's last forecast, which was published in the beginning of June. It found that medium-term inflation prospects had deteriorated since June, due to higher foreign inflation and even more vigorous domestic demand growth than had been expected. In the current forecast, this trend is even more marked. Even though the strong króna will continue to constrain domestic inflationary pressures in the short term, soaring domestic demand will cause the medium-term inflation outlook to deteriorate. Short-term inflation prospects have changed little since the June forecast. Inflation one year ahead is forecast at roughly 3.5%, compared with 4% one year ahead in June, or 3% for the horizon corresponding to the current one-year forecast (i.e. up to and including Q3/2005).

Towards the end of the forecast horizon, the impact of the currency appreciation and robust productivity growth in 2003 and 2004 will ebb, and be outweighed by rising domestic demand, which then will be driven among other things by the rapidly approaching peak of investments for the aluminium industry. Medium-term inflation prospects have taken a sharp turn for the worse. Inflation two years ahead is forecast at 3.6%, compared with only 2.6% in the June forecast. It should be remembered, however, that the two-year horizon in June extended to Q1/2006, while it is now Q3/2006. Part of the divergence can be explained by the forecast period mov-



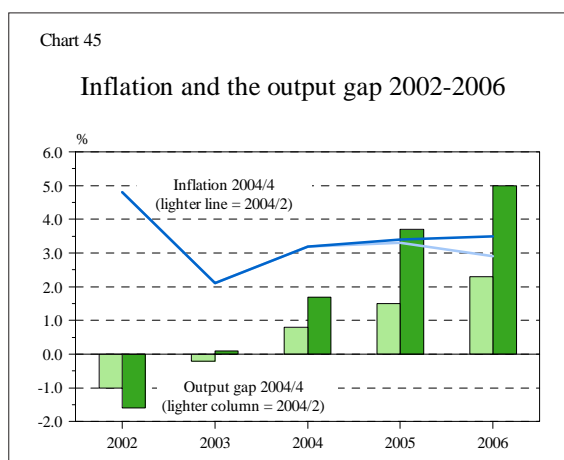
ing closer to the peak of the upswing. In Q4/2006 inflation will exceed 4%, according to the forecast. Chart 44 compares the current forecast with that from June.

Inflation is forecast to be above target across the entire horizon, and move beyond its upper tolerance limit at the end. The outlook is for average inflation of 3.2% in 2004, in line with the June forecast. Average inflation next year is forecast at 3.4%. Inflation in 2006 is forecast at 3.5% on average, but almost 4.5% over the year, assuming that the policy interest rate remains unchanged.

Positive output gap goes on widening ...

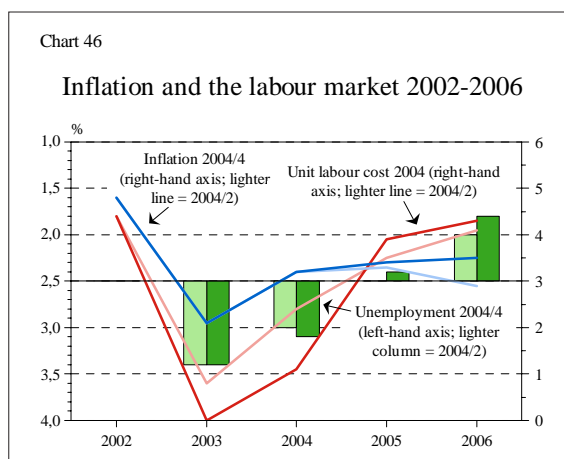
The main driver of inflation over the next two years is growing domestic demand which will increasingly widen the output gap, i.e. production in excess of long-term potential. The forecast assumes that the negative output gap was completely eliminated last year and that in 2006, output will exceed potential by almost 5%. This is a substantially wider output gap than forecast in June, the result of brisker growth in domestic demand than was expected then. By comparison, the output gap was estimated to be just under 3% at the peak of the last upswing in 2000.

Chart 45 shows the estimated output gap and inflation (annual averages) over the forecast horizon, compared to the estimates on which the June forecast was based. The output gap in 2002 is rather more negative than was assumed then, but more positive from last year until 2006. The wider positive output gap is reflected in a higher inflation rate, but with a lag of several quarters. In June, the annual rate of inflation was forecast to peak next year, based on the prospect that rising oil prices would deliver a temporary boost to inflation. More robust domestic demand and higher imported inflation (discussed later) have now changed the inflation profile so that the annual rate goes on accelerating to the end of the forecast period. The outlook is also that the large output gap foreseeable in 2006 will – assuming that the policy interest rate remains unchanged – drive inflation even further in the subsequent period. If the króna were to weaken in the course of the forecast period, inflation would rise even more. The Bank’s forecasting models suggest that average inflation in 2007 could reach as high as 5-6%, given the above economic assumptions and an unchanged policy rate.



... and labour market slack will disappear

Unemployment is expected to fall faster than was forecast in June, and move significantly below the level compatible with the Central Bank’s inflation target in 2006. Despite declining unemployment, labour use will increase more slowly than output. Productivity will therefore continue to increase across the forecast horizon, after substantial growth in 2004 and last year.⁸ Rapid productivity growth implies that unit labour cost is forecast to increase by only slightly more than was expected in June, in spite of higher forecast wage costs in 2005-6. The estimated increase in unit labour cost in 2003-4 has also been revised downwards since June. This is evident from Chart 46, which shows the development of



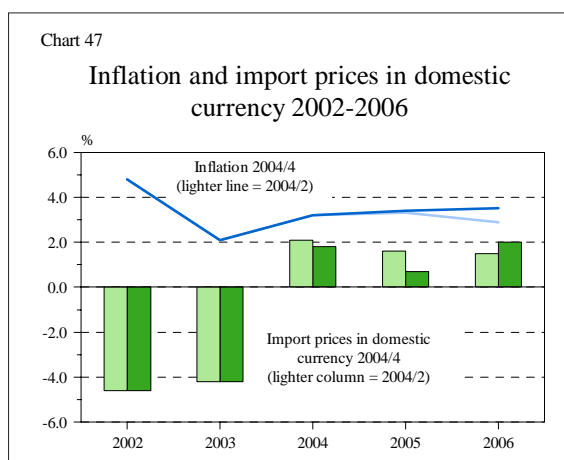
8. See the sections on the labour market above and in *Monetary Bulletin* 2004/2.

inflation, unemployment (as a deviation from an estimate of the equilibrium unemployment rate of 2.5%), and unit labour cost over the forecast horizon. It reveals little change in the development of unemployment since the June forecast. Labour market slack is forecast to disappear entirely in 2006, but next year unit labour cost will already be rising at a somewhat faster rate than is consistent with the inflation target.

More imported inflation in the long term than was previously forecast

As mentioned earlier, the current forecast assumes that the króna will be just over 3% stronger across the whole period than was expected in June. A stronger currency will counteract domestic inflationary pressure for most of the forecast period. However, the forecast for imported inflation has been revised upwards since June, as discussed in *Monetary Bulletin* 2004/3 in September. The main reason is higher global oil prices. The June forecast assumed that fuel prices would rise by just over 17% in foreign currency terms on average this year, which would unwind completely over the following two years, as implied by futures prices. Oil prices have continued to climb since the summer and this year's increase appears to be heading close to 28% in foreign currency terms. Futures contracts also suggest that oil prices will be more than 9% higher on average in 2005 compared to this year, then fall slightly in 2006. The fuel price outlook has therefore clearly worsened sharply since the June forecast. Developments of manufactured goods prices and prices of commodities apart from oil have also turned less favourable since June, because global excess capacity is apparently shrinking more rapidly than was assumed. Retail margins on imported goods can be expected to increase when demand grows as quickly as has been forecast. Competition and cost-consolidation in the domestic retail market could, however, provide some counteraction.

Assuming an unchanged exchange rate from the day of the forecast, the appreciation of the króna so far this year will offset the rise in foreign inflation into next year. Consumer goods prices will thus rise by less in króna terms than was forecast in June, as Chart 47 shows. It will not be until 2006 that imported inflation, measured in domestic cur-



rency terms, will begin to exceed the rate forecast in June.

Upside risk for medium-term inflation

Inflation prospects are always fraught with uncertainty. The main forecast may be seen as the most probable outcome based on an unchanged policy rate and exchange rate. Global economic developments, for example, are a major uncertainty – especially oil prices, but no attempt is made to evaluate whether prices are more likely to be higher or lower than assumed in the forecast.

There is a fairly high probability that the Norðurál smelter will be expanded beyond the scale that has already been announced. A number of other power-intensive and manufacturing options are being explored, although plans are at early stages. If they materialise, these investments will have a macroeconomic impact, but their effect on inflation is uncertain. The króna could strengthen, temporarily cutting back inflation, but the level of economic activity would grow beyond the forecast assumptions, which would spur inflation in the longer run.

The asymmetric uncertainties deserve particular attention. Table 6 summarises the main asymmetric uncertainties in the forecast. It is possible that the expectations and the wealth effect caused by recent soaring asset prices and fiercer competition in the domestic credit market will be stronger than assumed in the forecast. There is some risk of the króna weakening later in the forecast period, as the external imbalances increase. If inflation cannot be brought to target in good time, a review of wage agreements

could be triggered in November 2005. Finally, there is some risk of a laxer fiscal stance across the forecast horizon than has been aimed for or is assumed in the forecast, since the fiscal restraints are only defined in fairly general terms. Likewise, the impact of planned tax cuts on future income expectations has been fairly cautiously assessed, and they could provide an even stronger impulse to demand.

While any of these risk factors could fuel inflation, at least one could have the opposite effect in the medium term. Domestic asset prices are very high at present, and probably higher than is warranted by economic fundamentals. Buoyant prices of equities and housing will continue to drive vigorous demand in the medium term, but if asset prices begin to give way, domestic demand is likely to grow more slowly than expected in the main forecast, resulting in less output growth, excess capacity and inflation. A fall in housing prices would also have a direct downward impact on inflation, with “owner-equivalent rent” weighing more than 10% in the CPI. Whether and

when such an adjustment will take place is highly uncertain, but the probability of this happening increases across the forecast horizon, especially if the main forecast’s assumption for an unchanged policy rate is relaxed.

All the above uncertainties, apart from asset prices, are upside risks to inflation in the main forecast. Since their effect is likely to intensify across the forecast horizon, it is not felt necessary to review the risk profile one year ahead. This is considered to be symmetric as in the June forecast. The risk remains upside two years ahead. On first impression an even higher upside risk might have been expected, but it should be borne in mind that the uncertainties discussed in previous forecasts have now been partly incorporated into the main forecast. Hence there is no reason to presume that the uncertainties two years ahead are significantly more asymmetric than they were in June. Thus the risk profile remains broadly the same as it has been since November 2003.

Table 6 Main asymmetric uncertainties in the inflation forecast

<i>Uncertainty</i>	<i>Explanation</i>	<i>Inflationary impact</i>
Private consumption.....	The impact of changes in the credit market, in the form of lower long-term interest rates and easier credit access, and their potential wealth effect, on private consumption could be underestimated	Risk of underestimated demand pressures and thereby of underforecasting inflation
Exchange rate developments...	Wide current account deficit and increasing inflation expectations for the coming years could create downward pressure on the króna	Risk of the króna weakening and thereby of underforecasting inflation
Wage developments.....	Adverse inflation prospects and the outcome of specific wage agreements could create pressure to renegotiate general wage agreements	Risk of underestimated wage rises and thereby of underforecasting inflation
Fiscal policy	The fiscal stance could be laxer than assumed in forecasts. The impact of planned tax cuts on future income expectations could be underestimated, so their demand impulse could be correspondingly greater	Risk of underestimated expansion driven by demand pressures and thereby of underforecasting inflation
Asset prices	Asset prices could fall, reducing private consumption later in the forecast period	Risk of overestimated expansion driven by demand pressures and thereby of underforecasting inflation
<i>Central Bank risk profile</i>	<i>One year ahead</i>	<i>Two years ahead</i>
November 2003	Symmetric	Upward
June 2004	Symmetric	Upward
December 2004	Symmetric	Upward

Box 5 Financial market analysts' assessments of the economic outlook

The accompanying table shows the economic forecasts of financial market analysts in the beginning of November. Participants in the survey were the research departments of Íslandsbanki, KB banki, Landsbanki, and Economic Consulting and Forecasting.

Analysts have been revising their inflation forecasts for 2004 and 2005 upwards since the beginning of this year, in pace with the development of the CPI over this period. They expect an average rate of inflation of 3.7% over 2004, and 3.2% year-on-year. The Central Bank's forecast is virtually the same: 3.8% over the year and 3.2% year-on-year. There is more divergence in assessments for 2005. The Central Bank forecasts lower inflation in 2005, at 3.0%, compared with the analysts' average of 3.5%, while their year-on-year forecasts are broadly the same. All forecasts are above the Central Bank's inflation target.

The economic growth outlook has improved since August, in the analysts' view. They foresee average GDP growth of 5.0% this year and 5.1% in 2005, but with a considerable difference between the highest and

lowest forecast values. The Central Bank forecasts a higher rate of GDP growth, at 5.4% this year and 6.1% in 2005.

On average, respondents forecast an exchange rate index of 123 twelve months ahead, implying a slight depreciation of the króna from its recent value. Two years ahead they forecast a further slide to an exchange rate index of 128.

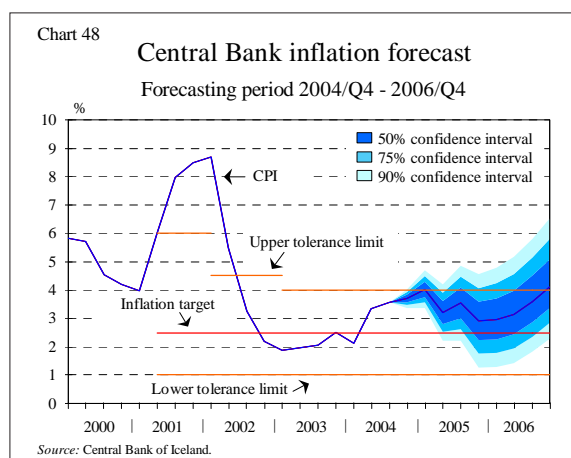
Although the Central Bank raised its policy interest rate to 7.25% on November 1, analysts expect further hikes in the medium term, forecasting a policy rate of 8.6% one year ahead and the same rate two years hence. As the range of figures in the table shows, opinions are divided about these developments.

The same applies to future equity prices, especially two years ahead. One forecaster expects a sizeable drop and the others predict rises – although to varying degrees. Also, financial market analysts expect real estate prices to continue trending upwards in the medium term.

Overview of forecasts by financial market analysts¹

	2004			2005		
	Average	Lowest	Highest	Average	Lowest	Highest
Inflation (within year)	3.7	3.5	3.9	3.5	2.7	4.9
Inflation (year-on-year)	3.2	3.1	3.3	3.5	3.1	4.4
GDP growth.....	5.0	3.9	6.2	5.1	4.3	6.5
	One year ahead			Two years ahead		
The effective exchange rate index of foreign currencies vis-à-vis króna (Dec. 31, 1991=100)...	123.0	120.0	128.0	128.0	123.0	133.0
Central Bank policy interest rate.....	8.6	8.5	9.0	8.6	8.0	9.5
Nominal long-term interest rate ²	8.2	8.0	8.2	7.5	7.0	7.7
Real long-term interest rate ³	3.8	3.5	4.2	3.6	3.2	3.9
ICEX-15 share price index (12-month change)....	2.5	-20.0	20.0	11.8	-10.0	35.0
Housing prices (12-month change).....	8.8	5.0	10.0	12.3	10.0	15.0

1. The table shows percentage changes between periods, except for interest rates (percentages) and the exchange rate index for foreign currencies (index points). Participants in the survey were the research departments of Íslandsbanki, KB banki and Landsbanki, and Economic Consulting and Forecasting. 2. Based on yield in market makers' bids on non-indexed T-notes (RIKB 13 0517). 3. Based on yield in market makers' bids on indexed HFF bonds (HFF 44 150644). *Source:* Central Bank of Iceland.



As before, estimates of forecast uncertainty based on historical forecast errors are likely to exaggerate to some extent the uncertainties that lie ahead, since they tend to be unduly influenced by the recent period of high and variable inflation.

Chart 48 presents the estimated confidence intervals for the next two years. The entire shaded area shows the 90% confidence interval; the two darkest ranges show the corresponding 75% confidence interval and the darkest range shows the 50% confidence interval. The uncertainty increases over the horizon of the forecast, as reflected in the widening of the confidence intervals.⁹

Table 7 Probability ranges for inflation over the next two years

Quarter	Inflation				
	Under 1%	In the range 1%-2½%	Under 2½%	In the range 2½%-4%	Above 4%
2004:4	< 1	< 1	< 1	94	6
2005:3	< 1	10	10	62	28
2006:3	1	13	14	44	42

The table shows the Bank's assessments of the probability of inflation being in a given range, in percentages.

9. The range for which the Bank has not previously forecast is based on a simple extrapolation. Just as forecasts for individual values are subject to uncertainty, so is the method of estimating the uncertainty of forecasts. The estimated forecast uncertainty should therefore be interpreted with caution. The aim is to highlight the inherent uncertainty of the forecast rather than to provide a precise assessment of the probability distribution of forecast inflation.

Less probability of inflation being close to target over the next two years, assuming an unchanged monetary stance

Since June, the probability that inflation will be close to the target over the forecast horizon has decreased significantly, especially in the second half of the period, assuming that the Central Bank's policy interest rate remains unchanged. Similarly, there is a significantly greater probability that inflation will move beyond the upper tolerance limits at the end of the forecast period.

Alternative scenarios

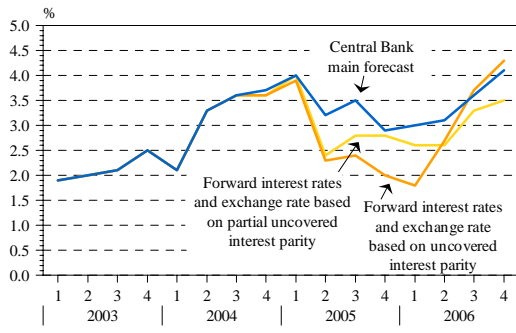
The interest rate rises that can be inferred from forward rates are insufficient to keep inflation close to target

As pointed out elsewhere, the main forecast is based on the technical assumption of an unchanged policy interest rate and exchange rate from the day of the forecast. Such a forecast may present a misleading picture of future economic developments because it is unlikely that these technical assumptions will hold, especially when inflation diverges substantially from target. In particular, the forecast aims to provide the Central Bank with a guideline for its interest rate decisions, so that the policy rate can be set such that the target can be attained.

Hence it can be useful to examine an inflation forecast which allows the interest rate and the exchange rate to change. Chart 49 shows two such forecasts. In both cases the policy rate is allowed to develop in line with forward interest rates as they are presented in Chart 6 above. The exchange rate is also allowed to develop in line with uncovered interest parity, i.e. on the basis of market expectations of the future development of the interest-rate differential with abroad. According to the Central Bank's assumptions for foreign interest rate developments over the next two years and the forward curve of its policy interest rate, the policy rate will increase sharply next year, and in excess of foreign rates, while rises in 2006 will be relatively modest and the differential with abroad will narrow slightly. As a result, the króna will appreciate at first, and then depreciate in the second half of the forecast period in order to ensure that the expected return on domestic and foreign assets is always the same along the hori-

Chart 49

Inflation forecasts based on different interest rate and exchange rate assumptions



zon. This path implies that the króna will strengthen in 2005 by roughly 1½ percentage points in excess of the main forecast, then weaken again in 2006, but without its appreciation in the previous year unwinding entirely. Chart 49 includes another inflation profile which partly deviates from the uncovered interest parity assumption and is smoother, with the króna appreciating by less at first and likewise weakening by less later along the horizon.

In this scenario, inflation is initially lower than in the main forecast, because higher interest rates subdue demand and the króna strengthens. Output growth is in the range of 0.3-0.5 percentage points lower over the next two years, depending upon which exchange rate path is applied, with a corresponding narrowing of the output gap. Later along the forecast horizon the króna begins to depreciate again, and inflation picks up. The rate of inflation varies depending upon which exchange rate assumption is used, and actually exceeds the rate in the main forecast at the end of the horizon if uncovered interest parity is incorporated in full, because that assumption implies a relatively sharp depreciation. If only partial interest parity is included the curve is smoother. The interest rate curve develops along broadly the same lines as in the main forecast, but is always somewhat below it.

In both scenarios, however, it transpires that the expected interest rate rises that can be inferred from forward interest rates are apparently insufficient to keep inflation on target along the forecast horizon. With its current information on the macroeconomic position, changes in the credit market and revised

investment plans for the aluminium industry, the Central Bank would clearly have raised its policy rate earlier than it actually did. This implies that a larger rise than otherwise is needed to ensure that inflation remains as close to the target as possible.

Inflation will be lower if the government tightens its fiscal stance as planned

The main forecast diverges from the Ministry of Finance's assumptions about the development of public consumption over the next two years. It assumes that public consumption will grow by just over 3% in 2005 and 2½% in 2006, compared with Ministry's projection of 2% for both years. Part of the explanation lies in the effect of the primary school teachers' strike on local government expenditure, but the forecast also takes into account the vague wording of the cost restraint measures and the strong tendency for public sector expenditure to overshoot targets.

If the Ministry of Finance's estimates hold, however, underlying demand pressures will ease slightly compared with the main forecast. National expenditure growth in 2005 would be almost 1 percentage point lower. GDP growth would therefore probably be almost half a percentage point lower in 2005, but the economic impact in 2006 would be less pronounced. A narrowing of the output gap by half a percentage point across the forecast horizon would ease inflationary pressures. Annual inflation over the next two years would then be in the range 0.2-0.3 percentage points lower than in the main forecast.

IX Monetary policy

At the time of writing, the Central Bank has raised its policy interest five times since early May this year, by a total of 1.95 percentage points. The last hike was announced at the end of October, when the Bank raised its policy rate by 0.5 percentage points to 7.25%. In its press announcement, the Bank cited the analysis of economic and monetary developments and prospects that was published in *Monetary Bulletin* 2004/3 in mid-September. It described how unfolding developments in the financial markets had been counteracting the Central Bank's measures in recent months. The Central Bank had to respond to this development, given that construction work on power

stations and aluminium smelters would surge over the next few months. Furthermore, it was pointed out that strong demand for new borrowing had become evident following major changes in credit supply, which resulted in a substantial easing of the debt service burden of households, allowing them considerably more disposable funds for consumption or housing investment. The announcement also emphasised that inflation had been some way above the Bank's 2½% inflation target for some time, exacerbating the risk that inflationary expectations, which had been on the increase over the past year, would become anchored at a higher level. Consequently, the Central Bank's policy interest rate had not gone up in real terms to any extent. The last policy rate increase aimed to counteract the easing of the monetary stance caused by higher inflation expectations and the laxer financial conditions created by the banks' entry into the housing mortgage market and by changes in the state Housing Financing Fund's lending rules. Further measures were probably necessary to bring inflation back down to target, the press announcement said, partly because a rate of inflation some way above the Bank's target could trigger a review of current wage agreements in November 2005, and also because of intensifying investments in the aluminium industry and related hydropower production and the insufficiently tight fiscal stance in the budget proposal for 2005. The Bank warned that the current account deficit over the next two years could threaten to undermine the exchange rate in the course of time, with repercussions for price stability and putting a strain on the financial system. Since recent changes in the housing market delayed the intended effect of policy rate rises, the case for raising the policy rate sooner rather than later had strengthened significantly. A timely policy rate hike could mean that interest rates would not need to be raised by as much later on.

Real policy rate still close to real natural rate of interest

Over the month that has elapsed since the last rise was announced, the policy rate has gone up slightly in real terms, although broadly remaining within the range where it has fluctuated over the past year. Financial companies have clearly had ample liquidity and money market rates have been some way below the Bank's policy rate. Both these factors

imply that the monetary stance has not tightened as much as was aimed for. In recent weeks the policy rate in real terms, measured against the breakeven inflation rate on non-indexed two- to three-year Treasury bonds, has been around 4%.

This real rate of interest may be measured against the natural real interest rate in Iceland, i.e. the real rate that is compatible with price stability when GDP growth is in line with the growth of potential output, and hence under normal conditions should represent the real interest rate to be expected on average across the business cycle. While such an assessment is fraught with uncertainties, the natural real interest rate in Iceland probably lies in the range 3-4%. As money market rates have not fully tracked the policy rate, effective real short-term interest rates have been lower. This invites the conclusion that current interest rates need to rise considerably in real terms in order to tighten the monetary stance enough to counteract the demand impulse from investments for the aluminium industry and easier credit supply, and thereby ensure that developments remain in line with the Bank's target. Real interest rates can go up either with nominal rates rising in excess of inflation expectations or with inflation expectations falling. In the present climate, inflation expectations appear unlikely to come down sufficiently except by monetary policy measures. Before inflation expectations can fall, the real interest rate barrier needs to be broken which has formed at a rate that is probably only marginally – if at all – higher than the natural real rate of interest. This requires measures on the part of the Bank that are sweeping enough to make the prospect of constraining inflation credible.

Monetary policy influences effective interest rates on foreign borrowing

There has been some discussion of the notion that easy domestic access to foreign capital at low interest rates severely dampens the effectiveness of monetary policy. It has even been claimed that monetary policy has become completely impotent. This is a misunderstanding. Admittedly, inflows of foreign credit may temporarily dampen the effectiveness of a tight monetary policy and require the policy rate to be moved more in order to achieve the desired effect. But an interest rate level can always be found that fits the Central Bank's target. Easier access to foreign credit

may have a considerable effect on the transmission mechanism. It can certainly cause a lag in the transmission of monetary policy through the interest rate spectrum and heighten uncertainty about the speed of the transmission. That said, monetary policy can also have a strong influence on the effective interest rates on foreign borrowing, through its impact on the exchange rate. By raising interest rates, the Central Bank can contribute to a temporary strengthening of the króna. If the króna appreciates in the short term beyond what market agents perceive to be its equilibrium exchange rate, it will prompt expectations of future depreciation. This entails that expected effective interest rates, i.e. the rates that domestic entities actually pay in domestic currency on their foreign debt service, will be higher than the nominal rates. An appreciation above expected long-term equilibrium makes domestic bonds less attractive to foreign investors, since they represent a currency risk. If financing of mortgage loans, for example, is based to some extent on demand from such investors, the point will eventually be reached where lenders will need to adjust their own interest rates to those available to them when funding their lending. In this way, domestic monetary policy influences the effective rates of interest on foreign loans, even though nominal rates are beyond its scope. A stronger króna would also squeeze the export and traded goods sectors and their demand for domestic factors of production, which would help to keep domestic wage and price rises in check. It would be preferable to rely more on other channels for transmitting monetary policy. The reason is that a strong domestic currency hits some sectors sooner and with greater force than others, in addition to initially stimulating imports of consumer goods and causing a wider current account deficit before its impact on general demand kicks in.

Currency purchase to strengthen the foreign exchange reserve will be discontinued

A tight monetary policy inevitably has side-effects in a small, open economy, however. Consequently, it is important not to obstruct the transmission mechanism that enables the Central Bank to influence the effective interest rate on foreign borrowing. This consideration prompts a discussion of the Central Bank's regular currency purchases in recent years, aimed at boosting the foreign exchange reserve. As the Bank

has repeatedly stated, the aim of its currency purchases has not been to influence the exchange rate, but rather to consolidate Iceland's foreign liquidity position and create a more secure environment for the króna in the long run. In their own right, the Bank's currency purchases increase liquidity in the domestic market. In practice, however, they tend to be automatically sterilised, since DMBs use the domestic currency they receive from their forex sales to the Bank to reduce their repo liabilities. As explained in more detail in the following chapter on Financial markets and Central Bank measures, currency purchases and the abolition of required deposits have nonetheless had a net positive impact, i.e. the combined reduction in the repo stock and increase in the certificate of deposit stock have not completely managed to offset the impact that currency purchases and last year's lowering of the reserve requirement have had on overall liquidity. In addition, market agents have tended to interpret the Bank's regular strengthening of its reserves as a measure aimed at maintaining exchange rate stability. Irrespective of the Bank's actual purpose, this market perception is very detrimental to monetary policy, since in effect it can cause the Bank's measures to have a similar impact to a fixed exchange-rate regime, although this is not the intention. For this reason and because of the substantial consolidation of the foreign reserve that has been achieved, as of the beginning of next year the Bank will discontinue purchases of currency for this purpose. From that time, purchases will be solely linked to the Treasury's currency requirements for its foreign debt service, as explained in more detail in the chapter on Financial markets and Central Bank measures.

Tighter fiscal policy stance needed

In the next few years, monetary policy will face conditions that seriously challenge the adaptability of the economy. An effective monetary and fiscal policy mix is vital in such a climate. The greater the burden that monetary policy has to bear over this period, the more negative its side-effects. The Central Bank has firmly underlined that monetary policy should be backed up with a tight fiscal policy stance and from the public sector as a whole. The fiscal budget proposal for 2005 implies some tightening from the previous year. Nonetheless, the cyclically adjusted

Treasury balance in 2005 and 2006 will be considerably weaker than during the episode of overheating in 1999 and 2000. The stance at that time proved to be insufficiently tight, as became clear in the aftermath in 2001 and 2002. Counteracting the impulse provided by tax cuts over the coming years calls for sizeable cuts in central government spending, which undoubtedly will meet with resistance. The vague nature of plans announced for cost restraint is therefore a major

cause of concern. Public sector expenditure tends to overshoot the budget targets in most years. Monetary policy can not afford to take the realisation of ambitious plans for cutbacks for granted. If they fail to be realised, it may be too late to respond, given the circumstances that lie close ahead. The Central Bank must base its monetary policy measures on what it considers to be the most probable scenario.

Financial markets and Central Bank measures¹

Interest rate rises and shifts in the markets

The Central Bank of Iceland raised its policy interest rate by 0.5 percentage points in September and again by the same amount in November. In part, the hikes were a response to deteriorating inflation prospects and greater household expenditure capacity following changes in the mortgage market. Competition for housing loans took on a new shape when the banks began offering mortgages on easier terms. The króna has strengthened recently for various reasons. In the beginning of 2005 the Central Bank will cease to make regular currency purchases with the aim of strengthening its foreign reserves, and subsequently only purchase currency in regular trades to meet the Treasury's debt service requirement. Credit institutions have experienced fairly easy liquidity and bank interest rates have not fully tracked changes in the Central Bank's policy rate. Indexed bank rates have gone down after the banks announced new mortgage loans. Equity prices took a sharp dive in October after three years of almost continuous rises. Bond market yields have been relatively stable.

The Central Bank raised its policy rate in September ...

Coinciding with the publication of Monetary Bulletin on September 17, the Board of Governors of the Central Bank of Iceland announced an 0.5 percentage point rise in its policy interest rate, effective from September 21. Reasons for the hike included growing inflationary pressures and the need for a tighter stance in response to the expansionary effect of investments for the aluminium industry. Also, the higher policy rate aimed to offset the easing in financial conditions in preceding months, in particular due to rising inflation expectations.

... and again in the beginning of November

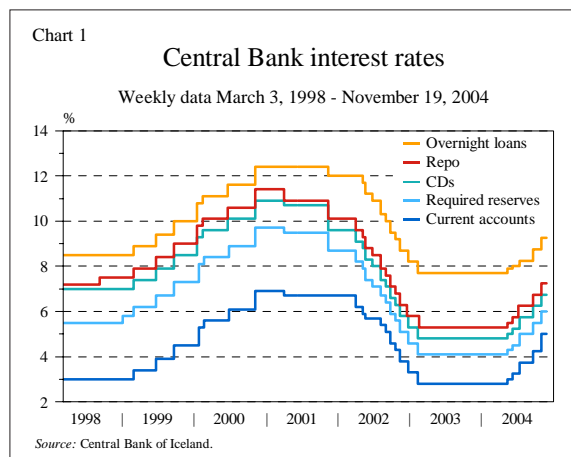
On October 29, the Board of Governors of the Central Bank announced an 0.5 percentage point rise in its policy interest rate, effective from November 2. In part this hike was a response to the greater household expenditure capacity unleashed by new developments in the mortgage market. According to

Central Bank sources, there is intense demand for the new loans. Lower interest rates have created some scope for households to reduce their payments burden, or to leave it unchanged while increasing their indebtedness, which is likely to spur consumption. Inflation has also exceeded the Central Bank's target for several months and there is a risk that expectations will become anchored higher. In its announcement the Central Bank also stated that, in the light of economic prospects, there was a strong case to be argued in favour of raising the policy rate sooner rather later, since a timely hike could mean that interest rates would not need to be raised by as much later.

Stepwise narrowing of the interest rate corridor

Since the Central Bank began raising its policy rate in May this year it has also narrowed the spread between its overnight lending rate and deposit rate for credit institutions from 4.9 to 4.25 percentage points. It plans to narrow this margin further in the coming months, which will reinforce the impact of policy rate changes and dampen volatility in inter-bank market rates. Chart 1 shows the development of

1. This article uses data available on November 19, 2004.



the policy rate and the Central Bank's other main interest rates.

Increase in new mortgage lending by banks ...

Since the banks began offering housing loans on new terms in August, their stock has soared and amounted to 55 b.kr. at the end of October. A sizeable share of these loans have been used to prepay older loans on less favourable terms from the Housing Financing Fund (HFF), pension funds and the banks themselves. However, many borrowers appear to have used this opportunity to increase their mortgage leverage and deploy some of the new borrowing on consumption. It is not yet clear how the banks intend to finance the new loans, but funding them with liquid assets or short-term capital will not be sustainable for long. Housing loans issued by the HFF and its predecessors have been prepaid on a considerable scale, but no official figures are available showing the sums involved. The HFF arranged an extra draw of housing bond categories that it prepaid in October and November and withdrew bonds to a market value of 14.4 b.kr. It also offered to buy back older bonds in the market. Seven bids were made but none were accepted. On October 19 the HFF announced how it intends to enact an extra draw which will be confined to the housing bond categories for which the prepaid bonds were financed. The HFF has also announced the issue of a new category of HFF bonds with a final maturity in 2014, aimed at increasing the flexibility of its liquidity management.

... and new loan limits were introduced

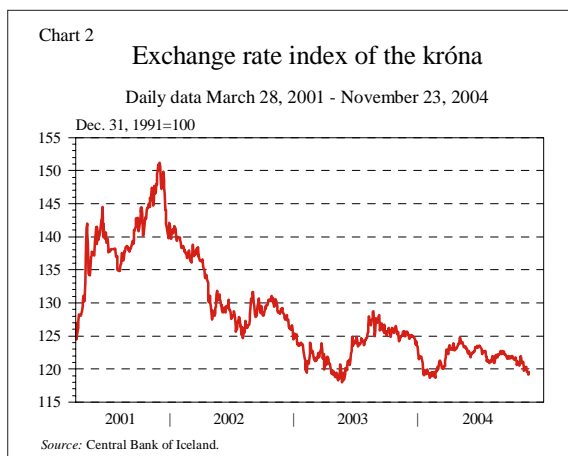
In October the HFF increased its maximum housing loan amount from 9.7 m.kr. to 11.5 m.kr. The Minister of Social Affairs has told parliament that the cap will go up to 13 m.kr. at the beginning of next year. A draft bill currently before parliament will allow the HFF to offer a loan-to-value ratio of up to 90% (based on purchase price). In November, Íslandsbanki announced 100% mortgages, subject to conditions for collateral and life expectancy. Other banks followed suit, with various conditions. These moves obviously exacerbate credit risk, given the stronger risk that such a high loan-to-value ratio could leave equity negative if housing prices turn downwards. In a report commissioned by the Minister of Social Affairs earlier this year,² the Central Bank found that, if a house is purchased when the price is two standard deviations above average long-term prices (as at present), the probability of negative mortgage equity at some stage over the loan period is 83-98% in the case of a 90% loan. This means that, for a long maturity, the equity position is almost certain to turn negative at some point and leave the lender's collateral position less secure. While this need not mean loan losses, the lender will be in an adverse position under such circumstances and more exposed to financial shocks.

The króna has strengthened slightly

The króna fluctuated within a fairly narrow range during the summer and into the autumn, but a relatively slow trend towards appreciation could be discerned. Some strengthening took place following the policy rate hike in the beginning of November and the exchange rate index dipped below 120; it has been in this region several times during the year. Reasons for the recent appreciation include the higher policy rate, which widens the interest-rate differential with abroad, relatively high yields in the Icelandic bond market, announcements of greater-than-expected investment such as further expansion of the Norðurál smelter, and changes in the ownership of major companies. The Central Bank bought

2. *Efnahagsleg áhrif breytinga á fyrirkomulagi lánsfjármögnunar íbúðarhúsnæðis* (The economic impact of changes in housing financing arrangements), June 28, 2004, published on the Central Bank of Iceland website on November 15, 2004.

50 million US dollars from one market maker in a single trade on November 4. Chart 2 shows the development of the exchange rate index this year.



... but Central Bank foreign currency purchases will be reduced next year

Since the beginning of September 2002 the Central Bank of Iceland has made regular purchases of currency in the interbank forex market with the aim of boosting its foreign exchange reserve, which had been severely depleted by the Bank's intervention in the market in 2000 and 2001. From September 2002 until the end of 2004, currency purchases will probably have totalled 75 b.kr. and the reserve is likely to be around 70 b.kr. at the end of the year. The Central Bank does not see grounds for boosting its reserves further for the time being. It has therefore decided, from the beginning of 2005, to cease regular currency purchases with the aim of strengthening its reserves. After that the Central Bank will only purchase currency in the domestic forex market to fulfil the Treasury's requirements for foreign debt service. Accordingly, in 2005 the Bank will purchase 2.5 million US dollars once a week in the market. The Central Bank will purchase currency on behalf of the Treasury for its foreign debt service requirement beyond these scheduled amounts and give forex market makers advance notice of transaction arrangements.

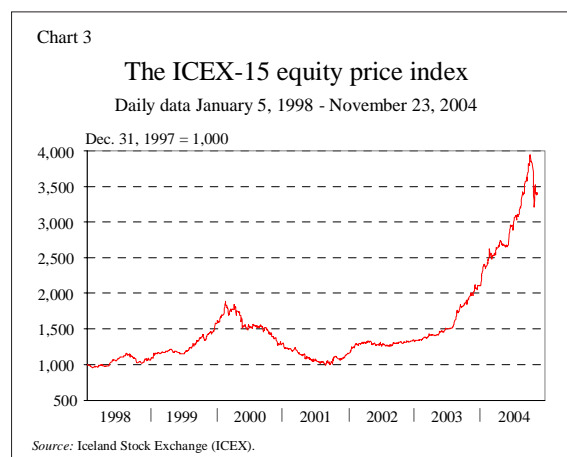
Equity prices fell ...

Equity prices in Iceland have been climbing fairly continuously ever since plans to cut corporate income

tax were announced in October 2001. Coupled with a turnaround in the economy and extensive cost consolidation, this measure caused equity prices to spiral. This year the rises were led by financial companies and for some time the twelve-month increase measured 100%. Strong cross-ownership links between certain companies also affected prices. In the beginning of this year, the Iceland Stock Exchange ICEX-15 index stood at 2,100 but it was nudging 4,000 in the beginning of October. On October 20 a slide began that lasted for 10 business days during which ICEX-15 fell by more than 16%. The largest fall in a single day was 4.23% on October 26, when the Competition Agency published its report on alleged price collusion by oil companies and announced fines against them, which doubtless served to sharpen the slide.

... then climbed some way back

Equity prices began rising again on November 3. ICEX-15 gained a total of 9.5% over the next four business days and is now hovering around a value of 3,400. Positive reports of company performance, expansion in foreign markets and increased investments for the aluminium industry clearly prevented a greater price slide. Chart 3 shows the development of the ICEX-15 index so far this year.



Easy liquidity

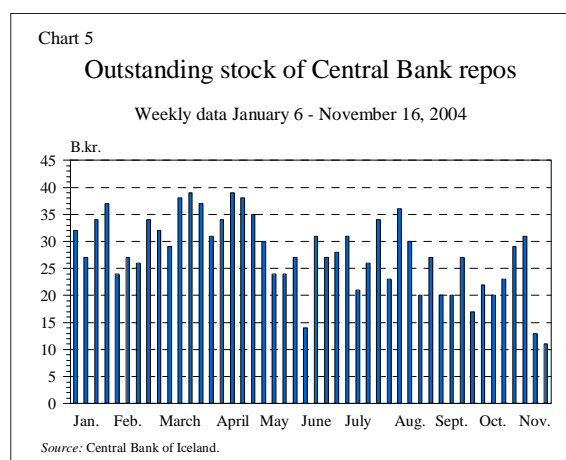
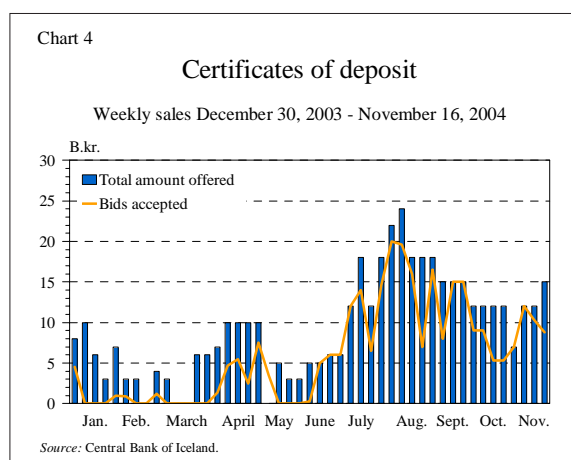
The banks' liquidity position has been quite easy, partly reflecting the Central Bank's regular currency purchases and changes to minimum reserve requirements that went into effect at the beginning of the

year. However, the impacts of both these measures were largely offset by the reduction in Central Bank repo transactions (see Box 1). As a countermeasure, the Bank has offered certificates of deposit (CDs) this year on almost a weekly basis. Chart 4 shows that there has been considerable demand for these instruments, although repo transactions have also been sizeable (see Chart 5). Intermediation of liquidity between individual credit institutions has shown some improvement and the banks have now opened credit lines with each other under the same arrange-

ment as in Central Bank repos, i.e. with secured loans.

Domestic interbank currency rates have been below the policy rate

One effect of easy liquidity is to soften the sensitivity of interest rates in the interbank króna market to changes in the Central Bank's policy rate. Credit institutions with liquid positions have a limited need for Central Bank lending facilities and opt instead for deposit instruments (CDs). It would be preferable if



Box 1 Central Bank regulatory changes and market measures and their impact on liquidity since January 2003

The following is an overview of the main effects that Central Bank measures have had on liquidity in circulation since the beginning of 2003. Four types of measures are examined: changes in the reserve requirement, currency purchases, repos and issues of certificates of deposit (CDs).

Required reserves

In March and December 2003 the methodology for calculating the reserve requirement of credit institutions was changed. As a result of these changes, 23 b.kr. were released from the credit institutions' required deposits (8 b.kr. in March and 15 b.kr. in December 2003; see *Monetary Bulletin* 2004/1). However, the institutions' expanding balance sheets have led their

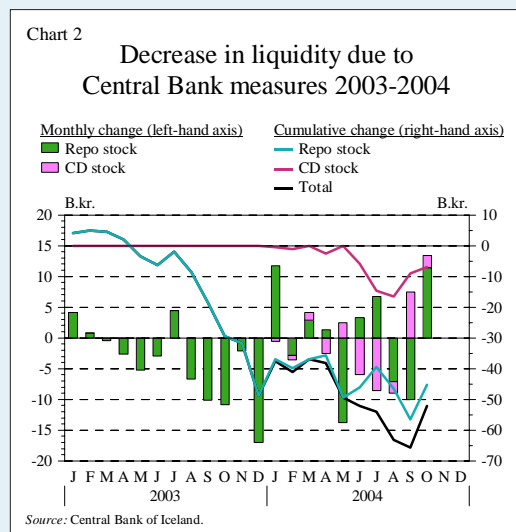
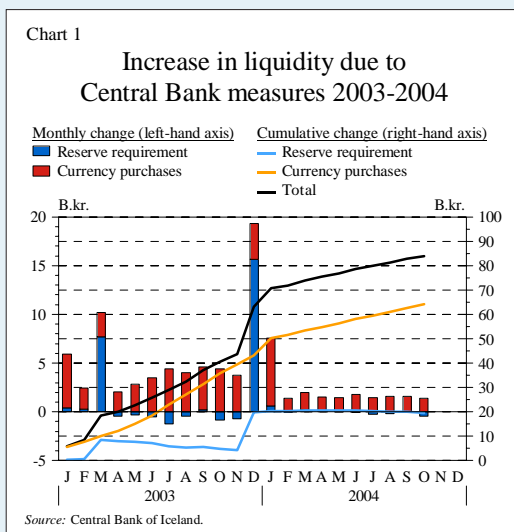
required reserves to increase again. Their reserve deposits with the Central Bank amounted to 31 b.kr. at the end of December 2003 but in September 2004 they were 11 b.kr., i.e. liquidity increased by 20 b.kr. over this period.

Central Bank currency purchases

Central Bank currency purchases over the period January 2003 to the end of October 2004 increased liquidity in the credit system by 64 b.kr. (currency amounting to 4.5 b.kr. was purchased in 2002).

Gross increase in liquidity as a result of Central Bank measures

Central Bank measures therefore resulted in a total



increase of 84 b.kr. in credit institutions' liquidity over this period.

Repos

At the beginning of 2003, the outstanding stock of Central Bank repurchase agreements with credit institutions amounted to 74 b.kr. At the end of October 2004 the outstanding stock was 28 b.kr., a reduction of 46 b.kr.

Certificates of deposit

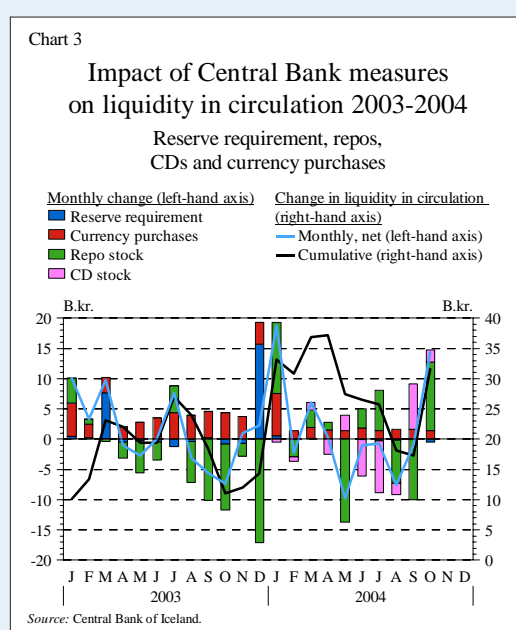
The Central Bank launched regular sales of CDs in the beginning of 2004. The outstanding stock of CDs was 7 b.kr. at the end of October.

Gross reduction in liquidity as a result of Central Bank measures

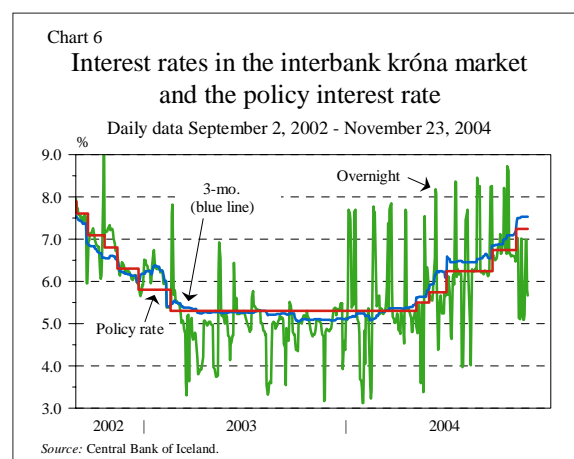
The decrease in repo transactions and the sale of CDs have resulted in a liquidity flow of 53 b.kr. to the Central Bank.

Net increase in liquidity as a result of Central Bank measures

These calculations imply that liquidity in circulation increased by 31 b.kr. over the period from the beginning of 2003 to the end of October 2004 as a result of Central Bank measures and changes to its rules on the reserve requirements.



institutions with ample liquidity were to open facilities for those that are tighter, in order to channel liquidity between them. Central Bank lending and deposits would then make up the balance. Such an arrangement has not been established in Iceland, in part because of risk evaluation criteria in inter-institutional trading. Also, the temporary impact that required reserves have on interest rates can cause fluctuations. A persistent mismatch, on the other hand, indicates liquidity imbalances, and new measures may need to be adopted. Chart 6 maps interbank króna market rates against the Central Bank's policy rate.

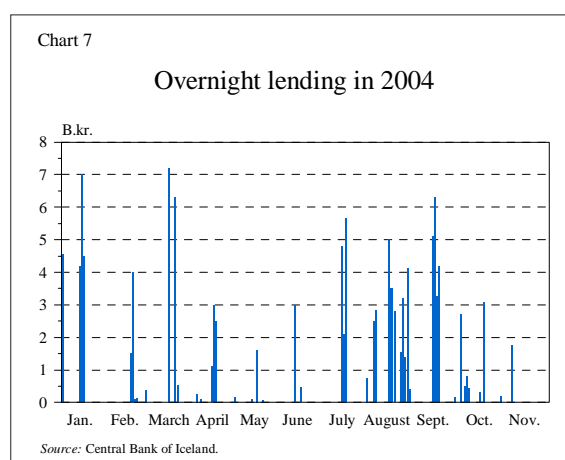


Decline in overnight lending

Easier liquidity of credit institutions has substantially reduced the need for Central Bank overnight lending facilities. O/N loans are now mostly used to close unforeseen gaps that form in payment systems. There are occasional cases when market agents miscalculate their own positions the market position and need to use O/N loans as a temporary bridge, although this is rare. O/N lending is shown in Chart 7.

Other central banks raise their policy rates

The Bank of Canada raised its key policy rate in September and October, by 0.25 percentage points each time. Likewise, the Reserve Bank of New Zealand announced hikes of 0.25 percentage points each in September and October, and the US Federal Reserve hikes of 0.25 percentage points each in September and November. The National Bank of Switzerland raised its repo rate by 0.25 percentage



points in September. Table 1 shows policy rates in selected countries and changes in them so far this year. The euro appreciated sharply against the US dollar in mid-October after lying below 1.24 for some time, and moved to around 1.3 where it has been in recent weeks. From October 26, 2000, when the dollar was at its strongest against the euro, until its weakest rate on November 10 this year, the dollar had slid against the euro by 36%.

Interest-rate differential has widened following policy rate rises

Following the Central Bank's policy rate rises, the interest-rate differential between Iceland and main trading partner countries has widened. The interbank market differential now measures 4.9 percentage

Table 1 Policy rates of selected central banks

%	December 31, 2003	November 19, 2004
Central Bank of Iceland	5.30	7.25
Reserve Bank of Australia.....	5.25	5.25
Reserve Bank of New Zealand.....	5.00	6.50
Bank of England.....	3.75	4.75
Norges Bank	2.25	1.75
Sveriges Riksbank	2.75	2.00
Bank of Canada	2.75	2.50
Federal Reserve System	1.00	2.00
European Central Bank	2.00	2.00

Source: Central Bank of Iceland.

points, compared with 3.1 percentage points in the beginning of May. One consequence of the wider differential is to fuel demand for foreign borrowing, which contributes even further to the strengthening of the króna. However, international interest rates have been at a historical low and are on an upward trend, as Table 1 clearly shows. The Central Bank of Iceland has repeatedly pointed out the inherent risk in borrowing under such conditions, especially the exchange rate risk faced by domestic entities with no foreign currency revenues that could cushion against exchange rate movements. The Bank reiterates this warning and urges caution in this respect. Hedges against exchange rate risk could also be a prudent measure.

Little change in bond market yields

HFF bond yields have changed relatively little in recent months. They rose slightly in the wake of the banks' new mortgage loan offers, but the increase was by and large reversed. The yield is currently 3.58% on HFF bonds with a maturity in 2024 and 3.67% for bonds maturing in 2044. HFF bonds in the amount of 7 b.kr. were auctioned at the end of September. Bids totalling 17 b.kr. were made, of which 4.9 b.kr. were accepted. No auction was held in October because of ample liquidity at the HFF. It is foreseeable that supply of the new HFF Bonds may be lower than was expected before the banks announced their new mortgage offers, possibly spurring demand for existing bonds in the market. Yields on non-indexed bonds have gone up broadly in line with higher inflation and rises in the Central Bank policy rate.

Box 2 Foreign exchange market activity

Since 1989, the Bank for International Settlements has conducted a Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity. Data are collected on turnover in traditional foreign exchange markets – those for spot transactions, outright forwards and foreign exchange swaps – and additionally since 1995, turnover in over-the-counter (OTC) currency and interest rate derivatives. The aim of these surveys is to obtain reasonably comprehensive information on the size and structure of foreign exchange and OTC markets. Increased information also promotes market transparency and reforms. Participants in the survey were 52 central banks and monetary authorities, which is similar to the last survey three years ago but more than double the original number. Each participant reports on foreign exchange activity in its own country. Iceland does not participate in the survey, although the Central Bank has collected foreign exchange trading data which are more detailed than in most other countries.

Preliminary findings were published in September this year. More detailed results will be released at the end of 2004. Further details of the survey are posted on the BIS website, www.bis.org.

Market turnover

Turnover data provide a measure of market activity and can also indicate market liquidity. Turnover was defined as the absolute gross value of all new deals entered into during the survey month (April 2004), measured in terms of the nominal or notional amount of the contracts and adjusted for double-counting. Table 1 presents a comparison of total forex market turnover with previous years, broken down by instrument. In April 2004, average daily turnover amounted to just under USD 1,880 billion,¹ an increase of USD 500 b. since three years ago. Turnover rose across markets but particularly in the spot and forward markets. However, global trading volumes had fallen between 1998 and 2001.

Factors that arguably boosted turnover include the growing importance of hedge funds and the more active role of asset managers in general. Investors also became increasingly interested in foreign exchange as an asset class alternative to equity and fixed income. There were no substantial changes in the currency

1. At the exchange rate of 67.67 kr. = USD 1 on November 9, this was equivalent to 127 thousand b.kr. By comparison, the record for annual turnover in the Icelandic forex market was in 2001, at 1.2 thousand b.kr.

Global foreign exchange market turnover
Daily averages in April in billions of US dollars¹

<i>Instrument</i>	<i>1989</i>	<i>1992</i>	<i>1995</i>	<i>1998</i>	<i>2001</i>	<i>2004</i>
Spot transactions.....	317	394	494	568	387	621
Outright forwards.....	27	58	97	128	131	208
Foreign exchange swaps.....	190	324	546	734	656	944
Estimate gaps in reporting.....	56	44	53	60	26	107
Total "traditional" turnover.....	590	820	1,190	1,490	1,200	1,880
Turnover at April 2004 exchange rates.....	650	840	1,120	1,590	1,380	1,880

1. Adjusted for local and cross-border double-counting.

composition of turnover between 2001 and 2004. The dollar was on one side of almost half of all transac-

tions, followed by the euro, yen and pound sterling. Unsurprisingly, dollar/euro was by far the most traded currency pair, followed by dollar/yen. Shares of the less-traded currencies have increased with the opening (or recovery) of markets in Asia and Eastern Europe.

The UK was the most active trading centre, capturing 31% of total turnover reported in the survey. Next came the United States (19%), Japan (8%), Singapore (5%), Germany (5%), Hong Kong (4%) and Australia, Switzerland and France (3% each).

The OTC market section consists of "non-traditional" foreign exchange rate derivatives such as cross-currency swaps and options and interest rate derivatives contracts. Turnover in the OTC market jumped to more than double the figure in the previous survey. Average daily turnover in April 2004 was reported as USD 1.2 trillion. The increase in activity largely reflects greater diversity of products rather than a shift from exchanges.

Hjördís Dröfn Vilhjálmisdóttir¹

Housing support and public housing funds in Iceland and abroad

Considerable changes have taken place in the Icelandic housing market in recent years. Public sector involvement has changed and further reforms have been announced. It is interesting to examine these changes with reference to the way that public sector involvement in housing has evolved in neighbouring countries. The following is an account of the position and development of housing policies in several countries for which data are available. It compares different countries' government intervention in the housing market through the tax and welfare benefit system, and by direct intervention in the housing loan market. Iceland appears to provide less support through the tax and welfare system than neighbouring countries, but applies more direct intervention in the housing loan market.

Introduction

Economists and monetary and fiscal policy-makers have various reasons for scrutinising the housing market. It is influenced by economic developments and at the same time can have a considerable macroeconomic impact. Macroeconomic changes affecting the housing market are almost always reflected in changes in housing prices. Factors at work include actual or expected changes in household income, short-term real interest rates, population size and family structure. If housing supply does not manage to track such changes in the short term, imbalances may develop between housing supply and demand. Housing prices are also impacted by government measures, e.g. changes in taxation, subsidies and official housing policy. Variable supply of or access to finance can also have a substantial effect on demand for housing. In the

opposite direction, fluctuations in housing prices have a macroeconomic impact, in particular by stimulating lending and private consumption.

Central banks which are on inflation targets have ample reason to pay attention to the housing financing, due to its effect on the transmission of monetary policy.² Changes in housing financing arrangements cause an adjustment to a new equilibrium, and this process and its effects on monetary policy transmission and price stability need to be analysed.

Housing finance arrangements can have a direct impact on inflation measurements through the housing component of the consumer price index (CPI), which can vary depending on whether housing is predominantly owner-occupied or rented. Since Iceland has a relatively large proportion of owner-occupancy, housing prices weigh quite heavily in the CPI on which the Central Bank's inflation target is based, while rent is less important compared with other countries. Most other countries have a lower level of owner-occupancy and in some cases housing prices

1. The author is an economist at the Central Bank of Iceland's Economics Department. She would like to thank Ingimundur Fridriksson, Tómas Örn Kristinsson and Arnór Sighvatsson for their constructive remarks. The views expressed in this article are those of the author and do not necessarily reflect the views and policies of the Central Bank of Iceland.

2. See Pétursson, Thórarinn G., "The transmission mechanism of monetary policy", *Monetary Bulletin*, 2001/4, pp. 62-77.

are not incorporated into the CPI on which their respective monetary policies (inflation targets) are based.³

Major reforms have been made to housing arrangements in Iceland in recent years, in most cases affecting the mortgage market. Recently the government has extended the sphere of operations of the Housing Financing Fund (HFF) and made efforts to expand its activities.⁴ It is interesting to examine whether housing arrangements are evolving in the same direction in Iceland as in neighbouring countries. A comparison has therefore been made with the following countries: Denmark, Finland, France, Germany, the Netherlands, Norway, Spain, Sweden and the UK. A snapshot of the current state of the housing market in these countries is given by the key figures shown in Table 1. Housing prices have soared in many parts of the world in recent years, including

portion of GDP was highest in Iceland in 1998-2003, the rise in housing prices third highest in 1997-2003 and the rise in rent the highest over the same period. Mortgages as a proportion of GDP are also high in Iceland, but surpassed by Denmark and the Netherlands.

The following sections discuss the government's housing policy objectives and the main paths for achieving them. The scope of support in different countries is compared as far as data are available. Support for tenants in rented accommodation and owner-occupied households is discussed, focusing on support for homebuyers through the mortgage system in the countries where this is provided. Finally, the main characteristics of housing arrangements in Iceland are summarised, and the current position and developments in recent years are compared with those in other countries.

Table 1 Housing market highlights in selected European countries

%	Owner-occupancy ¹	Housing investment, average year-on-year change 1998-2003	Mortgages as % of GDP ¹	Average year-on-year change 1997-2003		
				Housing prices	Rent	Consumer prices (HICP)
Denmark.....	51	0.4	75	4.1	2.6	2.1
Finland	61	1.6	31	7.2	3.1	1.9
France.....	55	2.4	23	9.0	1.6	1.5
Germany.....	42	-2.7	54	0.0	1.1	1.2
Iceland.....	83	8.9	64	10.3	9.1	3.5
Netherlands	53	0.8	88	4.9	3.0	2.9
Norway.....	77	2.3	50	4.7	3.6	2.1
Spain	85	5.6	38	18.1	4.2	2.8
Sweden.....	61	6.6	48	6.4	1.3	1.6
UK.....	69	1.3	62	25	2.8	1.3

1. Most recent statistics. Sources: European Mortgage Federation, Eurostat, *RICS European Housing Review* 2003 and 2004, Statistics Norway, Statistics Iceland and Land Registry of Iceland.

some of the countries in the comparison. Iceland ranks among the countries with the sharpest upswing in the housing market. Housing investment as a pro-

Government housing policy objectives generally quite similar – including matching housing quality and location to local conditions ...

Government policy objectives for residential housing are generally fairly similar. In short, it can be said that government policy in all the countries in this comparison is for everyone to be able to live in housing that is fit for habitation. However, the definition of being fit for habitation varies from one country to the next. Building regulations are used to define qual-

3. For example, housing prices are not included in the Harmonised Index of Consumer Prices (HICP) in the European Economic Area.

4. See "Household debt and the planned extension of public housing finance", Box 2 in the Financial stability chapter of *Monetary Bulletin* 2004/3, pp. 40-41, and "Main changes in the housing market in 2004", Box 1 in the chapter on Economic and monetary developments and prospects, *Monetary Bulletin* 2004/4, p. 13.

ity standards and adapt housing to local conditions. For example, residential housing in Iceland must be capable of withstanding strong earthquakes, which is not a necessary provision in, for example, the UK. Some countries need to consider the location of housing with respect to the risk of mudslides, floods or avalanches, and so forth. In Iceland and Germany the emphasis is on owner-occupancy, which is less of a priority in France, for example. In Spain, official policy is to increase the share of the rental market, as discussed below.

... while social goals also play a major role

Some regulations serve social goals, e.g. laws and regulations on the rental market, which aim to ensure satisfactory housing for all. Spain attempted for years to safeguard the interests of lower-paid groups with stringent rules for the rental market, which have in fact recently been changed. Support for rental tenants is discussed below. In North and Central Europe, social aspects of housing design have been a particular focus. This includes rules on the size of housing relative to the size of families – the number of members in a family is taken into account when social housing is allocated. Rules also apply to rent benefit. In Iceland, rent benefit is means-tested and intended to relieve the burden on less well-off households. Specific rules govern the allocation of rent benefits, for example they are not awarded for residential housing in industrial premises, or if kitchen and sanitary facilities are shared.

Social goals are generally attained through the tax and benefit system

To a large extent, governments have attempted to attain their social goals for housing through the tax system, i.e. tax allowances, subsidies and outlays on housing. The table in the Appendix presents a detailed overview of the tax and benefit systems of several European countries, which gives some idea of how governments can use them to influence the housing market. The main categories in the table are discussed below. Housing policy is rarely implemented by direct government intervention in the mortgage market. No other country in the comparison applies public support through the mortgage system on the scale witnessed in Iceland, as discussed in more detail below. Lending policy at Iceland's HFF has

increasingly performed a social role, spearheaded by the second mortgages available to lower-income families in addition to its ordinary housing loans. Besides Iceland, only Norway and France have public sector credit institutions that provide mortgages. Norway's *Husbanken* mainly lends for new housing, but also has a role in providing social support. For example, the bank is intended to assist low-income households, seniors and people with disabilities in acquiring satisfactory housing. This support is provided on a considerable scale: Norway's 2002 budget allocated 5.45 b. NOK to Husbanken to provide grants and benefits to assist lower-income groups, and 13 b. NOK for lending. In France, a range of public assistance is provided through the mortgage system. The most common is a dedicated savings scheme, but efforts are also made to contribute to lower interest rates on mortgages from credit institutions. Various loans are available to civil servants, and through the welfare system low-income households are offered loans at 0% interest. Arrangements for public support through the mortgage system in these three countries are described below.

Scope of public housing support through the tax system

Both the form and the extent of public housing support varies from one country to the next. In some the focus is on support for homeowners, and in others for rental tenants. The extent to which social support⁵ is connected with housing varies as well.

Table 2 presents an overview based on recent data from the European Central Bank (ECB), OECD and Nordic Council of Ministers for the scope of public expenditure on housing policies. Although harmonised data were not available for all countries, these figures should still provide an indication of where Iceland stands in this respect. The table indicates that Iceland has one of the lowest levels of public support for housing (generally based on social principles) compared with the countries in the OECD and ECB surveys. Iceland also has one of the lowest levels of housing taxes, and of support net of taxation. It should be reiterated that this comparison is confined to support through the tax system. No

5. "Social support" refers to support aimed at assisting lower-income individuals and households and improving their circumstances.

Table 2 Public expenditure on housing policies as a % of GDP

% of GDP			Nord 2001:27		
	ECB	OECD	Housing support	Taxes on housing	Support net of taxes
	2000	1998	1999	1999	1999
Denmark	1.4	0.72	2.67	1.35	1.32
Finland	1.2	0.38	1.32	0.13	1.19
France	1.1 ¹	0.92	...	...	...
Germany	0.9	0.18	...	...	...
Iceland .....	...	0.12	0.87	0.50	0.37
Netherlands	0.7 ¹	0.44	...	...	...
Norway .....	...	0.20	0.80 ²	0.72 ²	0.80 ²
Sweden	1.4	0.81	1.74	0.93	0.81
UK	0.6	1.61	...	...	...

1. Data on allowances are from 1999. 2. Data on tax revenues from 1998. Sources: ECB March 2003, OECD, Social benefits, Nordic Council, Nord 2001:27.

allowance is made for the HFF and its activities in the OECD or Nordic Council data – through its state mortgage loan system, Iceland provides one of the highest levels of public support in Western Europe and indeed in the western world.

Central and local government shares in housing support

In Iceland, housing support largely consists of interest relief, rent relief and interest rate subsidies. Interest relief and subsidies⁶ are provided by the state, and rent relief by the municipal authorities. Rent relief amounted to 0.9 b.kr. in 2002 and interest relief 5.1 b.kr. The state therefore accounts for a much larger share than local government in Iceland. The same is true of Finland, where the municipalities' share is negligible. In Denmark just over one-quarter of support is provided by the state and remainder by local authorities. In Germany, on the other hand, only one-quarter is provided by the federal government, just under one-fifth by municipalities and the remainder by regional Länder. This difference may be connected with the fact that Iceland has one of the highest proportions of owner-occupied housing and Germany the lowest. As a rule, the division between public housing expenditure appears to be that central government

provides interest relief and tax relief, while local government provides support for rental tenants and generally also handles social support. Germany's low owner-occupancy rate, coupled with the absence of interest relief and tax relief, largely explains its different mix of support between central and local government, compared with Iceland.

In presentations of central and local government expenditures in the terms used here, it should be borne in mind that single-year comparisons may be misleading, especially in countries with variable mortgage rates. Interest relief and tax relief on mortgages may change year-on-year in step with interest rate changes. Since interest rates in the euro area were low in 2002, it can be assumed that the share of support provided by the state was exceptionally low in Finland, where 97% of mortgages carry variable interest rates. Hence the respective shares of central and local government in housing support are variable. This factor has less effect in Denmark, where only 15% of mortgages carry variable interest and 10% a mix of fixed and variable rates. Systemic changes that have a permanent effect on interest rate levels can also alter the relative shares of central and local government support, e.g. a cut in interest rates in Iceland will reduce interest relief but be offset by an increase in mortgage lending.

6. Interest rates on earlier types of HFF loans were subsidised. In the HFF's annual statements for 2002, the Treasury's contribution for interest rate subsidies was reported at just over 70 m.kr. This support is therefore negligible, the remnant of a previous housing loan system.

Support for households in rental accommodation

Support enables lower-income families and individuals to live in rental accommodation. Families living in unsatisfactory housing are helped in moving to better or larger dwellings. Support for rental tenants also brings people into the rental market who would otherwise not have the opportunity or incentive to do so (e.g. students living in their parents' homes and tenants who defer buying their own housing on account of favourable welfare benefits). In many countries the main channel for social assistance is in the form of support for rental tenants.

Table 3 Residential housing by category

	% of total residential housing ¹				Year
	Owner-occupied	Private rental	Social rental	Other or unknown	
Denmark	51	26	19	4	2001
Finland	58	15	16	11	2000/2001
France	54	20	18	8	1999
Germany	43	47	10	...	1999
Iceland ²	83	...	...	17	2003
Netherlands	53	12	35	...	2000
Norway	74	...	...	26	2001
Spain	85	9	2	4	1999/2001
Sweden	60	20	20	...	1995/2000
UK	69	10	7	14	2001

1. '...' indicates that a breakdown of data is not available. 2. The breakdown of rental accommodation between social housing and the private sector market is not available. Sources: Statistics Iceland, *Housing Statistics in the European Union 2002*, RICS *European Housing Review 2004*, *The Housing Market in Spain*.

Table 3 shows the breakdown of residential accommodation by category in the selected countries. The ratio of owner-occupancy varies, being lowest in Germany and highest in Spain. It is interesting to examine the causes of this wide discrepancy. Can it be traced to varying degrees of housing support, or is the underlying reason differences in legislation?

Data on the breakdown between support for rental tenants and homeowners are not easy to obtain and the information that is available often gives an imprecise picture of the real support. Housing support may be linked to size of family, income or other factors. In such cases, differences in the age composition of population can produce apparent differences in sup-

port, even when similar rules apply. In most of the countries, younger people tend to live in rental accommodation and older people are owner-occupiers. Younger people often have unreliable sources of income, e.g. they are still in education, are unemployed more often and want to travel before tying themselves to a specific place by buying housing. Furthermore, saving for a down-payment on housing generally takes some time. The following analysis is confined to arrangements in the three countries on the extreme in Table 3: Germany, where the owner-occupancy rate is lowest, and Spain and Iceland where it is highest.

Germany

Germany has a strong rental housing market. Only 41% of residential housing is owner-occupied, other housing is classified as rental and some is vacant. Conditions differ between West and East Germany. In Berlin, for example, only 10% of housing is owner-occupied, while the ratio in the Saar state is highest at almost 60%. Vacant dwellings are more predominant in East Germany. Almost one-fifth of rental housing in East Germany is social.⁷ The reason for the high share of rental housing in Germany compared with the rest of Western Europe probably lies in the levels of support for families in rental and owner-occupied housing respectively. As in other countries, older people in Germany tend to be owner-occupiers and younger people rental tenants. Official housing policy in the 1950s-1970s tended to encourage people to live in rented accommodation. Some impact still lingers from the unification, when there was an exodus from east to west and strong excess demand for housing was met with public support for rental market agents. Rental market regulations make long-term tenure very favourable for tenants, because rent is not determined by new agreements, but by a cross-section⁸ of the rent for comparable dwellings. As a

7. *Housing Statistics in the European Union 2002*, RICS *European Housing Review 2004*.

8. Rent is fully negotiable at the start of an agreement, but subsequent changes are regulated, and generally indexed either to inflation or to market rent for comparable housing. The index for comparable housing is based on average rent at any time. Only new rental agreements can affect the average rent for each respective category of housing, together with earlier agreements that are cancelled. For this reason, rent is inelastic and lags behind the market.

result, increases in existing rent lag behind the market rate, making tenants reluctant to change their housing arrangements. Landlords may be tempted to counteract this by setting the rent on new agreements higher so that new tenants bear the brunt of market rents when they go up. However, this has not been a problem in recent years, since strong supply of rental housing, weak demand and low inflation have kept rises to an insignificant level.

The German government is aiming for a higher level of owner-occupancy. It supports homebuyers with tax relief based on the value of the housing in the year of purchase, but unlike most EU countries does not grant relief for mortgage-related interest payments. Germany also waives landlords' debts with the public sector if they sell at least 15% of their rental housing to tenants. But several temporary factors constrain growth of owner-occupancy, in addition to the temporary support provided to the rental market in connection with unification. Germany's economy has been depressed in recent years, accompanied by unemployment, sluggish private consumption growth and higher taxes. Relatively high real interest rates on mortgages have also dampened housing demand.⁹ Supply of new building land has been limited due to the reluctance of local authorities to plan and develop new residential districts.

The interaction of government policies over the past few decades, the temporary impact of reunification and the recent economic climate are probably the main causes of Germany's notably low proportion of owner-occupancy.

Spain

Spain has the highest level of owner-occupancy in the EU. A survey of consumption conducted by the Spanish Statistics Office¹⁰ in 2001 revealed that 84.7% of residential housing was owner-occupied, 9.3% rented and 6% vacant.¹¹ No single reason can be identified for the high level of owner-occupancy.

9. In 2002 nominal interest rates (fixed for at least 10 years) averaged 5.8% and year-on-year inflation was 1.3% (HICP), leaving interest rates at around 4½% in real terms.

10. Martínez, Jorge and M^a de los Llanos Matea, Banco de España Research Department.

11. These figures apply to residential housing that is occupied year-round, not holiday homes.

Under earlier rules on the rental housing market, tenancy was inherited and rent could only be raised after demonstrating that housing costs had increased. As a result, new rental housing was in short supply, and rented accommodation in general difficult to come by. Rental market regulations were liberalised in 1985 but without a grandfather clause for existing agreements. Thus the Spanish rental market is divided into two parts. One comprises a relatively fixed number of long-term, low-rent agreements, and the other short-term agreements at much higher rent. Demand for rental housing covered by the new regulations is very subdued. Part of the explanation for the high level of owner-occupancy may be cultural: the tendency for extended families to live together. In the mid-1990s there were 3.3 persons in the average household; 44% of males and 30% of females under the age of 30 still lived with their parents, and only 5% of the 65+ group lived alone. High unemployment and lack of social housing also prevented young people from being able to afford to leave home. In recent years, Spain has been attempting to increase the share of rental housing. The tax advantage of owner-occupancy was reduced in 1999 and legislative reforms last year aim to stimulate the rental market. However, low real interest rates,¹² stiff competition in the mortgage market and the buoyant Spanish economy have caused the owner-occupancy rate to rise from 76% in 1985 to almost 85% in 2001.

Iceland

It has been government policy in Iceland to encourage home ownership. Much more funds have been allocated to promoting general home ownership than to boosting the rental market. Planned changes in HFF lending rules to raise the loan-to-value ratio to as much as 90% support general home ownership further still. Plans are also afoot to abolish net wealth tax, but this will be offset by a planned reduction in interest relief.¹³ However, support for the rental market was stepped up with a regulation issued in 2001

12. Interest rates remained low in real terms due to low nominal rates, variable interest rates of approx. 4.5% in 2002 and high inflation measuring 3.6% (HICP) year-on-year. The real interest rate was therefore just under 1%.

13. Cf. the parliamentary bill amending Act no. 90/2003, on Income Tax and Net Wealth Tax, as amended, and other legislation.

authorising the HFF to lend for construction of rental accommodation. Loans may amount to up to 90% of construction cost or purchase price of housing, with a maturity of up to 50 years. Rent relief is means-tested and therefore relatively small in scope, and the rental market is not large. Rented accommodation owned by the public sector (mainly local authorities) is in short supply and solely used by the social services or for municipal employees. In regional Iceland, it is common for local authorities to own housing occupied by their employees such as teachers.

Another difference in the rental market between Iceland and most countries in the comparison is that very few landlords own housing that is specifically intended for renting out. Rental accommodation commonly belongs to people who are temporarily resident elsewhere, for example when studying. As a result, rental agreements tend to be fairly short-term, most often for one year, and a tenant rarely stays in the same housing for longer than five years. Because agreements are short-term, rent moves in close step with housing prices. This makes it less economical to rent during episodes of housing price inflation than in countries where rental agreements are longer-term, rent lags behind housing prices and rent increases are more stringently regulated. However, it should be mentioned that some rental accommodation has been built in Iceland following a new regulation set in 2001.¹⁴ Increased supply of rental housing should contribute towards longer-term rental agreements. Time alone will tell whether sufficient rental accommodation will be built and sufficient demand will be at hand to increase its share in the housing market.

Support for owner-occupants

People need to consider various factors when deciding whether to buy rather than to rent housing. A buyer must be able to meet the instalments and preferably be able to sell the housing without much cost or other problems. Capital formation is another consideration, because households invest a large share of their life savings in housing.

Public support for owner-occupancy is most commonly provided through tax relief on interest pay-

ments or direct interest relief. In this way the general government helps homebuyers over the first and most difficult hurdle, when the principal of the loan is highest and interest payments heaviest. Over time the principal decreases and the interest payments burden eases. The table in the Appendix shows that most countries provide some kind of interest relief or tax relief. Only the UK,¹⁵ France and Germany do not support owner-occupants in this way.

Tax relief on interest payments is the more common arrangement for support. However, it benefits only employed taxpayers. Iceland's interest rebates are means-tested, so it is not least the unemployed and low-income groups who benefit from them. Interest relief is by far the largest single component of public housing support in Iceland and is much greater than rent relief. Overall, as Table 2 shows, the scope of public support in Iceland is fairly small by international comparison.

It should be pointed out that although the UK provides neither tax relief on housing nor mortgage interest relief, social support is provided in connection with interest payments for people in difficult circumstances such as unemployment or illness. Such assistance is provided only when unpaid mortgage interest has accumulated for several months. The government will then settle the interest due, but does not remit the sum to the payer. Also, assistance is confined to homebuyers who have not insured themselves against mortgage delinquency.¹⁶ Such insurance policies are offered in other countries, including Iceland recently.

Housing transaction costs vary from one country to the next (see table in the Appendix). Iceland has relatively low housing transaction costs. On signing the purchase deeds the buyer pays stamp duty equivalent to 0.4% of the valuation of the property. Stamp duty is equivalent to 1.5% of the nominal value of new borrowing and thus amounts to around 1.2% of the market value of a property if an 80% new mort-

14. The aim of this regulation is to facilitate local authorities and housing associations in increasing rental housing supply. It largely appears to constitute a form of social assistance.

15. Support through interest relief was in effect in the UK, but was abandoned because the government felt that households too frequently spent interest rebates on consumption instead of their mortgage payments.

16. In the UK, mortgages are provided in the private market with the property as collateral. Homebuyers can insure against delinquency due to circumstances beyond their control, such as unemployment or illness, in which cases the insurance fund meets the mortgage interest payments.

gage is taken. Loan registration fees are 1% of the nominal value of HFF bonds and 0.5% of supplementary loans (second mortgages), nominal. Public costs on housing transactions are highest in the Netherlands and Denmark and lowest in Iceland.

A higher capital income tax than the capital gains tax on housing¹⁷ encourages housing investment. This applies in Iceland and the countries surveyed here.¹⁸ In most countries homebuyers are exempt from capital gains tax on housing that they have occupied for two years or longer. In the Netherlands there is no capital gains tax on housing.

People deciding whether to buy or rent housing also need to take into account real estate tax and tax on owner-equivalent (imputed) rent. Real estate tax appears broadly similar in the surveyed countries and can be ignored. Tax on owner-equivalent rent, i.e. on the economic benefit of owner-occupancy over and above paying rent, is levied in Denmark, Norway, Sweden and the Netherlands, but not Iceland. Research has shown that it is primarily homeowners who have paid off their mortgages who benefit more from living in their own housing than in rented accommodation.¹⁹

Support through the mortgage system

No other Western European country provides public support for homebuyers through the mortgage system on the scale operated in Iceland. Of the countries in this comparison only Norway and France provide public support through the mortgage system. Elsewhere it has increasingly been provided through other channels. Developments in Western Europe have been characterised by privatisation of banks that provide mortgages and a market-oriented legal environment for the activities of housing credit institutions. Examples include deregulation of loan ceilings and interest rates, lower prepayment charges, etc.²⁰

17. "Capital gains tax on housing" refers here to tax on the margin between the buying and selling price of house caused by an increase in the price of the property over the period of its ownership.

18. Such an incentive exists even in Sweden, where capital gains tax on housing is 25%, because capital income tax is higher, at 30%.

19. Frick, J. R. and M. M. Grabka, January 2002.

20. See Appendix 2, "Public support for homebuyers in Iceland and elsewhere", to the section on Economic and monetary developments and prospects, pp. 45-47, *Monetary Bulletin* 2003/4; and ECB, *Structural factors in the EU housing markets*.

The following is a brief outline of the main aspects of mortgage arrangements in two countries which, along with Iceland, provide public housing loans.

France

In France, homebuyers are provided with a variety of public support through the mortgage system. The following account is confined to the main types of public mortgage loan. The public housing savings scheme (*plan d'épargne-logement*) has been used for the purchase of 40% of owner-occupied housing. Under this scheme, potential homebuyers save a specific sum for at least 5 years at below the market interest rate. They can then borrow 2.5 times the accumulated saving at below the market interest rate, and use the amount already saved as a down-payment. Public involvement in the mortgage market also follows other channels, e.g. with regulations on private sector mortgages. Among them are the regulated loan scheme (*prêt conventionné*) for public sector institutions and lenders, which contributes to lower interest rates than in the private market. Zero-interest mortgages are also provided by the state in France for low-income families.

Norway

Husbanken in Norway is a public loan provider for homebuyers. At the end of 2002 Husbanken accounted for 14% of outstanding mortgages in Norway. While Husbanken also lends for first-time mortgages and renovation and performs a social role, as mentioned above, its largest lending category by far is for new housing, subject to regulations on layout and size. Husbanken lends for the lion's share of all new housing and in effect its rules for allocation shape housing design trends in Norway.

Husbanken is state-financed with funding on the budget approved by the Norwegian parliament, which also covers grants and operating costs including loan losses.

Iceland

The Housing Financing Fund (HFF) dominates Iceland's mortgage market. At the end of 2003 it accounted for more than 75% of outstanding lending for housing. It lends both to social housing and the private market, and for construction of new housing and secondary market purchases. The HFF grants

secured mortgages for low-income and low-asset households at a loan-to-value ratio of up to 90%, 70% of collateral to first-time buyers and 65% to others. The maximum loan amount is 11.5 m.kr. In recent years the government has eased the HFF lending rules in various ways. The maximum loan amount was increased in two steps from 8 b.kr for secondary market purchases and 9 b.kr. for new-buildings in 2003, to 11.5 b.kr. towards the end of 2004; the maximum mortgage-to-fire-insurance ratio was 85% until October 2004 when it was raised to 100%; and it has been decided to raise the maximum loan-to-mortgage ratio to 90% at the beginning of 2005. Presumably the government has eased the HFF's lending rules faster than originally planned after the commercial banks began offering more favourable mortgage terms than it had provided.²¹ As soon as a private sector market evolved, the HFF was set into competition with it.

The HFF also lends for construction of rental housing, as mentioned above.

The relation between housing debt and the support associated with it

It is interesting to examine whether there is any relation between housing debt and the form or extent of support associated with. In this context, public lending for housing purchases can be compared with support in connection with interest payments.

Only France, Norway and Iceland provide public loans to homebuyers. The owner-occupancy rate is higher in these countries than the others in the table, at 72% against 60%. Nonetheless, the average mortgage-to-GDP ratio is higher in the countries that do not provide public mortgage loans, at 57% against 46%.

The UK, France, Spain and Germany do not provide tax relief or interest relief on mortgage debt. The mortgage-to-GDP ratio is much lower in these countries than elsewhere. Interest relief, however, does not seem to have such a strong effect on owner-occupancy rate.

On first impression, public loans to homebuyers would seem to promote more widespread housing

Table 4 Public support connected with mortgages, and mortgage ratios

	<i>Mortgage-to-GDP ratio</i>	<i>Owner-occupancy ratio</i>
Denmark.....	75	51
Finland.....	31	61
France.....	23	55
Germany.....	54	42
<i>Iceland.....</i>	<i>64</i>	<i>83</i>
Netherlands.....	88	53
Norway.....	50	77
Spain.....	38	85
Sweden.....	48	61
UK.....	62	69
<i>Countries providing:¹</i>		
Public housing loans.....	45.7	71.7
No public housing loans.....	56.6	60.1
<i>Countries providing:²</i>		
Interest relief on housing.....	59.3	64.2
No interest relief on housing.....	44.3	62.8

1. Iceland, Norway and France provide public housing loans, the others do not. Averages. 2. The UK, France, Spain and Germany do not provide interest relief or tax relief on mortgage interest payments; the other countries do in one form or another. Averages. Sources: European Mortgage Federation, Statistics Iceland, Central Bank of Iceland.

ownership, and support for mortgage interest to increase indebtedness. It must be remembered that because this comparison is based on very few countries, it should be regarded only as a vague indication of these relationships. Changes to HFF lending arrangements and new injections of funding from the banks for housing purchases are likely to increase mortgage debt and thereby its ratio to GDP, besides the impact of indebtedness on consumption. Other things being equal, the reduction in interest relief ought to have the opposite effect.

Conclusion

The above is an examination of public intervention in the housing market in Iceland, compared with selected other countries in Europe. In terms of support for homebuyers through the tax and welfare system, Iceland has one of the lowest levels of government

21. See Box 1, "Main changes in the housing market in 2004", in the section on Economic and monetary developments and prospects on p. 13 of this edition of *Monetary Bulletin*.

intervention. Official housing policy in Iceland and many other countries is to enable as many people as possible to own housing of an acceptable standard. Iceland has achieved this objective well, with only Spain attaining a higher level of owner-occupancy. In recent years, however, efforts have been made to strengthen the rental housing market. It is still premature to evaluate the impact of those measures, and many other developments have had a counteracting effect, especially cheaper mortgages and easier access to them. The stated policy in Spain is to increase the share of rental housing, among other things to enhance mobility of labour. Owner-occupancy in Iceland is only slightly less than in Spain, but claims that the level is too high are rarely heard. On the contrary, the government's measures this year apparently aim to boost owner-occupancy from the current level.

Intervention in the housing market through the credit market is more pronounced in Iceland than any other country in the comparison. Besides Iceland, only Norway and France offer homebuyers public assistance with housing finance.

In both Iceland and Norway, public support for housing finance is handled by a single institution, but in Norway its scope is much more limited. Public support is transparent in these two countries and its scope is easy to appraise. France uses a number of channels for public assistance with housing finance, making its total scope difficult to assess. Nonetheless, it seems fairly certain that public support in France, where only just over half of housing is owner-occupied, is not as extensive as in Iceland. The increase in the maximum mortgage amount from Iceland's HFF, the raising of loan-to-value ratio to 90% (or 100% of fire insurance evaluation) and lower rates of interest will contribute to continued participation by the HFF in mortgage lending.

Undoubtedly, these changes will increase housing debt still further and help to maintain the HFF's sizeable share in the mortgage market despite recent competition from the banking sector. Iceland would appear to be on the opposite trend to France and Norway in this respect. To emulate these countries' position would call for a substantial cutback in HFF activities with more focus on social support, levelling out opportunities for homebuyers with regard to their income, geographic factors and conceivably new housing.

Easier access to cheap funding for the purchase and mortgage of housing in Iceland will probably have a sizeable macroeconomic impact. The chief effect will be increased consumption, which will become apparent in the near future. In the long run the development of housing prices and inflation will also be important. All classes of mortgage loans are price-indexed with a maturity of 20-40 years. If the increase in price level exceeds nominal housing price rises by more than the ratio of the housing that is not mortgaged, it is clear that part of the residential housing stock will be mortgaged beyond its market value.

A straightforward comparison of arrangements in the above countries indicates that public support in the form of mortgages leads to more widespread housing ownership, but not to more indebtedness than in countries where support is not provided through public credit agencies. Tax relief and interest relief, on the other hand, do not appear to contribute to greater owner-occupancy, but encourage higher levels of debt than in the countries that do not offer such allowances. The ongoing changes in Iceland (easier access to state credit and reduced interest relief) will probably serve to increase indebtedness, but given the limited scope for increasing owner-occupancy on any great scale, it is questionable whether this is desirable.

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Appendix Taxes, benefits and official charges on housing transactions¹

	Tax on imputed rent	Interest relief/ mortgage-related tax relief	Tax on capital gains on housing	Real estate taxes	Inheritance tax	Net wealth tax	Indirect tax		Stamp duty ²
							On repairs	On new homes	
Denmark	Y	Y	Y (exemptions for owner-occupiers)	Y	Y (same as for financial assets)	N	25%	25%	Stamp duty 1.5% – total trading costs 7.2%
Finland	N	Y (flat rate for principal owner-occupied dwellings up to a ceiling, 29%)	Y (exceptions for principal owner-occupied dwellings after at least 2 years)	0.2% of taxable value	Y	Progressive in wealth, 0% for most households	22%	22%	4% of purchase value (first-time buyers exempted)
France	N	N	Y (no tax for main dwelling)	+ residence tax: 7.8%-45% of half cadastral rental value	5%-40% (progressive)	0.5%-1.5%	5.5%	19.6%	2%-3%
Germany	N	N	Y (turnover < 10 years, exemptions for owner-occupiers)	N (land tax, 0.3%-1% of rateable value)	Lower than for financial assets	N	16%	16%	3.5%
Iceland	N	Y (interest relief)	Y (10% if housing is sold within 2 years and not refinanced in housing, otherwise none)	≤ 0.5%	10%-45% (progressive)	0%-0.6% (progressive in wealth, was 0%-1.2% in 2001)	24.5% (rebate of 60% of VAT on labour cost)	24.5% (rebate of 60% of VAT on labour cost)	0.4% of housing value, 1.5% on housing bond mortgage, 1% on HFF bonds and 0.5% on second mortgage

Appendix Taxes, benefits and official charges on housing transactions¹

	Tax on imputed rent	Interest relief/ mortgage-related tax relief	Tax on capital gains on housing	Real estate taxes	Inheritance tax	Net wealth tax	Indirect tax		Stamp duty ²
							On repairs	On new homes	
Netherlands	Y	Y	N	0.3%	5%-27% (on amount above tax-free threshold)	1.2%	19%	19%	6%
Norway	Y	Y (28% tax relief on interest payments)	Y (28% exemption if owner has been occupier for one of 2 years before sale)	≤0.7%	...	0%-1.1% (progressive in wealth)	Y	Y	...
Spain	N	Y	Y (exemptions for principal dwellings when reinvested)	0.62%	7.65%-34% (progressive)	0.2%-2.5%	15%	7%	...
Sweden	Y	Y	Y (25%)	0%-1.5% of 75% of the market price	Y	1.5%	25%	25%	1.5%-3%
UK	N	N	Y (exemption for principal owner-occupied dwellings)	0.2%	Y (same as for financial assets)	N	17.5%	0%	1%, 2%, 4% depending on value of housing

1. '...' indicates information not available. 2. Only duties on housing transactions, except for Iceland where the borrowing cost of HFF bonds and second mortgages from the HFF is included. Borrowing costs for private sector mortgages are excluded, since they are variable and also differ among institutions, making it difficult to state the most accurate figure for each country. Sources: ECB March 2003, Icelandic tax law, Nord 2001:27, Norwegian tax law.

Jónas Thórdarson¹

Revised framework for capital measurement and capital standards (Basel II)

Introduction

Over recent years the *Basel Committee on Banking Supervision*² has been working on a revised framework for capital measurement and capital standards (often termed Basel II). The first round of proposals for revising the capital adequacy framework were published in June 1999, and additional proposals in January 2001 and April 2003. Three quantitative impact studies were conducted to assess the impact of the Basel II proposals on minimum capital requirements. In June 2004 the Basel Committee published its final paper, *International Convergence of Capital Measurement and Capital Standards: A Revised Framework*. The Committee reserves the right to make revisions to the proposals when necessary.

The Basel Committee's current Accord (Basel I), dating from 1988, presented standardised approaches for calculating capital requirements against lending. Treatment of market risk was added later. Main changes to capital requirements under the revised framework include the use of a ratings-based approach (RBA), internal assessment approach (IAA) and operational risk measurement methodologies. A number of minimum requirements are proposed that banks must fulfil, especially concerning the IAA. The revised framework provides a range of options for determining the capital requirements for credit risk and operational risk to allow banks and

supervisors to select approaches that are most appropriate for their operations and their financial market infrastructure. It also stipulates that supervisors should verify its implementation by banks, including their minimum requirements.

The revised framework is designed to establish minimum levels of capital for internationally active banks. As under the 1988 Accord, national authorities will be free to adopt arrangements that set higher requirements, for example to address potential uncertainties in the accuracy of the measure of risk exposures. The Committee intends the framework to be available for implementation as of year-end 2006. Basic impact studies or parallel calculations will be available for implementation from year-end 2006, and the most advanced approaches as of year-end 2007.

This article summarises certain key aspects of the revised framework, focusing in particular on elements that differ from the current Basel I framework. It describes minimum capital requirements (Pillar 1), supervisory review process and capital requirement (Pillar 2) and market discipline (Pillar 3). Discussion of the minimum capital requirement focuses on the standardised and internal risk-based (IRB) approaches to credit exposure, as well as methodologies for measuring operational risk.

Pillar 1 – Minimum capital requirements

The broad principle is that the revised framework will be applied on a consolidated basis to internationally active banks. Thus it includes any holding company that is the parent entity within a banking group.

1. The author is employed at the Financial Department of the Central Bank of Iceland.

2. The *Basel Committee on Banking Supervision* was established by the central bank governors of the Group of Ten countries in 1975. Its work includes standards and guidelines for best practice in banking supervision. Proposals by the Basel Committee do not have legal effect.

It will also apply to all internationally active banks at every tier within a banking group.

Regulatory capital, risk exposure and capital ratio

Regulatory capital under the revised framework is calculated using the definition of regulatory capital and risk-weighted assets.

Defined regulatory capital is divided into Tier 1 capital (T1), Tier 2 capital (T2) and Tier 3 capital (T3). T1 capital comprises equity, goodwill, retained earnings and innovative capital instruments. T2 consists of revaluation, subordinated debt, hybrid instruments and general loan-loss provisions (under the standardised approach). T3 comprises short-term subordinated debt. Measurement of defined capital incorporates deductions such as holdings in financial, insurance and other companies. Such deductions of investments will be 50% from Tier 1 and 50% from Tier 2 capital.

Risk exposure comprises risk-weighted assets in connection with lending, plus market risk and operational risk. The minimum capital ratio will be 8%, as in the earlier framework.

Treatment of provisions

Under the standardised approach to credit risk, general provisions can be included in Tier 2 capital subject to the limit of 1.25% of risk-weighted assets. Banks using the IRB must compare the amount of total eligible provisions with the total expected losses (EL) amount. Where EL exceeds total eligible provisions, banks must deduct the difference. Deduction must be on the basis of 50% from Tier 1 and 50% from Tier 2. Where total EL is less than total eligible provisions, banks may recognise the difference in Tier 2 capital up to a maximum of 0.6% of credit risk-weighted assets.

Credit risk – standardised approach

In effect, the standardised approach as presented under the revised framework is a direct continuation of the current capital requirements. One of the main changes is that banks may now use credit ratings of external credit assessment institutions (ECAIs),³ which are deemed eligible by the supervisory author-

ities, to determine their credit risk weightings. The following are the main aspects of the standardised approach to credit risk assessment.

Claims on sovereigns and central banks

Credit assessments of sovereigns and central banks are rated and the derived risk weightings of claims on them are as follows:

<i>Credit assessment</i>	<i>AAA to AA-</i>	<i>A+ to A-</i>	<i>BBB+ to BBB-</i>	<i>BB+ to B-</i>	<i>Below B-</i>	<i>Unrated</i>
Risk weight	0%	20%	50%	100%	150%	100%

At national discretion, a lower risk weighting may be applied to banks' exposures to their sovereign (or central bank) of incorporation which are denominated in domestic currency and funded in that currency.

Claims on banks

There are two options for claims on banks. National supervisors will apply one option to all banks in their jurisdiction.

Under Option 1, the risk weight of banks is derived from that of the sovereigns where they are incorporated. Thus all banks in countries with sovereigns rated above BB+ will be assigned a risk weight one category less favourable than that assigned to the sovereign. Credit assessments of sovereigns and the derived risk weights for claims on banks are as follows:

<i>Credit assessment of sovereign</i>	<i>AAA to AA-</i>	<i>A+ to A-</i>	<i>BBB+ to BBB-</i>	<i>BB+ to B-</i>	<i>Below B-</i>	<i>Unrated</i>
Risk weight under Option 1	20%	50%	100%	100%	150%	100%

Option 2 bases the risk weight on the external credit assessment of the bank itself with claims on unrated banks being risk-weighted at 50%. Under this option, a preferential risk weight that is one category more favourable may be applied to short-term claims (< 3 months), except for banks rated below B-. Credit assessments of banks and the derived risk weights for claims on them are as follows:

3. The notations in this article follow the methodology used by Standard & Poor's.

<i>Credit assessment of banks</i>	<i>AAA to AA-</i>	<i>A+ to A-</i>	<i>BBB+ to BBB-</i>	<i>BB+ to B-</i>	<i>Below B-</i>	<i>Unrated</i>
Risk weight under Option 2	20%	50%	50%	100%	150%	50%
Risk weight for short-term claims under Option 2	20%	20%	20%	50%	150%	20%

Claims on corporates

The risk weights of rated corporate claims, including claims on insurance companies, are as follows:

<i>Credit assessment</i>	<i>AAA to AA-</i>	<i>A+ to A-</i>	<i>BBB+ to BB-</i>	<i>Below BB-</i>	<i>Unrated</i>
Risk weight	20%	50%	100%	150%	100%

Unrated credit is assigned a risk weight of 100%.

Claims included in regulatory retail portfolios

Exposures included in a regulatory retail portfolio may be risk-weighted at 75%. To be included in that category, claims must meet the following criteria:

- The exposure is to an individual person or persons or to a small business.
- The exposure takes the form of a consumption (rather than investment) loan, as further defined.
- The regulatory retail portfolio is sufficiently diversified.
- The maximum aggregated retail exposure to one counterparty cannot exceed an absolute threshold of €1 million.

Claims secured by residential property or commercial real estate

Lending fully secured by mortgages on residential property will be risk-weighted at 35%, but supervisors should increase the standard risk weight where they judge that there is no substantial margin of additional security over the amount of the loan, based on strict valuation rules.

In view of the experience that commercial property lending has been a recurring cause of troubled assets in the banking industry over the past few decades, mortgages on commercial real estate, in principle, justify only a 100% weighting of the loans secured. Exceptional treatment may be made, subject to very strict conditions.

Past due loans

Qualifying residential mortgage loans that are past due for more than 90 days will be risk-weighted at 100%, net of specific provisions. If such loans are past due but specific provisions are no less than 20% of their outstanding amount, the risk weight applicable to the remainder of the loan can be reduced to 50% at national discretion.

The unsecured portion of an ordinary loan⁴ that is past due for more than 90 days, net of specific provisions, will be risk-weighted as follows:

- 150% risk weight when specific provisions are less than 20% of the outstanding amount of the loan;
- 100% risk weight when specific provisions are no less than 20% of the outstanding amount of the loan, but with supervisory discretion to reduce the risk weight to 50% when specific provisions are no less than 50% of the outstanding amount of the loan.

Standardised approach – risk weight of assets

	<i>Risk weight</i>
Sovereigns and central banks Credit assessment	
Financial companies and local authorities ¹ Option 1 or Option 2	
Corporates Credit assessment or 100%	
Regulatory retail portfolio	75%
Claims secured by residential property	35%
Claims secured by commercial real estate.....	100%
Past due loans secured by residential property	100% (50%)
General past due loans (90 days)	150%/100% (50%)
Equities	100%
Venture capital	150%
Other assets	100%

1. Whether local authorities qualify for treatment as sovereign or central government, or as corporates, depends on their specific revenue-raising powers.

Issuer versus issues assessment

Where a bank invests in a particular issue that has an issue-specific assessment, the risk weight of the claim will be based on this assessment. Where the bank's claim is not an investment in a specific

4. After allowance for qualifying collateral, in particular securities.

assessed issue, the following general principles apply:

- If the borrower has a specific assessment for another issued debt, it may only be applied to an unassessed claim that ranks *pari passu* or senior to the claim with an assessment.
- If the borrower has an issuer assessment, this will typically apply to senior claims on that issuer. Other unassessed claims of an issuer will be treated as unrated.

Credit risk mitigation

The revised framework permits the use of more financial collateral for credit risk mitigation than in the 1988 Accord. The main collateral instruments eligible for recognition in the simple approach are cash, gold, rated debt securities, listed debt securities issued by a bank, equities included in a main index and units in UCITS and mutual funds. In assessing the qualification of collateral, banks may opt for either a simple approach or a comprehensive approach. The simple approach substitutes the risk weighting of the collateral for the risk weighting of the counterparty for the collateralised portion of the exposure, but does not allow mismatches in the maturity of the underlying exposure and the collateral. In the comprehensive approach, banks are required to use haircuts to adjust both the amount of the exposure to the counterparty and the value of any collateral. In effect, the adjusted amount for the exposure will be higher than the exposure and for the collateral it will be lower. Where the adjusted exposure amount is greater than the adjusted collateral amount, banks shall calculate their risk-weighted assets as the difference between the two multiplied by the risk weight of the counterparty.

Credit Risk – The Internal Ratings-Based Approach

Banks that have received supervisory approval to use the IRB approach may rely on their own internal estimates of risk components in determining the capital requirement for a given exposure. The IRB approach is used for measures of unexpected losses (UL) and expected losses (EL). Total expected losses are compared with the total eligible provisions for the items on which the expected loss is calculated.

The capital ratio of banks using the IRB approach is as follows:

$$\frac{\text{Defined regulatory capital} + (\text{provisions} - \text{EL amount})}{\text{Risk-weighted assets (UL)} + (12.5 \times \text{capital requirements for market risk and operational risk})} \geq 8\%$$

The IRB approach for measuring the capital requirement for exposures is largely based on four elements: categorisation of exposures, formulas, risk components and minimum requirements.

Categorisation of exposures

Under the IRB approach, exposures are divided into seven categories: corporates, sovereigns, banks, retail, equities in the banking book, receivables and other assets. Classification is crucial since exposure categories are subject to different formulas, risk components and minimum requirements. Exemptions are made from the principles, and the processes for implementing them differ between exposure categories.

Formulas

Formulas are used to risk-weight assets corresponding to UL. Five formulas are used in the IRB approach: one for corporate, sovereign and bank exposures, another for SMEs and three for different types of retail exposure. Different rules apply to calculation of other categories of risk-weighted assets.

For corporate, sovereign and bank exposures not in default, the formula for calculating risk-weighted assets is:⁵

$$\text{Correlation (R)} = 0.12 \times (1 - \text{EXP}(-50 \times \text{PD})) / (1 - \text{EXP}(-50)) + 0.24 \times [1 - (1 - \text{EXP}(-50 \times \text{PD})) / (1 - \text{EXP}(-50))]$$

$$\text{Maturity adjustment (b)} = (0.11852 - 0.05478 \times \ln(\text{PD}))^2$$

$$\text{Capital requirement (K)} = [\text{LGD} \times N[(1 - R)^{-0.5} \times G(\text{PD}) + (R / (1 - R))^{0.5} \times G(0.999)] - \text{PD} \times \text{LGD}] \times (1 - 1.5 \times b)^{-1} \times (1 + (M - 2.5) \times b)$$

$$\text{Risk-weighted assets (RWA)} = K \times 12.5 \times \text{EAD}$$

5. Ln denotes the natural logarithm. N(x) denotes the cumulative distribution function for a standard normal random variable. G(z) denotes the inverse cumulative distribution function for a standard normal random variable.

Risk components

Under the IRB framework, banks must calculate risk components used in measurements of UL capital requirements for risk-weighted assets and of EL amounts. There are four risk components under the IRB framework: probability of default (PD), loss given default (LGD), exposure at default (EAD) and effective maturity (M). PD and EAD are percentages. PD (90 days) is based on one year and calculated for each of a minimum of seven risk categories.

Minimum requirements

Banks must meet minimum standards set by the supervisor in order to use the IRB approach for measurements of capital requirements. To be eligible for the IRB approach, a bank must demonstrate to its supervisor that it meets certain minimum requirements at the outset and on an ongoing basis.

It is important for the credit risk rating system to be integrated with the credit approval, risk management and corporate governance functions of banks. Documentation must be available of their rating systems' design and operational details, evidencing compliance with the minimum standards. Banks must have independent credit risk control units that are responsible for the design or selection, and the implementation and performance, of their internal rating systems. Internal audit or an equally independent function must review at least annually the bank's rating system and its operations. A review of the overall risk management process should take place at regular intervals and should address the integration of the rating system and lending processes, assess risk components and review adherence to minimum requirements.

Foundation and advanced approaches

Two broad approaches are available for calculation of capital requirements: a foundation and an advanced approach. Under the foundation approach, banks provide their own estimates of PD and rely on supervisory estimates for other risk components. Under the advanced approach, banks provide their own estimates of PD, LGD and EAD, and their own calculation of M.

For retail exposures, there is no distinction between a foundation and advanced approach. Banks using the IRB approach must provide their own estimates of PD, LGD and EAD.

The IRB approach allows the use of more types of collateral for offsetting the capital requirement than the standardised approach.

Adoption of the IRB approach

When adopting an IRB approach, a bank must produce an implementation plan that must be approved by the supervisor, specifying to what extent and when it intends to roll out IRB approaches across significant asset classes over time. Various factors such as data limitations may prevent banks from assessing risk components for some asset classes. In such circumstances, supervisors may allow the use of the IRB approach on some of the assets, and the standardised approach on others (generally exposures in non-significant asset classes that are immaterial in terms of size and perceived risk profile). The supervisor may also allow banks to use the foundation approach at first, and then the advanced approach when its conditions have been met. Banks adopting an IRB approach will not be allowed to return to the standardised approach except in extraordinary circumstances, such as divestiture of a large fraction of its credit-related business.

Under the revised framework, the foundation approach may be used from the end of 2006 and the advanced approach from the end of 2007. A year before implementation, i.e. in 2006 for the foundation approach and 2007 for the advanced approach, banks will need to calculate their capital requirements both according to the older Accord of 1988 and using the IRB approach. Until the end of 2009 a capital floor will be applied to prevent the adoption of the IRB approach from causing a substantial reduction in the risk weight.

Banks may use two years of historical data at the implementation of the framework for calculation of risk components. After three years of using the IRB approach, the historical data observation period shall be five years.

Operational risk

Operational risk is defined in the framework as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.

The framework presents three methods for calculating operational risk capital charges: the Basic

Indicator Approach, the Standardised Approach and Advanced Measurement Approaches (AMA).

Basic Indicator Approach

Under the Basic Indicator Approach, banks must hold capital for operational risk equal to the average over the previous three years of 15% of positive annual gross income. Banks using this approach are encouraged to comply with the Basel Committee's guidance on *Sound Practices for the Management and Supervision of Operational Risk*.

Standardised Approach

In the Standardised Approach, banks' activities are divided into eight business lines: corporate finance, trading & sales, retail banking, commercial banking, payment & settlement, agency services, asset management, and retail brokerage. Within each business line, gross income is a broad indicator for proxying the likely scale of operational risk exposure. The capital charge for each business line is calculated by multiplying gross income by a factor assigned to it in the range 12%-18%. The total capital charge is calculated as the three-year average of the simple summation of the regulatory capital charges across each of the business lines in each year.

A supervisor can choose to allow a bank to use the Alternative Standardised Approach (ASA), under which the operational risk capital charge/methodology is the same as for the Standardised Approach except for retail banking and commercial banking. For these business lines, loans and advances are used as the exposure indicator.

Certain minimum criteria are set to qualify for using the Standardised Approach for measuring operational risk. These address issues including the operational risk management framework, quality of assessment systems and regular review by external auditors and/or supervisors.

Advanced Measurement Approaches (AMA)

Under the AMA, banks use an internal risk measurement system. They must track internal loss data to tie risk estimates to actual loss experience. Qualitative and quantitative criteria are set for the use of internal risk measurement systems. Examples of the former are an independent operational risk management function that is responsible for the design and imple-

mentation of the bank's operational risk management framework; an internal operational risk measurement system that is closely integrated into day-to-day risk management processes; and a routine for ensuring compliance with a documented set of internal policies, controls and procedures concerning the system. Furthermore, internal and/or external auditors must perform regular reviews of the operational risk management processes, measurement systems and management function. Supervisory approval is required for the use of AMA.

Pillar 2 – Supervisory review process and capital requirement

The key aim of Pillar 2 of the framework is to ensure that banks have adequate capital to support all the risks in their business. It also aims to encourage banks to develop and use better risk management techniques in monitoring and managing their risks, and to serve as a framework for communications between supervisors and banks.

Internal capital assessment

Banks need processes for assessing total risk and subsequent capital requirements. Assessment of total risk exposure must consider risks that are not fully captured or comprehensively taken into account by the Pillar 1 process. The main risks involved in this respect are credit concentration risk, operational risk, market risk, interest rate risk in the banking book and liquidity risk. Stress testing shall be one method used in evaluating capital adequacy. Banks must be able to demonstrate that the capital targets set are commensurate with their risk profile. Board and senior management oversight is emphasised in risk management, along with internal control review.

Supervisory review

Supervisors should review and evaluate banks' internal capital adequacy assessments and strategies, as well as their ability to monitor and to ensure their compliance with regulatory capital ratios. Supervisors should take appropriate supervisory action if they are not satisfied with the result of this process.

Capital and prudential supervision

Supervisors should expect banks to operate above the minimum regulatory capital ratios and should have the ability to require banks to hold capital in excess of the minimum. Furthermore, supervisors should seek to intervene at an early stage to prevent capital from falling below necessary minimum levels and should require rapid remedial action in such cases.

Pillar 3 – Market discipline

The purpose of Pillar 3 – market discipline is to complement the minimum capital requirements (Pillar 1) and the supervisory review process (Pillar 2). As pointed out above, the IRB approach gives banks more scope in assessing their capital requirements. The Basel Committee aims to encourage market discipline by developing a set of semi-annual disclosure requirements which will allow market participants to assess key pieces of information on the scope of application, capital, risk exposures, risk assessment processes, etc. Such disclosures enable market participants to make better assessment of a bank's exposure to risks and enhance comparability. In selecting its requirements, the Committee aimed to strike an appropriate balance between the need for meaningful disclosure for assessment and comparison, and the protection of proprietary and confidential information.

This information can be presented in a variety of forms, e.g. in annual financial statements, a publicly accessible Internet website or under a different disclosure regime, as decided by the supervisory author-

ities. When information is presented in annual financial accounts, banks should explain differences between accounting disclosures and Basel II disclosures.

Concluding remarks

Financial companies operating in Iceland are subject to capital adequacy rules set by the Financial Supervisory Authority (FME). The FME rules are based on two EU directives addressing capital issues: Directive 2000/12/EC of the European Parliament and of the Council of 20 March 2000 relating to the taking up and pursuit of the business of credit institutions, and Council Directive 93/6/EEC of 15 March 1993 on the capital adequacy of investment firms and credit institutions. The capital adequacy provisions of both directives are largely based on the Basel I framework.

Alongside the Basel Committee's work on the revised capital framework, the EC Commission has been reviewing the capital adequacy provisions of Directives 2000/12/EC and 93/6/EEC with a view to harmonising them with the Basel II framework. Thus the substance of the revised Basel framework will be valid for Icelandic financial companies, even though the framework itself will not have legal effect in Iceland.

The Basel Committee's *Revised Framework for International Convergence of Capital Measurement and Capital Standards* (Basel II) has been published on the BIS website: <http://www.bis.org>.

Kristiana Baldursdóttir¹

The Icelandic credit system

Domestic lending and securities of the credit system have grown much faster in recent years than over the period 1992-1998. The main reason is a surge in lending by the banking system and in foreign borrowing. Corporate borrowing has grown substantially in recent years.

Introduction

The credit system comprises lenders and borrowers in the domestic credit market. Lenders consist of the banking system, miscellaneous credit undertakings, pension funds, mutual funds and investment funds, insurance companies, state lending funds and abroad.

Within the banking system are the Central Bank of Iceland, commercial banks, savings banks, Postgiro and credit cooperatives.

Several types of corporations/institutions constitute miscellaneous credit undertakings, of which the Housing Financing Fund (HFF) is by far the largest. Other undertakings are investment banks, investment credit funds, two leasing companies and two payment card companies.

State lending funds consist of a number of funds/institutions responsible for lending by the state, i.e. the Student Loan Fund, Energy Fund, Harbour Improvement Fund, Unemployment Insurance Fund, Fisheries Development Fund – Employment Insurance Division, the guarantee and on-lending divisions of the National Debt Management Agency and the relevant divisions of State Accounts. Treasury foreign borrowing is also channelled through the state lending funds.

Borrowers are classified into four groups: central government, local government, corporate and household. They are confined to domestic entities, since

the accounts cover only the domestic credit market, but borrowing by foreign entities and Icelandic claims on abroad are deducted from foreign borrowing to yield a net figure, as discussed later.

Domestic entities are permanent residents in Iceland in accordance with the Act on Legal Domicile, irrespective of nationality, as defined under the Currency Act no. 87/1992. Foreign entities are all those not classified as domestic.

Domestic credit and securities

Domestic credit and securities of the credit system, after eliminating inter-institutional transactions, amounted to 2,439.4 b.kr. at the end of June 2004, as shown in Table 1. Shares of individual lenders in total domestic credit and securities within the system have changed considerably since December 1992. The banking system has increased its share, as has foreign borrowing. Total lending by miscellaneous credit undertakings, including the HFF, and the pension funds has decreased correspondingly.

The most striking change is the massive increase in inter-institution transactions, i.e. lending by credit system entities to each other, which at the end of June 2004 exceeded 2,000 b.kr. – 45% of total lending. Including these transactions would give a different picture of relative shares. For example, the share of foreign borrowing would contract, since the largest item in inter-institutional transactions is foreign borrowing by deposit money banks (DMBs), at 925 b.kr. Also, the pension funds would gain share if inter-

1. The author is a Division Chief at the Central Bank of Iceland's Statistics Department.

Table 1 Assets and liabilities of the credit system December 1992 and June 2004

	<i>Position at end of period (b.kr.)</i>		<i>% of total</i>	
	<i>Dec. 1992</i>	<i>June 2004</i>	<i>Dec. 1992</i>	<i>June 2004</i>
<i>Assets:</i>				
Banking system	210.4	1,183.2	22.6	26.5
Miscellaneous credit undertakings	209.0	620.9	22.4	13.9
Of which HFF	132.1	482.9	14.2	10.8
Pension funds	165.1	681.2	17.7	15.3
Insurance companies	17.0	68.4	1.8	1.5
Mutual and investment funds	8.0	221.1	0.9	5.0
Foreign lending	256.3	1,348.2	27.5	30.2
State lending funds	65.7	340.5	7.1	7.6
Total	931.5	4,463.6	.	.
Less inter-institutional transactions	-254.6	-2,024.2	27.3	45.3
Assets = liabilities	676.9	2,439.4	.	.
<i>Liabilities:</i>				
Domestic liabilities	457.0	1,760.4	.	.
Foreign liabilities, net	220.0	679.0	.	.

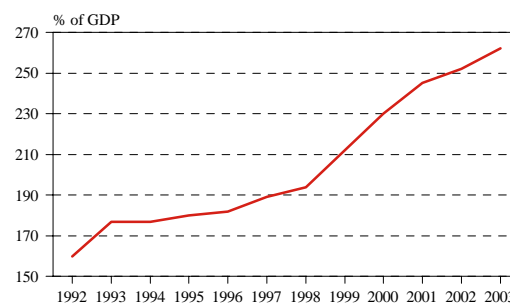
institutional transactions were included, even though their lending to other credit system entities amounts to 366 b.kr., comprising purchases of securities issued by credit institutions.

As a proportion of GDP, the development of domestic credit and securities in the credit system shows clearly accelerating growth in recent years compared with the earlier part of the period. Chart 1 presents the average loan stock position over the year relative to GDP for the period 1992-2003. It shows that the ratio was in the range 177-194% for almost all of the 1990s, but has since grown much faster to reach 262% in 2003.

More rapid growth may be traced in particular to the banking system, whose net lending soared over the period 1998-2003. In 1998 this was equivalent to 56% of GDP but had risen to 103% in 2003. Foreign borrowing and pension funds also grew relative to GDP over the same period, although not at a comparable pace.

Chart 1

Domestic lending and securities of the credit system at year-end 1992-2003



Source: Central Bank of Iceland.

This period, 1992-2003, witnessed great volatility in twelve-month movements of lending in the credit system.² The sharpest spike was in mid-1999 at just over 35%, followed by a steep drop until the end of 2002 when growth was very subdued. Since then it has been steadily increasing. Foreign loan movements closely match those in the banking system, which is by far the largest foreign borrower.

Lending classifications

As pointed out above, there are four main types of borrower in the Icelandic credit system: central government, local government, corporate and household. Transactions between credit system agents have been netted, i.e. credit institutions' borrowing from each other is included in the inter-institutional transactions in Table 1. At the end of June 2004, lending to corporations amounted to 1,333 b.kr. and to households 813 b.kr., while public sector entities had outstanding loans totalling almost 300 b.kr.

Since September 2003, credit institutions' lending has been automatically classified according to Statistics Iceland's ÍSAT standard, instead of manually. The new methodology resulted in shifts between categories of borrowers. Lending to households decreased with a corresponding rise in lending to both the corporate and local government sectors. The main reason for the reduction in lending to households was that some HFF debt was reclassified to local authorities and businesses which had previous-

2. Adjusted for transfers between miscellaneous credit undertakings and the banking sector.

ly been attributed to households as the ultimate borrower. There was also a sizeable decrease in household borrowing within the banking system, due to reclassification to the corporate sector. In statistical comparisons, earlier data have been adjusted to incorporate the changes made in September 2003.

Lending to households

As mentioned above, total lending to households by the credit system stood at 813 b.kr. at end-June 2004. Chart 3 shows a breakdown by lender at that time.

Some 55.7% of total household debt, amounting to 453 b.kr., was with miscellaneous credit under-

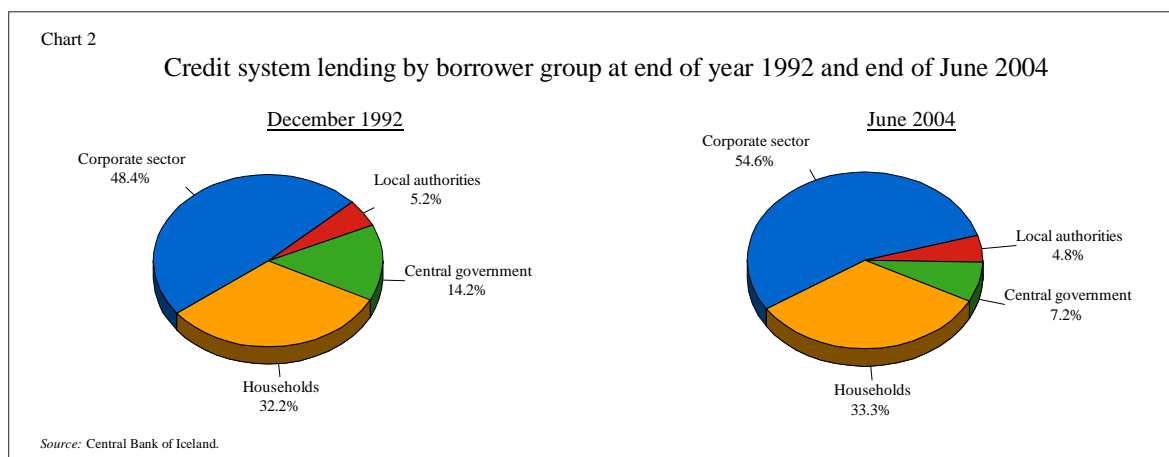


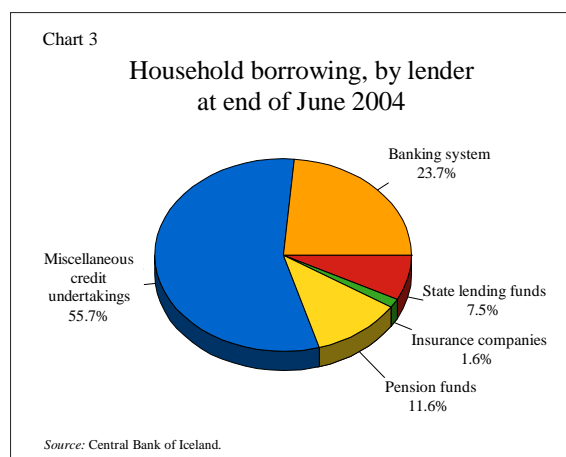
Chart 2 shows the change in borrowers' shares in total lending by the credit system since 1992. The greatest increase was in the corporate sector, which accounted for 48.4% of total lending at the end of 1992 but 54.6% at end-June 2004. The shares of local authorities and households remained broadly unchanged, while the central government's share contracted by 7 percentage points. An important explanation lies in foreign borrowing, with central government accounting for more than one-third of the total at the end of 1992 but less than 13% at end-June 2004.

Lending to corporations

The largest lender to corporations is the banking system, which in June 2004 accounted for 57% of total corporate debt. A large share of this debt – more than 400 b.kr. – is exchange rate-indexed in addition to direct foreign borrowing by corporations amounting to almost 200 b.kr. Thus some 600 b.kr., or 45% of total corporate liabilities, were of foreign origin at the end of June 2004.

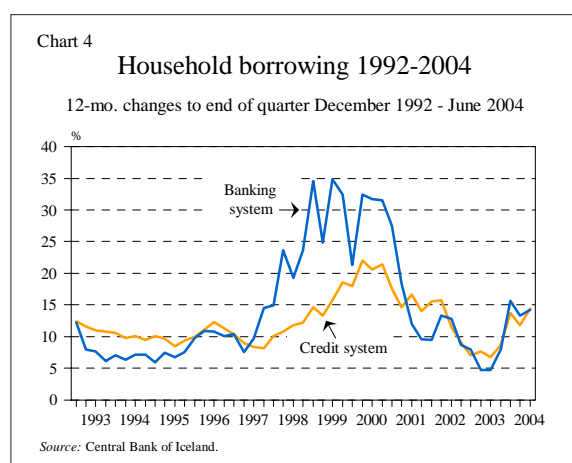
takings at end-June 2004. By far the largest individual agent in this segment is the HFF, which accounts for more than half the figure. The HFF's share in total household debt lay in the range 48-58% over the period from December 1991 to June 2004, reaching a peak in the mid-1990s and a low at the end of 2000.

At the end of June 2004, banking system lending accounted for just under one-quarter of total household debt, or 193 b.kr. The twelve-month rate of growth was around 10% over the period December

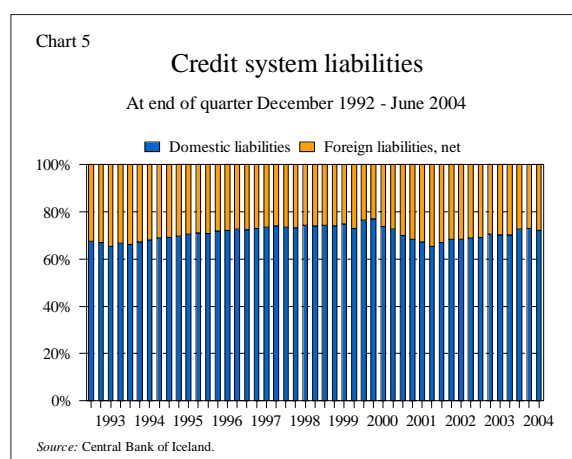


1992 until June 1997, when it soared as shown in Chart 4. Growth reached a peak in mid-2000.

Chart 4 shows that banking system lending to households has been more volatile than lending to them by the credit system as a whole. This is natural, since loans from the HFF, pension funds and Student Loan Fund are long-term and therefore stable over time. Short-term lending by DMBs, such as overdrafts, can fluctuate sharply in pace with conditions at any given time.



Pension funds' loans to members amounted to 94 b.kr. at the end of June 2004. Their twelve-month rate of growth surged in mid-2001 to beyond 30%. This has subsequently slowed down and since mid-2003 has been in the region of 9%.



State lending funds include the Student Loan Fund, which accounted for 7% of household debt at end-June 2004.

Financing of the credit system

Chart 5 shows a breakdown of the liability side of the credit system into domestic and foreign liabilities for the period December 1992 to June 2004. More than 2/3 of liabilities are with domestic entities for almost the whole period.

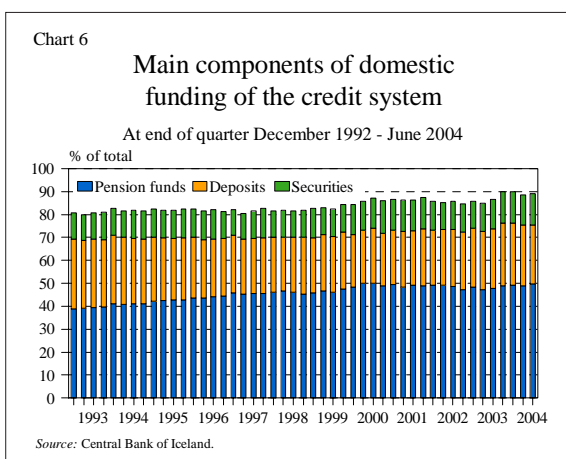
Borrowing from domestic entities

The lion's share of domestic borrowing by the credit system is the disposable (net) assets available to pension funds for lending or securities purchases. Pension funds' disposable assets accounted for almost 40% of the credit system's domestic liabilities at the end of 1992. The pension funds' share grew steadily until the beginning of 2000 when it stood at exactly half, and it has hovered around that level since.

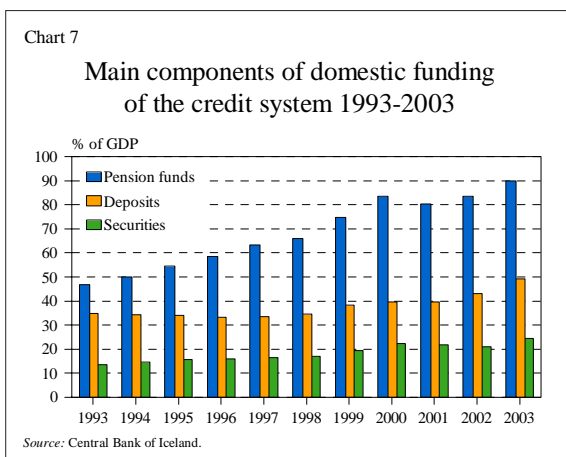
There are two main reasons for the pension funds' increased share. First, premia paid to pension funds mushroomed in the second half of the 1990s and until 2002. In 1996 they were equivalent to 4.1% of GDP, but had grown to 8.5% by 2002. Second, in 1994 the pension funds began investing in foreign variable-income securities when foreign investment rules were liberalised. At the same time the pension funds increased their positions in comparable domestic securities, having invested until then almost entirely in domestic fixed-income instruments. Investments in variable-income securities increased annually and in 2000 they accounted for almost 70% of total pension fund securities purchases. Returns were strong and the pension funds grew rapidly with a net real rate of return over the period 1995-1999 in the range 6.6%-12%.

Chart 6 shows the development of the three largest components of domestic financing over the period December 1992 to June 2004. Pension funds account for the largest share, as described above, followed by deposits with DMBs and securities portfolios of others than credit institutions. It reveals that deposits with DMBs have contracted over the period, from 30.5% in 1992 to 25.6% in June 2004. They hit a low of 23% at the end of 1999 and in September 2000. Shrinking deposits might have been expected

to produce a corresponding increase in the share of securities assets, but this was not the case. This item's share was 11.5% at the end of 1992 and 13.9% in June 2004, and lay somewhere in this range for the whole period.



These three largest components of domestic funding of the credit system can also be examined in terms of GDP. Measured by this criterion, pension saving-based financing spiralled over the period 1993-2003, from 47% of GDP to 90%, apart from a slight dip in 2001. Deposits have not grown as sharply, since their average position as a proportion of GDP was 35% in 1993 but had risen to 49% in 2003. For almost all the 1990s this ratio remained virtually unchanged in the range 33-35% of GDP.



Foreign borrowing

Net foreign borrowing amounted to roughly one-third of total capital in the credit system in December 1992, then its share fell steadily until the end of March 2000 when it was only 23%. In September 2001 the share rose to 35% but more recently it has been trending slowly downwards and was 28% in mid-2004. Part of the explanation for the sharp increase from spring 2000 to autumn 2001 is the weakening of the króna over that period, when the exchange rate index rose (i.e. the króna depreciated) from 107 to 151.

Given the continuous reports of mounting foreign borrowing and securities issues in international markets, the recent declining share of foreign borrowing may come as some surprise. But the explanation can be seen in Chart 8. The foreign share of credit system funding is a net figure, i.e. foreign debt less claims on foreign entities, shown by the line "Foreign liabilities, net".

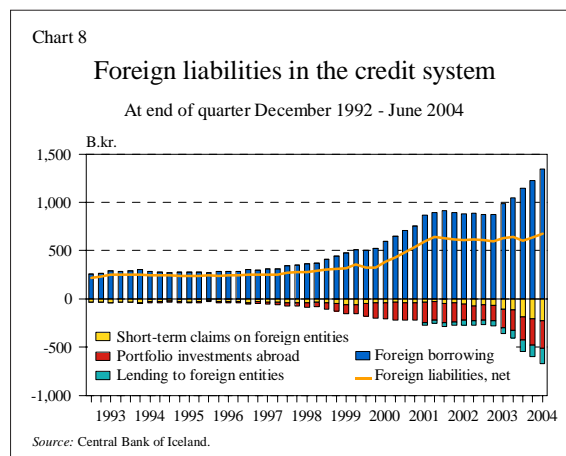


Chart 8 shows that foreign borrowing, including securities issues in international markets, soared in 2000-2001 and again in 2003 and the first half of 2004. For example, the stock was 1,348 b.kr. in mid-2004, compared with 872 b.kr. in March 2003.

However, the chart also shows that domestic claims on foreign entities have increased at the same time, especially in the more recent period. Short-term claims on foreign entities, residents' portfolio investments abroad and lending to foreign entities measured almost 670 b.kr. in the middle of this year, as against 277 b.kr. only 15 months before in March

2003. DMBs began lending to foreign entities on a significant scale in the first half of 2001 and the figure had exceeded 60 b.kr. in June 2003 (stated at July 2004 prices). Over the following twelve months their foreign lending soared by almost 100 b.kr. to reach almost 160 b.kr. at the end of June 2004.

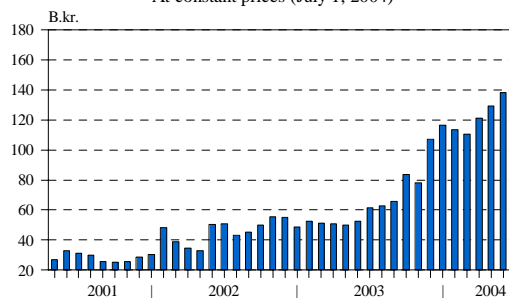
Residents' portfolio investments abroad have also surged in recent years. The stock measured 17 b.kr. at the end of 1996 but had risen to 282 b.kr. in June 2004, at respective price levels. Of the end-June 2004 figure, the pension funds held almost 193 b.kr.

Claims on foreign entities have therefore grown much more rapidly than foreign borrowing in the recent term, which explains why the foreign share in total financing of the credit system has remained relatively stable recently.

Chart 9

DMB lending to foreign entities
April 2001 - June 2004

At constant prices (July 1, 2004)



Source: Central Bank of Iceland.

Monetary policy and instruments

The target of monetary policy

The target of monetary policy is price stability. On March 27, 2001 a formal inflation target was adopted, as follows:

- The Central Bank aims for an annual rate of inflation, measured as the annual twelve-month increase in the CPI, which in general will be as close as possible to 2½%.
- If inflation deviates by more than ±1½% from the target, the Central Bank shall be obliged to submit a report to the government explaining the reason for the deviation, how it intends to respond and when it expects the inflation target to be reached once again. This report shall be made public.¹
- The Central Bank publishes a quarterly inflation forecast, projecting two years into the future, and explains it in the *Monetary Bulletin*.

Since monetary policy aims at maintaining price stability, it will not be applied in order to achieve other economic targets, such as a balance on the current account or a high level of employment, except insofar as this is consistent with the Bank's inflation target.

Main monetary policy instruments

In particular, the Central Bank implements its monetary policy by managing money market interest rates, primarily through interest rate decisions for its repurchase agreements with credit institutions. Yields in the money market have a strong impact on currency flows and thereby on the exchange rate, and in the long run on domestic demand. Broadly speaking, transactions with credit institutions can be classified into fixed trading instruments and market actions.

Fixed trading instruments:

- *Current accounts* are deposits of the credit institutions' undisposed assets. These are settlement accounts for netting between deposit institutions and for interbank market trading, including transactions with the Central Bank. Interest rates on these accounts set the floor for overnight interest rates in the interbank market.
- *Overnight loans* are provided on the request of credit institutions and secured with the same securities that

qualify for repo transactions (see below). Overnight interest rates form the ceiling for overnight interest rates in the interbank market.

- *Certificates of deposit* are issued with a maturity of 90 days, on the request of credit institutions. Although they are unlisted, they qualify for repo transactions. Their role is to establish the floor for three-month yields in the money market.
- *Required reserves* are made with the Central Bank by credit institutions which are not dependent on Treasury budget allocations for their operations. The required reserve base comprises deposits, issued securities and money market instruments. The required reserve ratio is 2% for the part of the required reserve base which is tied for two years or longer. The maintenance period is based on the 21st day of each month until the 20th of the following month, and the two-month average reserve is required to reach the stipulated ratio during the period.

Market actions:

- *Repurchase agreements* are the Central Bank's main instrument. Auctions of 7-day agreements are held every week. Credit institutions need to put up securities that qualify as collateral. Fixed-price auctions have been used so far.
- *Certificates of deposit* with a maturity of 7 days are auctioned weekly. Their function is to counteract temporary surplus liquidity in the banking system. The Dutch auction format is used.
- *Securities market trading* is limited to treasury-guaranteed paper and is rarely used.
- *Foreign exchange market intervention* is only employed if the Central Bank considers this necessary in order to promote its inflation target or sees exchange rate fluctuations as a potential threat to financial stability.

Overview of Central Bank interest rates

	Current rate (%)	Last change		Rate one year ago
		Date	Percentage points	
Nov. 30, 2004				
Current accounts.....	5.00	Nov. 1, '04	0.75	2.8
Overnight loans.....	9.25	Nov. 1, '04	0.50	7.7
Certificates of deposit (90 days).....	6.75	Nov. 1, '04	0.50	4.8
Required reserves.....	6.00	Nov. 1, '04	0.50	4.1
Repos.....	7.25	Nov. 2, '04	0.50	5.3

1. The Central Bank was to attain the inflation target of 2½% no later than by the end of 2003. In the interim the upper limit for inflation was set at 3½% above the inflation target in 2001, and 2% in 2002.

Prudential regulation on liquidity ratio and foreign exchange balance

Prudential regulation in financial markets generally aims to contribute to secure and reliable practices in financial services. This is a fairly broad concept, including regulations on requirements for management practices in financial companies, their liquidity, consumer protection and effective internal and external supervision of their activities. In a broad sense prudential regulation also aims to contribute to financial and economic stability. By law, the Central Bank of Iceland sets rules for the liquidity ratio of credit institutions and for their foreign balance. Other prudential regulations in financial markets are either sanctioned by law, or set by a government minister or the Financial Supervisory Authority.¹ The main content of the rules on liquidity ratio and foreign balance is as follows:

Liquidity ratio

A credit institution's liquidity ratio may be defined as the ratio between its liquid claims and liquid liabilities. Rule no. 386 of May 29, 2002 (cf. Art. 12 of the Central Bank Act no. 36/2001), stipulates the liquidity ratio of credit institutions. The regulation aims to ensure that credit institutions always have sufficient liquidity to meet foreseeable and conceivable payment liabilities over a specified period. They are obliged to submit a monthly report to the Central Bank containing data on which calculation of the liquidity ratio is based. Claims and liabilities included in these calculations are classified according to their nature, maturity and risk. The proportion of each category included in the calculation is also specified. For example, all of an institution's cash is considered a liquid claim, but only 5% of overdrafts. The ratio is calculated for four periods, namely liquidity within one month, from one and up to three months, from

three and up to six months, and from six and up to twelve months. The ratios of claims to liabilities which fall due or can be liquidated within one month and three months shall not be lower than 1. If an institution fails to fulfil these requirements, the rules provide for per diem penalties which are levied on the shortfall. Credit institutions must also report their liquidity ratios for other periods, although no specific levels are required to be maintained.

Foreign balance

A credit institution's foreign balance may be defined as the difference between its foreign-denominated assets and liabilities, on and off the balance sheet. Foreign balance is therefore a measurement of an institution's foreign exchange risk. Rule no. 387 of May 29, 2002 (cf. Art. 13 of the Central Bank Act no. 36/2001), stipulates the foreign balances of credit institutions and financial intermediaries. The regulation aims to limit foreign exchange risk by preventing the foreign balance from exceeding certain limits. Two types of limit are stipulated in this respect. One is exposure in individual currencies, which may neither be positive (long) nor negative (short) by more than the equivalent of 15% of equity according to the most recently published financial statements. An exception is made for the US dollar and euro, however, where the limit is 20%. The other limits apply to the total foreign exchange position in all currencies, calculated in domestic currency, which is the sum of positions in individual currencies and may neither be long nor short by more than 30% of equity according to the most recently published financial statements. Credit institutions are obliged to submit regular monthly reports on their foreign balances to the Central Bank. Credit institutions with a balance exceeding the above limits shall take immediate measures to adjust it, and it shall be brought inside the permissible limits within three business days. If an institution fails to correct its balance within this time limit, the rules provide for per diem penalties.

1. See the websites of the Ministry of Commerce (<http://www.stjr.is/interpro/ivr/ivr.nsf/pages/log>) and Financial Supervisory Authority (<http://www.fme.is/fme.nsf/pages/index.html>).

Economic and monetary chronicle

August 2004

On August 9, KB banki hf. issued 110,137,128 new shares on Iceland Stock Exchange (ICEX) to a nominal value of 1,101,371,280 kr. The total number of shares in the bank on the ICEX Main List thereby increased to 550,685,640, to a nominal value of 5,506,856,400 kr.

On August 12, Íslandsbanki hf. made an offer to acquire Kredittbanken AS of Norway, at a price of NOK 7.25 per share. The offer price was equivalent to just over 3.5 b.kr. for all shares in the bank. The Board of Directors of Kredittbanken recommended to its shareholders to accept the offer, which was conditional upon acceptance by 90% of shareholders and approval by the relevant authorities in Iceland and Norway.

On August 23, KB banki hf. announced plans to offer inflation-indexed mortgage loans with a maturity of 40 years and carrying a fixed interest rate of 4.4%, subject to certain conditions. Subsequently, the other commercial banks and some savings banks and pension funds began offering loans on similar terms. Towards the end of the month the interest rate on mortgage loans was lowered to 4.2%, following a Housing Financing Fund auction of HFF bonds.

On August 30, Fitch Ratings affirmed Íslandsbanki hf.'s ratings at A for long-term obligations and F1 for short-term obligations. The outlook was also announced as stable.

September 2004

On September 17, the Central Bank of Iceland announced that it would raise its policy interest rate (i.e. its repo rate in transactions with credit institutions) by 0.5 percentage points to 6.75% as of September 21. The Bank's other interest rates were also raised by 0.5 percentage points on September 21.

On September 27, Íslandsbanki hf. increased its share capital by a nominal amount of 200 m.kr. After the increase, total listed nominal share capital in the bank on the ICEX Main List amounted to 10.2 b.kr. Average price per share was 10.80 kr.

On September 29, KB banki hf. announced that its acquisition of the Danish bank FIH A/S had been fully cleared by the Danish and Icelandic financial supervisory authorities, cf. its announcement from June 14. The announcement said that the acquisition was largely financed with a subordinated bond issue and pre-emptive rights issue of new share capital.

On September 30, the nominal share capital in Straumur Fjárfestingarbanki hf. investment bank was raised to 5.4 b.kr. Part of the new share issue was used to acquire a 14.41% share in Íslandsbanki hf. from Burðarás hf. investment holding company (which sold 5.33%), Landsbanki Íslands hf. (4.67%) and Landsbanki Luxembourg (4.42%).

On September 30, H.F. Verðbréf securities house set up a market for trading primary guarantee capital in Sparisjóður Reykjavíkur og nágrennis savings bank (SPRON).

October 2004

On October 1, the budget proposal bill for 2005 was presented to parliament. It assumed a surplus of 11.2 b.kr. The bill also presented the government's medium-term fiscal programme for 2005 to 2008.

On October 6, the state Housing Financing Fund (HFF) raised its maximum loan amount for both new and secondary market housing to 11.5 m.kr. At the same time, the maximum combined amount of ordinary mortgage loans and secondary mortgages was set at 13 m.kr.

On October 15, new shares in KB banki hf. to a nominal value of 1.1 b.kr. were listed on ICEX. After the

increase, the total nominal value of listed shares in the bank on the ICEX Main List amounted to 6,606,856,400 kr. Total sale price of the new shares was 52.8 b.kr.

On October 15, HFF increased its loan-to-value ratio from 85% of the fire insurance value of a property, to a maximum of 100%.

On October 18, it was announced that Íslandsbanki hf.'s takeover of Kredittbanken was completed. The takeover bid was accepted by 99.4% of shareholders.

From October 20 to 25, IMF staff visited Iceland for discussions on the economy with officials from the Central Bank, government and private sector. The IMF staff's concluding statement was published on the Central Bank's website on October 29.

On October 29, the Central Bank of Iceland announced that it would raise its policy interest rate on repo transactions with credit institutions by 0.5 percentage points to 7.25% as of November 2. The interest rate on credit institutions' current accounts with the Bank was raised by 0.75 percentage points on November 1.

November 2004

On November 3, Moody's Investors Service announced the upgrading of KB banki hf.'s credit rating. The bank's long-term deposit and senior debt ratings were upgraded from A2 to A1. The subordinated debt rating was upgraded to A2 from A3 and its C+ financial strength rating was affirmed. The short-term rating of P-1 was also affirmed, which is the highest rating given.

On November 5, Íslandsbanki hf. announced plans to offer mortgage loans with a loan-to-value ratio of up to 100% market value. With a maturity of up to 40 years, the loans would be subject to certain conditions. Other commercial banks and some savings banks followed suit and announced plans to offer similar mortgage terms.

On November 13, parliament approved a law on the pay conditions of primary school teachers and principals, ending a teachers' strike which had lasted since September 20. The law provided that, if contracting parties had not signed a wage agreement before November 20, 2004, the Supreme Court would appoint a three-man tribunal to decide, before February 28, 2005, the pay and terms of members of the Association of Teachers in Primary and Lower Secondary Schools and the Association of Headmasters with the local authorities that negotiate with them through the joint municipal wage committee. A new agreement was signed on November 17 and the result of a ballot on it was scheduled to be announced on December 6.

On November 16, Moody's Investors Service affirmed Íslandsbanki hf.'s A1 rating for long-term deposit and senior debt and P-1 rating for short-term obligations. The bank's financial strength rating of B- was placed on review.

On November 16, Reykjavík City Council approved an increase in the municipal tax rate from 12.7% to the maximum authorised rate of 13.03%. Real estate tax was also raised from 0.320% to 0.345%. The increases will generate an estimated 0.9 b.kr. in extra annual revenue for the city.

On November 22, new shares in Íslandsbanki hf. to a nominal value of 1 b.kr. were listed on ICEX. After the increase, the total nominal value of listed shares in the bank on the ICEX Main List amounted to 11.2 b.kr. Total sale price of the new shares was 10.65 b.kr.

On November 26, Fitch Ratings affirmed Íslandsbanki's long-term rating of A, short-term rating of F1, individual rating of C and support rating of 2. The outlook was stable.

On November 26, Fitch Ratings affirmed Landsbanki hf.'s long-term rating of A, short-term rating of F1, individual rating of C and support rating of 2. The outlook was stable.

Tables and charts

Based on statistical information available on November 26, 2004.

A list of symbols is on the inside of the front cover.

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Table 1 Main monthly indicators (continued on next page)

	Consumer prices		Exchange rate		Interest rates (end of period, %)							Money and credit ⁵			
	% change in CPI over the previous ¹		% ch. in effective exchange rate ^{1,2}		Short-term rates			Long-term rates				12-month % change			
	1 month	12 months	1 month	12 months	Central Bank repo yield	3-month REIBOR ³	3-month Treasury bills	5-y. non-indexed T-notes	10-year Treasury bonds ⁴	25-year housing bonds ⁴	Base money	M3 lending ⁶	Foreign liabilities		
1998	1.7	1.6	1.6	1.6	7.5	8.2	7.6	7.5	4.3	4.7	4.6	15.2	25.6	56.8	
1999	3.4	0.2	0.2	0.2	9.0	11.7	9.8	9.6	4.7	4.8	75.9	16.9	22.8	15.2	
2000	5.0	-0.1	-0.1	-0.1	11.4	12.0	11.5	11.7	5.5	6.3	-10.4	11.2	26.2	33.0	
2001	6.7	-16.7	-16.7	-16.7	10.1	12.5	10.0	9.1	5.1	5.9	-14.2	14.9	13.4	-0.2	
2002	4.8	3.0	3.0	3.0	5.8	6.2	5.8	6.9	4.9	5.2	17.2	15.3	2.0	-0.4	
2003	2.1	6.4	6.4	6.4	5.3	5.1	4.8	7.5	4.3	4.6	-33.5	22.4	14.8	-8.4	
2003															
April	0.1	2.3	1.2	11.3	5.3	5.3	4.5	7.0	4.6	4.9	2.1	15.6	5.0	12.2	
May	-0.2	2.2	1.2	8.9	5.3	5.3	4.8	6.6	4.4	4.8	-10.1	18.9	9.2	17.5	
June	0.1	1.8	-1.9	6.5	5.3	5.3	5.1	6.8	4.3	4.6	-13.8	19.3	10.1	23.5	
July	-0.1	1.6	-2.2	2.7	5.3	5.3	5.1	6.8	4.2	4.6	-2.5	14.8	11.5	39.2	
August	-0.1	2.0	-1.9	0.3	5.3	5.2	4.9	6.5	4.0	4.4	5.6	19.6	13.1	28.2	
September	0.7	2.2	0.0	2.3	5.3	5.2	4.5	6.3	4.3	4.6	-5.4	23.0	12.4	17.3	
October	0.5	2.2	0.6	3.2	5.3	5.1	4.6	6.9	4.2	4.6	-1.2	25.5	13.9	-18.9	
November	0.1	2.5	0.5	3.1	5.3	5.1	4.8	7.1	4.3	4.6	-17.2	23.7	13.6	-11.7	
December	0.3	2.7	0.5	1.7	5.3	5.1	4.8	7.5	4.3	4.6	-33.5	22.4	14.8	-8.4	
2004															
January	0.0	2.4	3.3	2.7	5.3	5.3	5.1	7.3	4.4	4.7	-12.5	26.4	20.8	-23.2	
February	-0.3	2.3	1.1	2.0	5.3	5.3	5.4	7.0	4.1	4.6	-30.0	22.5	21.4	-31.3	
March	0.6	1.8	-1.7	0.5	5.3	5.4	5.0	6.8	3.9	4.4	-28.7	24.5	23.9	-29.9	
April	0.6	2.2	-1.5	-2.2	5.3	5.4	5.3	6.8	3.7	4.1	-7.7	21.1	23.5	-13.2	
May	0.8	3.2	-0.3	-3.7	5.5	5.8	5.6	7.6	4.0	4.3	-32.4	18.4	19.8	-23.7	
June	0.8	3.9	0.7	-1.1	5.8	6.1	6.0	7.6	3.9	4.2	-11.7	19.0	20.1	-21.5	
July	-0.5	3.6	0.3	1.4	6.3	6.5	6.0	7.7	3.9	4.7	23.8	24.7	20.5	-37.6	
August	0.0	3.7	0.5	3.9	6.3	6.6	6.5	7.7	3.7	4.7	-15.8	15.4	23.6	-25.7	
September	0.4	3.4	-0.3	3.6	6.8	6.9	6.8	7.6	3.7	4.7	-8.3	20.0	26.6	-18.5	
October	0.8	3.7	0.6	3.6	6.8	7.2	7.0	7.7	3.7	4.6	3.5	20.2	32.9	7.3	
November [†]	0.2	3.8	1.3	4.4	7.3	7.6	7.5	7.9	3.6	4.6	...	...	...	...

† November 26. 1. Percentage changes between period averages. 2. Based on the official effective exchange rate basket (trade-weighted). Positive sign indicates appreciation of the Icelandic króna. 3. Average yield on the interbank market in Icelandic króna. 4. Yield in excess of changes in the CPI. 5. Annual figures are changes over year. Latest figures are preliminary. 6. DMBs = deposit money banks = commercial and savings banks and other institutions permitted to accept deposits from the public. Foreign lending excluded from January 2002.

Table 1 (continued) Main monthly indicators

	Foreign exchange market and reserves			Foreign trade and external conditions				Labour market		Treasury fin.		Asset prices		
	Gross foreign currency reserves:		CB	Trade balance (b.kr.)	Merchandise exports (b.kr.)	Merchandise imports (b.kr.)	Marine product prices, 12-mo. % ch. ⁹ króna ¹⁰	Real exchange rate of rev., króna ¹⁰	Un-employment % change	Wages, 12-mo. % change	Fin. balance, % of rev., cum. from beg. of year ¹¹	Equity prices ¹²	Housing prices ¹³	
	in b.kr.	Merch. imports ⁷	as ratio of: For. short-term liabil. ⁸ (b.kr.)											net purchases (b.kr.)
1998	29.6	2.2	0.8	17.0	-25.5	136.6	162.1	11.8	91.9	2.8	9.4	4.6	9.8	7.8
1999	35.8	2.6	0.9	12.0	-22.9	144.9	167.8	-4.8	93.6	1.9	6.8	8.7	47.4	22.2
2000	34.2	2.1	0.6	-13.9	-38.0	149.3	187.3	-3.0	96.2	1.3	6.6	5.9	-19.3	13.3
2001	36.6	2.1	0.4	-29.5	-6.7	196.4	203.1	1.6	83.6	1.4	8.8	-0.2	-11.2	3.1
2002	37.2	2.5	0.2	4.5	13.1	204.3	191.2	3.3	88.4	2.5	7.2	-5.6	16.7	7.5
2003	58.1	3.5	0.3	43.2	-16.9	182.6	199.5	0.4	93.8	3.4	5.6	-7.7	56.4	9.1
2003														
April	38.5	2.7	0.2	2.1	-2.4	14.1	16.5	4.2	95.9	3.9	5.6	-4.0	7.5	11.6
May	36.9	2.6	0.2	2.8	-1.7	15.1	16.8	0.5	97.1	3.6	5.6	-10.0	14.1	11.4
June	36.9	2.4	0.2	3.5	-3.2	14.3	17.5	-1.6	95.2	3.2	5.6	-7.7	14.6	14.8
July	36.5	2.3	0.2	4.4	-5.0	15.0	20.0	-4.7	93.2	3.0	5.7	-11.4	19.4	13.9
August	41.0	2.5	0.2	4.0	-0.9	14.9	15.8	-1.2	91.5	2.9	5.7	-11.5	38.0	14.9
September	46.4	2.8	0.2	4.4	-4.7	14.6	19.2	0.0	91.6	2.7	5.6	-11.7	39.5	12.6
October	51.7	3.1	0.3	4.4	-2.8	15.8	18.6	0.3	92.5	2.8	5.5	-9.6	48.7	12.4
November	57.8	3.5	0.3	3.8	-0.3	16.0	16.2	1.1	93.1	3.0	5.5	-10.2	52.7	12.7
December	58.1	3.5	0.3	3.7	-2.5	13.7	16.2	-1.4	93.6	3.1	5.4	-7.7	56.4	9.1
2004														
January	56.7	3.4	0.3	7.0	0.2	16.6	16.4	-2.9	96.3	3.7	3.3	20.1	76.8	8.3
February	57.3	3.5	0.3	1.4	0.0	14.1	14.1	-2.3	97.2	3.6	3.3	18.4	89.3	9.2
March	66.7	3.8	0.3	1.8	-0.2	20.1	20.3	-2.7	96.1	3.5	3.8	7.2	79.8	9.7
April	65.6	3.7	0.3	1.5	-3.3	16.8	20.0	-5.2	95.6	3.5	4.0	6.4	91.1	13.4
May	65.8	3.8	0.3	1.5	-3.7	14.9	18.6	-3.0	95.6	3.3	4.6	2.4	82.7	11.4
June	68.5	3.8	0.3	1.8	-7.3	15.8	23.1	-1.7	96.3	3.1	5.1	1.2	96.9	9.9
July	68.1	3.8	0.3	1.4	-6.5	16.6	23.1	-0.1	96.3	3.0	5.1	-0.9	105.6	12.6
August	70.8	3.8	0.3	1.6	-6.6	14.0	20.6	3.3	96.8	2.9	5.2	-2.0	92.6	9.5
September	71.1	3.8	0.3	1.6	0.2	19.3	19.2	4.2	97.0	2.6	5.3	-3.3	109.3	14.3
October	66.1	3.5	0.3	1.4	-4.6	16.9	21.6	4.7	97.9	2.7	5.3	...	75.1	13.8
November	...	...	...	4.8	...	...	...	...	99.1	...	...	...	76.3	...

7. Gross foreign exchange reserves at end of period as a ratio of the average monthly value of merchandise imports. Calculated at fixed exchange rates. 8. The denominator is foreign short-term liabilities of credit institutions (deposit money banks and investment banks). 9. Prices in SDR. Annual figures are % changes between annual averages. 10. Real effective exchange rate of the Icelandic króna based on relative consumer prices (a trade-weighted average of trading partners' consumer prices is used). 1980 = 100. 11. Cash basis. 12. The ICEX-15 index from January 1 1998. Earlier the ICEX stock price index. Annual figures are % changes over year. 13. Residential housing in the Greater Reykjavik Area. Annual figures are % changes over year.

Sources: Statistics Iceland, Directorate of Labour, State Accounting Office, Iceland Stock Exchange (ICEX), The Land Registry of Iceland, Central Bank of Iceland.

Table 2 Prices

	2004								
	March	April	May	June	July	August	Sept.	Oct.	Nov.
Consumer price index, May 1988 = 100	230.7	232.0	233.9	235.7	234.6	234.6	235.6	237.4	237.9
<i>1-month % changes:</i>									
Consumer price index	0.6	0.6	0.8	0.8	-0.5	-	0.4	0.8	0.2
Domestic goods excl. agric. products and vegetables	-0.5	0.1	0.8	0.6	0.1	-0.4	0.6	0.2	0.1
Agricultural products and vegetables	-0.2	-0.7	1.4	0.5	0.9	1.3	-0.1	0.7	-0.7
Imported goods excl. alcohol and tobacco	1.2	1.2	0.6	1.1	-1.8	-0.8	0.9	1.8	-0.2
Petrol	-2.0	4.1	3.3	6.2	-2.3	3.3	-0.4	2.0	-2.2
Housing	0.6	1.0	1.7	1.6	-0.4	0.6	0.7	0.9	1.1
Public services	-	-	0.7	0.1	0.6	0.4	-0.6	0.3	0.1
Other services	0.7	0.2	0.5	-	0.4	0.1	-0.1	-0.1	0.1
Harmonised index of consumer prices (HICP) ¹	0.7	0.5	0.8	0.5	-0.3	-0.2	0.5	0.5	...
<i>12-month % changes:</i>									
Consumer price index	1.8	2.2	3.2	3.9	3.6	3.7	3.4	3.7	3.8
Domestic goods excl. agric. products and vegetables	0.1	-0.2	1.6	1.7	1.8	1.7	1.6	1.6	1.6
Agricultural products and vegetables	-0.3	-0.4	0.8	1.4	3.6	4.5	4.2	3.7	3.0
Imported goods excl. alcohol and tobacco	-0.5	0.3	1.6	3.1	2.4	2.3	1.7	3.1	2.5
Petrol	-5.3	-1.0	8.4	18.5	12.7	16.4	13.0	19.2	16.6
Housing	6.7	7.0	8.0	9.4	7.7	6.9	7.1	7.5	8.8
Public services	5.9	5.9	6.6	6.7	6.5	6.9	5.0	5.1	5.1
Other services	1.7	2.4	2.7	2.3	2.4	2.9	2.9	2.3	2.3
Harmonised index of consumer prices (HICP) ¹	1.0	1.5	2.4	2.9	2.8	3.1	2.8	2.9	...
Building cost index for residential buildings	2.6	2.7	5.0	5.0	5.2	5.7	5.2	5.6	...
Housing prices ²	9.7	13.4	11.4	9.9	12.6	9.5	14.3	13.8	...
<i>Foreign CPI and commodity prices, 12-mo. % changes</i>									
Consumer price index in USA	1.7	2.3	3.1	3.3	3.0	2.7	2.5	3.2	...
Consumer price index in euro area ³	1.7	2.0	2.5	2.4	2.3	2.3	2.1	2.4	...
Commodity prices excl. oil	23.8	24.7	21.8	22.3	22.9	20.2	17.6	...	...
Petrol prices ⁴	11.5	33.7	46.4	27.7	34.1	42.8	59.8	68.5	...

1. Deviates from the CPI calculated by Statistics Iceland in that the latter includes own housing, education and health care. 2. Present value of price per m² in the Greater Reykjavik Area. Data for 2004 are preliminary. 3. Harmonised index of consumer prices (HICP). 1996=100. 4. Crude oil (Brent).

Sources: Statistics Iceland, The Land Registry of Iceland, EcoWin.

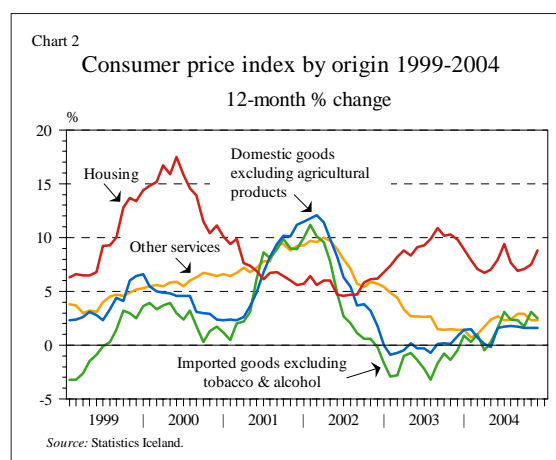
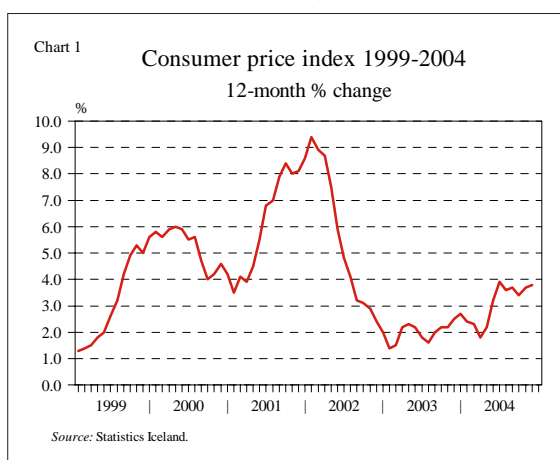


Table 3 Exchange rate of the Icelandic króna

Monthly averages	2004									3-month
	March	April	May	June	July	August	Sept.	Oct.	Nov. [†]	% ch. to Nov. 26
<i>Effective exchange rate indices:¹</i>										
Official index (31/12 '91 = 100).....	121.3	123.2	123.6	122.7	122.3	121.7	122.1	121.4	119.8	3.2
Import-weighted index (31/12 '94).....	102.7	104.3	104.7	103.9	103.5	103.0	103.4	102.8	101.4	3.2
Export-weighted index (31/12 '94).....	103.8	105.3	105.7	105.0	104.7	104.2	104.5	103.8	102.5	3.3
<i>Central Bank quotations:²</i>										
U.S. dollar	71.1	73.1	73.4	72.1	71.5	71.5	71.7	70.2	67.3	10.4
Euro	87.2	87.6	88.1	87.6	87.7	87.1	87.6	87.6	87.2	1.1
Japanese yen	0.655	0.679	0.655	0.659	0.654	0.647	0.652	0.644	0.641	3.6
Pound sterling.....	129.9	131.6	131.0	131.8	131.7	130.1	128.6	126.7	124.9	4.7
Danish krone	11.70	11.77	11.84	11.78	11.80	11.72	11.78	11.78	11.73	1.0
Norwegian krone.....	10.20	10.56	10.73	10.57	10.36	10.46	10.48	10.64	10.70	-2.3
Swedish krona	9.44	9.55	9.64	9.58	9.54	9.48	9.64	9.67	9.68	-0.9
<i>% changes³</i>										
	Between annual averages				From beginning of year			Previous 12 months		
	2000	2001	2002	2003	Nov. '02	Nov. '03	Nov. '04 [†]	Nov. '02	Nov. '03	Nov. '04 [†]
Official index (31/12 '91 = 100).....	-0.1	-16.7	3.0	6.4	10.6	-0.2	4.1	15.6	2.4	5.5
Import-weighted index (31/12 '94 = 100)....	0.2	-16.4	3.1	6.6	10.6	-0.1	4.1	15.5	2.7	5.6
Export-weighted index (31/12 '94 = 100)....	-0.2	-17.0	3.0	6.2	10.6	-0.3	4.1	15.6	2.2	5.4
<i>Central Bank quotations:²</i>										
U.S. dollar	-8.2	-19.3	6.9	19.2	19.9	8.4	8.5	25.2	15.5	13.6
Euro (Deutschmark before 1999).....	6.3	-17.0	1.5	-0.6	6.9	-5.2	3.6	11.9	-4.4	3.1
Japanese yen	-12.6	-9.1	10.2	10.1	11.8	-0.1	4.6	23.8	3.2	7.0
Pound sterling.....	-1.7	-15.3	2.6	9.4	12.1	1.3	2.3	14.9	3.9	3.7
Danish krone	6.5	-17.0	1.2	-0.6	6.8	-5.0	3.4	11.7	-4.2	3.0
Norwegian krone.....	3.7	-17.7	-5.2	5.9	-2.2	6.2	0.2	2.6	7.2	2.6
Swedish krona	2.0	-9.0	0.4	-1.0	4.1	-6.7	2.0	6.8	-4.5	2.1

† November 26. 1. Based on a trade-weighted (goods and services) basket of trading partners' currencies. 2. Exchange rate of respective currency against the Icelandic króna. 3. Positive sign indicates an appreciation of the Icelandic króna.

Source: Central Bank of Iceland.

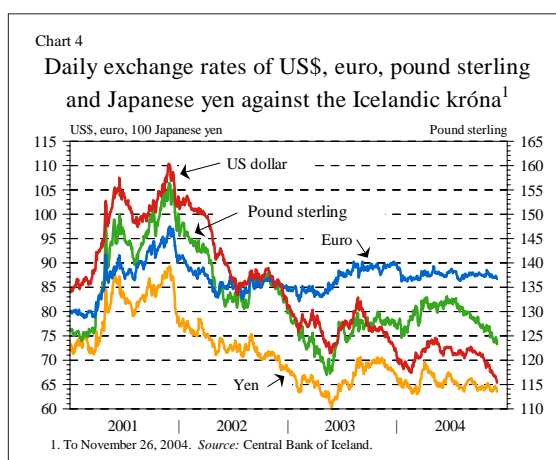
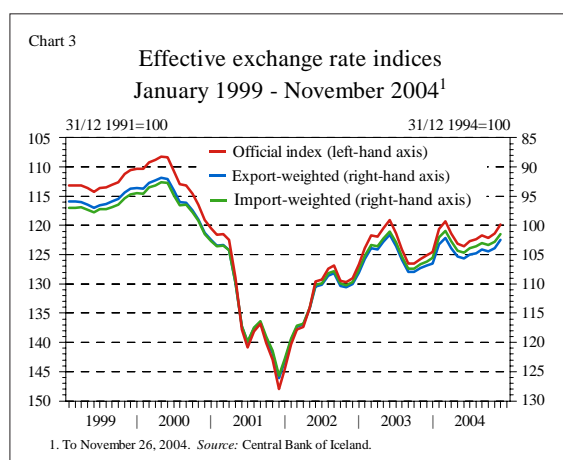


Table 4 Interest rates

All figures are in %	Annual averages ¹			At end of month 2004						
	2001	2002	2003	May	June	July	August	Sept.	Oct.	Nov. [†]
<i>Central Bank rates</i>										
Credit institutions' current accounts	6.8	5.5	2.9	3.0	3.25	3.75	3.75	4.25	4.25	5.00
Required deposits.....	9.4	7.1	4.2	4.3	4.50	5.00	5.00	5.50	5.50	6.00
Overnight loans (discount rates).....	12.3	10.7	7.8	7.9	8.00	8.25	8.25	8.75	8.75	9.25
Repurchase agreements.....	10.9	8.4	5.4	5.5	5.75	6.25	6.25	6.75	6.75	7.25
<i>Yields in the money market²</i>										
REIBOR, O/N.....	12.3	9.3	5.1	6.2	5.7	4.0	6.3	6.9	6.5	6.9
REIBOR, 1-month.....	12.1	9.0	5.3	5.7	5.8	6.1	6.4	6.7	6.8	7.2
REIBOR, 3-month.....	12.0	8.9	5.3	5.8	6.1	6.5	6.6	6.9	7.2	7.6
REIBOR, 6-month.....	11.8	8.8	5.5	5.9	6.5	6.8	6.8	7.0	7.4	7.9
Treasury bills, 3-month.....	11.0	8.1	5.0	5.6	6.0	6.0	6.5	6.8	7.0	7.5
Treasury bills, 6-month ³	10.9	7.9	5.0	5.6	...	...	...	...	...	...
<i>Yields in the capital market⁴</i>										
Treasury notes, up to 5 years.....	10.6	8.1	6.8	7.6	7.6	7.7	7.7	7.6	7.7	7.9
Treasury bonds, 10 years.....	5.3	5.2	4.4	4.0	3.9	3.9	3.7	3.7	3.7	3.6
Housing bonds, 25 years ⁵	5.9	5.7	4.7	4.3	4.2	4.7	4.7	4.7	4.6	4.6
Housing Financing Fund bonds, 20 yrs. ⁵ ..	.	.	.	.	.	4.0	3.8	3.8	3.8	3.6
Housing Financing Fund bonds, 30 yrs. ⁵ ..	.	.	.	.	.	3.9	3.7	3.7	3.8	3.6
Housing Financing Fund bonds, 40 yrs. ⁵ ..	.	.	.	.	.	3.8	3.7	3.7	3.7	3.5
<i>Commercial banks' lending rates⁶</i>										
Average rates on non-indexed securities ...	18.0	15.4	12.0	11.3	11.6	12.0	12.1	12.3	12.4	12.8
Average rates on indexed securities.....	10.2	10.1	9.1	8.0	8.0	8.0	8.0	7.5	7.5	7.5
<i>Rates acc. to Interest Rate Act 38/2001⁷</i>										
Penalty rates.....	23.7	21.3	17.3	17.0	17.0	17.5	17.5	17.5	17.5	17.5

† November 26. 1. Arithmetic averages of end-of-month figures. Central Bank rates are time-weighted averages. 2. REIBOR are interest rates on the inter-bank market in Icelandic króna. For Treasury and bank bills, yields in trading on ICEX (Iceland Stock Exchange). 3. Treasury bills with the closest maturity to 6 months. 4. All bond yields are in real terms. 5. Housing bonds and Housing authority bonds were discontinued as of June 1, 2004. New bonds, known as Housing Financing Fund (HFF) bonds, were issued instead and the majority of older issues were swapped for the new ones. 6. From July 1, 2001, the Bank issues information on banks' average interest rates only as statistical information. 7. Interest rates that have legal status in the month shown. From July 1, 2001, penalty rates are revised at 6-month intervals.

Source: Central Bank of Iceland.

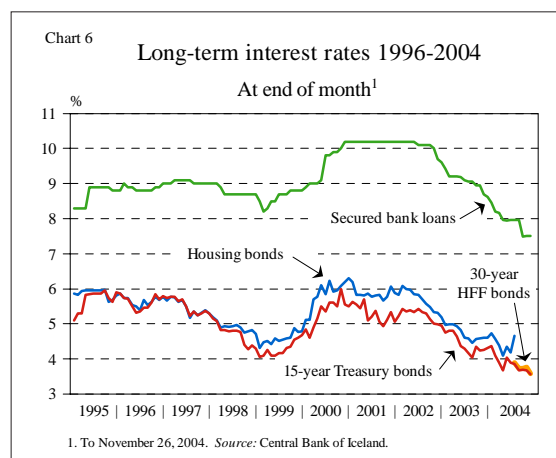
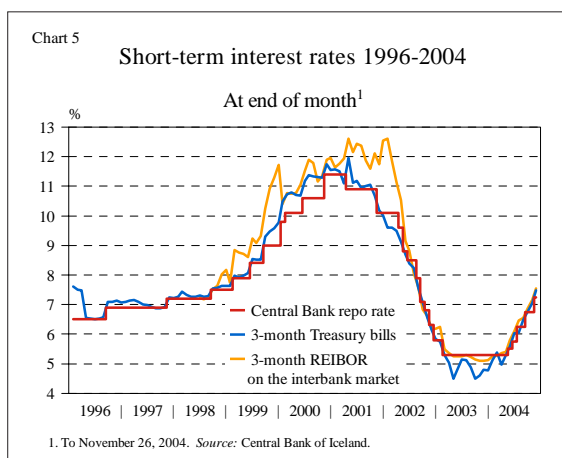


Table 5 Money and credit

Selected items from the balance sheets of the Central Bank, deposit money banks and the banking system

	In b.kr. Oct. 2004	% change over year			1-mo. change in b.kr.			12-mo. % change		
		2001	2002	2003	Aug. '04	Sept. '04	Oct. '04	Oct. '02	Oct. '03	Oct. '04
Net foreign exchange reserves	65.8	.	.	.	2.7	0.3	-5.0	.	.	.
Claims on Treasury and gov. inst., net ..	-17.0	.	.	.	-7.2	3.9	2.9	.	.	.
Claims on deposit money banks.....	20.6	38.7	27.9	-65.2	-6.4	-11.5	11.0	41.8	-43.2	-53.4
Base money.....	38.6	-14.2	17.2	-33.5	-12.3	-5.5	9.7	30.3	-1.2	3.5
Notes and coins in circulation.....	8.2	3.6	3.4	9.5	-0.5	-0.1	0.1	5.1	11.3	8.7
Reserves of deposit money banks	30.4	-19.2	22.3	-46.7	-11.8	-5.5	9.5	37.6	-4.0	2.1
<i>Deposit money banks¹</i>										
Central Bank items	9.7	.	.	.	-5.5	6.0	-1.5	.	.	.
Short-term position, net.....	1.3	.	.	.	-7.4	13.5	0.5	.	.	.
Credit and listed securities ²	1,589.4	22.5	3.1	28.1	68.3	24.2	96.3	6.4	20.7	39.7
Credit ³	1,227.6	19.7	2.6	22.9	52.4	25.6	73.2	4.3	15.9	40.1
Treasury and government institutions	15.2	8.1	1.6	-15.7	1.0	-0.8	0.2	-6.2	-5.0	-9.5
Non-bank financial institutions.....	29.4	-45.2	.	.	5.9	-2.0	5.8	.	.	-9.8
Industries	767.1	15.5	2.1	25.0	31.1	13.6	33.9	4.5	20.7	37.9
Households	237.1	9.9	8.1	13.2	8.6	13.5	27.4	6.6	12.2	32.1
Foreign sector	163.7	.	63.1	118.2	5.2	0.4	2.8	120.6	27.2	116.9
Listed securities.....	190.4	23.9	-3.4	38.3	12.3	-1.2	5.1	11.3	20.7	20.2
Domestic credit and listed securities.....	1,388.1	17.4	0.9	22.6	57.9	23.1	90.6	3.5	19.1	32.9
Domestic credit.....	1,063.9	13.4	2.0	14.8	47.2	25.2	70.4	1.4	13.9	32.9
Deposits	568.7	15.1	15.5	22.6	-6.1	44.4	8.2	13.3	25.7	20.4
Bonds	845.6	48.6	1.7	116.0	20.5	85.3	15.4	30.9	75.8	70.5
Foreign liabilities for on-lending.....	232.1	-0.2	-0.4	-8.4	23.9	11.6	8.1	-8.3	-18.9	7.3
<i>Banking system¹</i>										
Foreign assets, net	225.0	-33.2	-8.3	-205.3	19.7	2.3	-13.6	-33.8	-138.2	435.8
Domestic credit and marketable securities	1,382.4	17.5	-1.0	22.3	50.6	28.1	93.9	2.5	21.8	34.1
Money supply, M1 ⁴	143.9	-2.3	23.8	30.8	-9.5	13.7	7.7	20.8	44.3	20.4
M2 (M1 + demand savings deposits)....	252.1	11.0	9.3	28.2	-9.2	19.9	0.0	10.3	30.5	22.2
M3 (M2 + time savings deposits).....	576.9	14.9	15.3	22.4	-6.6	44.4	8.3	13.1	25.5	20.2
M4 (M3 + securities issues).....	1,422.5	27.1	9.5	59.2	13.9	129.7	23.7	20.1	46.8	45.8

1. Since March 1998, all percentage changes have been calculated using figures including FBA. This applies to the following items: credit (and subcategories of credit), listed securities, bonds, foreign liabilities and M4. 2. Treasury bills, equities and leasing contracts also included. 3. Lending series have been adjusted retroactively following reclassification under the ISAT standard. Data on lending to foreign entities available since January 2001. 4. Sum of notes and coins in circulation and DMBs' demand deposits. Source: Central Bank of Iceland.

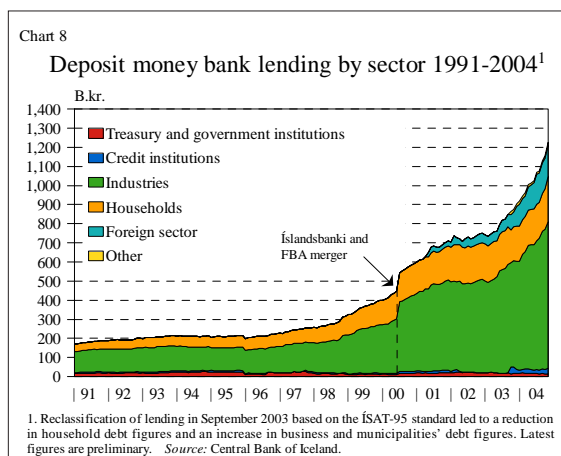
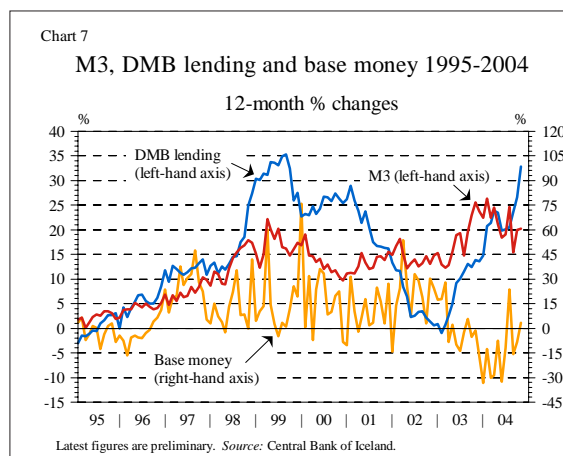


Table 6 The credit system¹

	In b.kr. June 2004	% change over year						3-mo. % change		
		1998	1999	2000	2001	2002	2003	Dec. '03	March '04	June '04
Assets										
Domestic lending and securities.....	2,439.4	15.1	17.3	17.3	19.2	3.2	11.0	1.9	6.1	4.5
Banking system ²	1,183.2	27.2	23.7	44.4	13.8	8.0	24.1	3.6	6.3	6.1
Miscellaneous credit undertakings....	620.9	13.2	17.4	-3.8	20.8	-2.0	8.0	2.7	6.0	6.3
Housing Financing Fund.....	482.9	7.2	13.9	12.0	18.1	11.5	14.1	3.3	4.0	4.2
Credit undertakings subject to minimum reserve requirements ³	94.3	.	.	-34.9	30.3	-41.4	-19.0	1.6	25.4	21.0
Other credit undertakings ⁴	43.7	-78.0	9.2	17.2	16.1	9.0	0.8	-1.5	-0.9	2.3
Pension funds.....	681.2	8.9	17.9	4.6	16.4	12.2	12.5	3.5	4.3	4.7
Insurance companies.....	68.4	9.6	10.1	24.1	12.2	6.3	14.8	12.1	5.8	0.6
Mutual and investment funds ⁵	221.1	123.5	24.1	-14.0	22.3	39.2	47.0	4.8	11.8	7.1
Foreign credit.....	1,348.2	19.3	24.0	39.6	30.0	-4.3	30.5	9.2	7.3	9.6
State lending funds.....	340.5	-3.7	2.2	0.0	31.9	-3.0	-1.8	-1.8	3.6	-1.2
Total of above.....	4,463.6	15.5	18.3	18.4	21.7	3.1	19.4	4.7	6.3	6.3
Less inter-institutional transactions.....	-2,024.2	16.0	19.9	20.4	25.8	3.0	32.0	8.5	6.5	8.6
Assets = liabilities.....	2,439.4	15.1	17.3	17.3	19.2	3.2	11.0	1.9	6.1	4.5
Liabilities										
Domestic liabilities.....	1,760.4	16.1	21.0	7.2	14.2	6.6	16.4	5.2	6.5	3.5
Notes and deposits.....	451.1	15.7	16.6	11.1	14.9	13.4	23.1	4.0	3.6	0.9
Securities.....	244.8	30.2	23.0	9.9	6.6	0.1	34.6	3.7	4.4	8.0
Insurance companies' indemnity fund	54.8	5.8	9.1	11.5	15.6	4.4	4.7	-2.9	12.4	-1.4
Pension funds.....	874.9	15.2	27.4	9.9	13.7	4.9	18.4	6.0	5.9	5.0
Capital of financial institutions.....	250.1	5.7	-1.9	14.3	26.0	19.4	19.7	11.3	4.8	7.7
Other items, net.....	-115.2	.	.	.	.	.	.	.	.	.
Foreign liabilities, net.....	679.0	12.6	6.6	50.3	30.6	-3.7	-0.9	-6.0	5.1	7.1
Credit by sector:⁶										
Central government.....	175.4	-0.9	-9.5	-8.4	25.4	1.7	0.7	-4.4	11.4	3.0
Municipalities ⁷	118.2	19.3	13.1	15.9	23.0	4.1	6.5	1.6	1.0	3.4
Industries ⁷	1,332.7	20.8	24.9	22.5	20.7	0.6	16.9	0.2	9.2	5.3
Households ⁷	813.2	14.6	18.0	17.6	15.5	7.0	15.3	6.0	1.2	3.6

1. Partly preliminary or estimated. 2. In May 2003, Glitnir leasing company merged into Íslandsbanki and was thereby reclassified to "Banking system". 3. Credit undertakings subject to minimum reserve requirements comprise: Frjálsi fjárfestingarbankinn hf., Framtak fjárfestingarbanki hf., Lýsing, SP-fjárföringun, Europay, Greiðslumiðlun hf., MP fjárfestingarbanki (since November 2003) and Straumur fjárfestingarbanki (since January 2004). 4. Other credit undertakings comprise: The Agricultural Loan Fund, the Agricultural Productivity Fund, the Municipal Loan Fund and the Regional Development Fund. 5. Since December 2003 investment funds are included. 6. Partly estimated. 7. Since September 2003, lending by sector has been reclassified according to the ÍSAT 95 standard. This produces a lower figure than otherwise for lending to households, and a higher figure for lending to municipalities and industries. Source: Central Bank of Iceland.

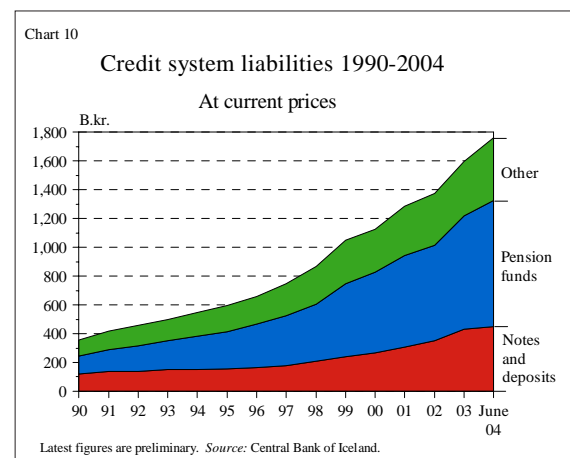
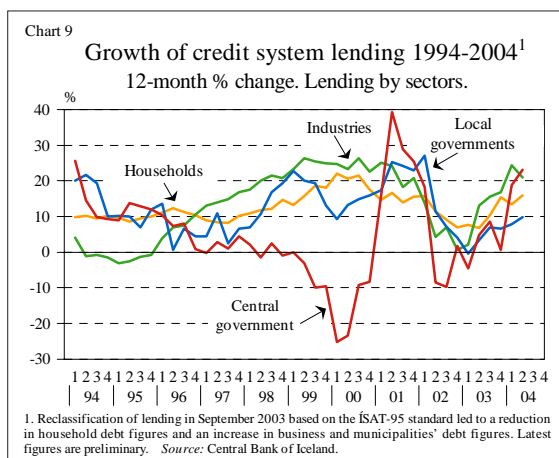


Table 7 Financial markets

At end of period	Outstanding in b.kr.			1-month % change			12-month % change		
	2002	2003	Sept. '04	July '04	Aug. '04	Sept. '04	July '04	Aug. '04	Sept. '04
Money market ¹	29.2	36.9	38.7	19.2	-5.6	-10.1	-1.3	5.8	-21.0
Securities market ²	759.8	1,187.6	1,531.3	1.8	2.3	6.7	74.9	76.6	58.6
thereof Treasury bonds.....	55.8	53.1	47.8	-0.4	-0.6	-2.7	-4.7	-6.2	-8.2
thereof housing bonds.....	259.2	307.7	103.2	-0.3	0.2	-69.9	20.9	19.0	-64.9
thereof HFF bonds.....	.	.	326.7	.	.	.	.	.	.
Market capitalisation of listed equities	529.3	658.8	1,142.3	4.8	13.5	12.3	71.2	75.4	91.9
Mutual funds' units (open-end).....	133.1	198.1	259.2	3.8	0.7	2.1	50.0	45.8	34.0

1. Bills issued by Treasury, commercial banks, savings banks and investment credit funds. 2. Government bonds, government notes, housing bonds, housing authority bonds, HFF bonds and listed bond issues of banks, savings banks, investment credit funds, leasing companies, firms, municipalities and non-residents. Open-end mutual funds' units not included. Source: Central Bank of Iceland

Table 8 Labour market

Changes in indices are in percent. Other changes indicate increase/decrease in jobs or permits	Averages			1-month change			12-month change		
	2002	2003	Oct. '04	Aug. '04	Sept. '04	Oct. '04	Oct. '02	Oct. '03	Oct. '04
Wage index (1990=100).....	195.0	205.9	218.1	0.2	0.2	0.3	5.9	5.5	5.3
Real wages (1990=100) ¹	127.5	131.8	133.2	0.2	-0.2	-0.5	2.9	3.2	1.6
Number of new work permits.....	3,637	3,299	353	-11	-28	81	-108	7	-38
Job vacancies, total.....	221	459	671	252	-281	-101	-351	208	285
thereof Greater Reykjavik Area.....	66	104	269	130	-102	-23	-247	-1	191
<i>Period averages</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>Aug. '04</i>	<i>Sept. '04</i>	<i>Oct. '04</i>	<i>Oct. '02</i>	<i>Oct. '03</i>	<i>Oct. '04</i>
Number of unemployed.....	2,009	3,631	4,893	4,452	3,891	3,880	3,525	4,059	3,880
Measured unemployment rate (% of labour force)	1.4	2.5	3.4	2.9	2.6	2.7	2.5	2.8	2.7
Seasonally adjusted unemployment rate.....	.	.	.	3.4	3.3	3.3	2.9	3.4	3.3
<i>Quarterly measurements</i>	<i>Averages</i>			<i>3-month % change</i>			<i>12-month % change</i>		
	<i>2002</i>	<i>2003</i>	<i>Q3 '04</i>	<i>Q1 '04</i>	<i>Q2 '04</i>	<i>Q3 '04</i>	<i>Q3 '02</i>	<i>Q3 '03</i>	<i>Q3 '04</i>
Wage index (1990 = 100).....	195.0	205.8	216.9	2.0	1.5	1.0	6.1	5.7	5.1
Wages in the private sector.....	178.6	188.5	199.1	1.1	2.2	1.5	4.9	5.6	5.4
Wages in the public sector and banks.....	221.9	234.5	246.4	3.5	0.4	0.4	8.0	5.6	4.8

1. Deflated by consumer prices. Sources: Statistics Iceland, Directorate of Labour, Central Bank of Iceland.

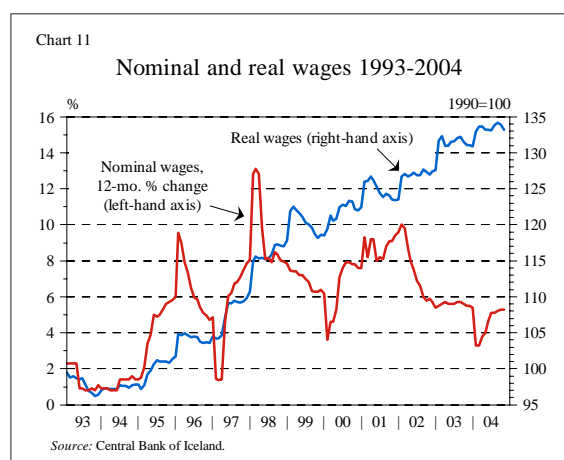


Table 9 National accounts – annual data (continued on next page)

<i>In b.kr.</i>	1998	1999	2000	2001	2002	Estimate 2003 ¹	Forecast ²		
							2004	2005	2006
Gross domestic product (GDP), current prices....	569.3	609.6	662.6	744.2	779.3	807.8	888.0	988.8	1,074.7
Current account balance, current prices.....	-39.5	-42.6	-67.1	-30.1	8.9	-32.8	-58.1	-102.8	-122.1
GDP at 1990 fixed prices	428.2	446.0	471.5	481.8	479.3	500.2	527.1	559.3	586.6
GNP at 1990 fixed prices	418.5	436.6	457.6	465.5	474.3	495.3	520.0	550.1	574.1
<i>Volume changes between years, percent</i>									
Private consumption	9.9	7.3	4.0	-3.8	-1.1	6.7	7.0	9.5	6.8
Public consumption	3.4	4.9	4.3	3.2	4.1	3.3	1.3	3.1	2.5
Gross fixed capital formation	32.9	-3.0	14.8	-7.6	-15.1	17.7	17.3	20.6	2.8
Industries	45.8	-5.1	14.9	-15.2	-22.7	26.0	29.3	29.3	2.3
Housing	1.3	0.3	15.2	17.8	5.2	13.3	13.0	8.3	5.8
Public works and buildings	23.4	2.7	14.0	-1.7	-12.2	-0.4	-18.4	-4.0	-
National expenditure	13.4	4.2	6.8	-4.2	-2.9	8.4	8.1	10.9	5.0
Exports of goods and services.....	2.1	4.0	5.0	7.7	3.6	0.3	6.5	5.7	8.9
Exports of goods	-2.6	7.1	-1.3	7.2	6.6	-1.2	7.3	5.7	10.9
Exports of services	13.8	-2.5	19.3	8.6	-1.9	3.3	5.2	5.7	5.0
Imports of goods and services.....	23.5	4.2	8.0	-9.0	-2.5	9.6	14.1	17.2	8.3
Imports of goods	24.3	3.2	2.8	-10.0	-3.4	7.3	13.9	19.6	7.9
Imports of services	21.2	6.9	21.5	-6.9	-0.8	14.5	14.3	12.8	9.3
Gross domestic product (GDP)	5.5	4.2	5.7	2.2	-0.5	4.1	5.4	6.1	4.9
Gross national product (GNP).....	5.6	4.2	4.7	2.3	0.4	4.4	5.0	5.8	4.4
Gross national income (GNI).....	7.8	4.0	3.7	1.9	2.1	2.7	3.5	4.8	4.3
Terms of trade (goods and services)	5.6	-0.8	-2.7	0.3	0.5	-4.2	0.9	1.3	-1.5
<i>Percent of GDP</i>									
Private consumption.....	57.3	58.9	58.8	54.9	53.8	55.7	55.9	56.9	57.9
Gross fixed capital formation.....	24.6	22.6	24.1	22.2	18.7	21.3	24.0	27.3	27.0
Current account balance.....	-6.9	-7.0	-10.1	-4.0	1.1	-4.1	-6.5	-10.4	-11.4
Gross national saving.....	17.8	15.6	14.3	17.9	19.8	16.7	18.2	17.1	15.7

1. Based on Statistics Iceland's quarterly (rather than annual) figures for inventory changes in 2003. 2. Central Bank of Iceland forecast in December 2004.
Sources: Statistics Iceland and Central Bank of Iceland.

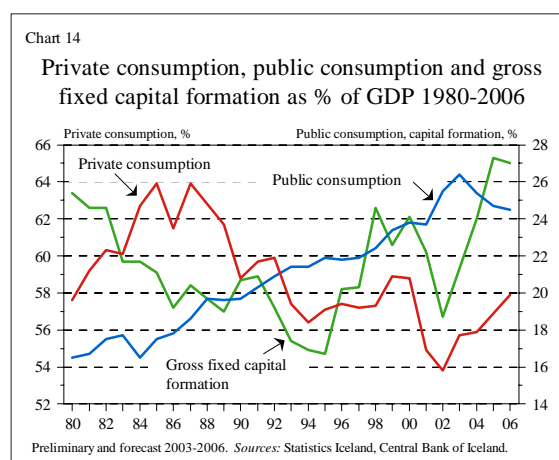
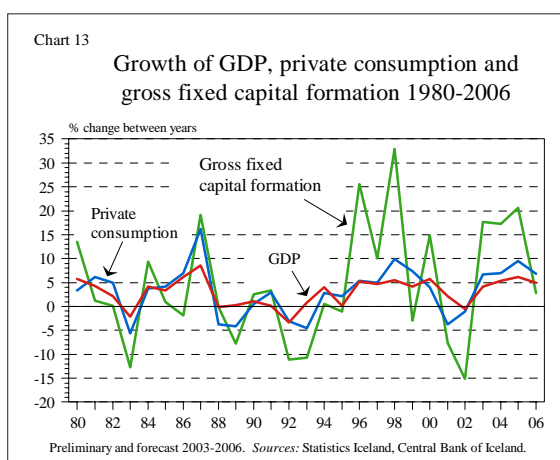


Table 9 (continued) National accounts – quarterly data

<i>In b.kr.</i>	<i>Private consumption</i>	<i>Public consumption</i>	<i>Gross fixed cap. format.</i>	<i>Changes in stocks</i>	<i>National expenditure</i>	<i>Exports</i>	<i>Imports</i>	<i>GDP</i>
2001: Q2	103,401	43,990	38,085	53	185,529	71,684	-74,897	182,316
2001: Q3	101,103	44,372	44,955	622	191,051	84,146	-84,131	191,066
2001: Q4	107,597	47,148	39,884	-20	194,610	82,602	-73,478	203,734
2002: Q1	99,009	47,809	35,501	-339	181,980	76,495	-71,239	187,236
2002: Q2	106,479	49,355	36,124	-896	191,061	79,239	-75,333	194,967
2002: Q3	103,758	49,408	37,145	825	191,136	80,789	-75,342	196,583
2002: Q4	109,902	52,297	36,797	229	199,224	72,279	-70,995	200,508
2003: Q1	105,489	51,505	33,026	-858	189,162	71,143	-67,337	192,968
2003: Q2	114,190	53,357	42,536	-369	209,715	67,615	-78,305	199,025
2003: Q3	111,147	52,906	48,001	27	212,082	80,177	-87,375	204,884
2003: Q4	119,171	55,859	48,867	-3,396	220,501	68,876	-78,503	210,874
2004: Q1	114,920	54,342	38,968	3,274	211,503	72,574	-77,433	206,644
2004: Q2	125,004	56,605	53,408	-1,677	233,340	76,465	-94,520	215,285
<i>Volume change from same quarter in prev. year (%)</i>								
2001: Q2	-4.3	5.0	-23.2	-0.3	-7.7	2.7	-16.4	0.1
2001: Q3	-5.2	-1.5	-5.2	0.8	-3.7	1.2	-8.1	0.2
2001: Q4	-6.9	2.5	-21.1	-2.2	-10.4	13.7	-19.8	1.3
2002: Q1	-5.5	3.1	-23.5	1.7	-6.9	3.1	-14.0	0.0
2002: Q2	-1.5	2.9	-10.6	-0.7	-3.2	11.8	2.4	0.1
2002: Q3	0.8	4.9	-17.5	0.3	-2.5	2.4	-3.2	-0.2
2002: Q4	1.9	5.8	-6.6	0.2	1.2	-2.1	6.7	-1.8
2003: Q1	6.5	3.2	-7.6	0.0	2.9	5.1	0.4	4.7
2003: Q2	7.3	3.9	20.5	0.6	9.8	-5.1	10.5	3.4
2003: Q3	6.3	3.0	26.3	-0.7	9.0	2.5	16.0	3.5
2003: Q4	6.5	3.1	31.0	-1.0	9.3	-1.2	10.8	4.9
2004: Q1	7.9	1.9	17.1	0.2	8.5	3.8	14.3	4.6
2004: Q2	6.5	2.2	21.0	-0.1	8.7	7.4	12.9	6.4

Sources: Statistics Iceland and Central Bank of Iceland.

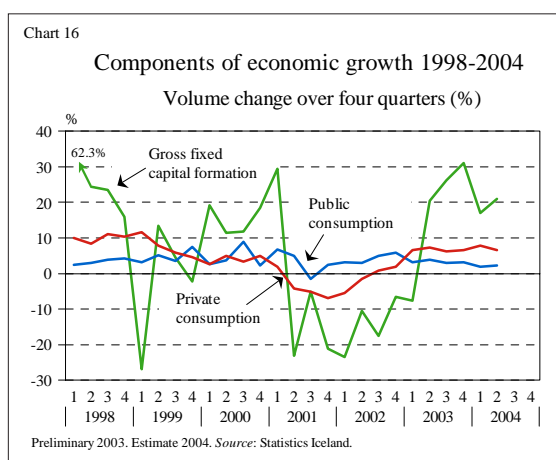
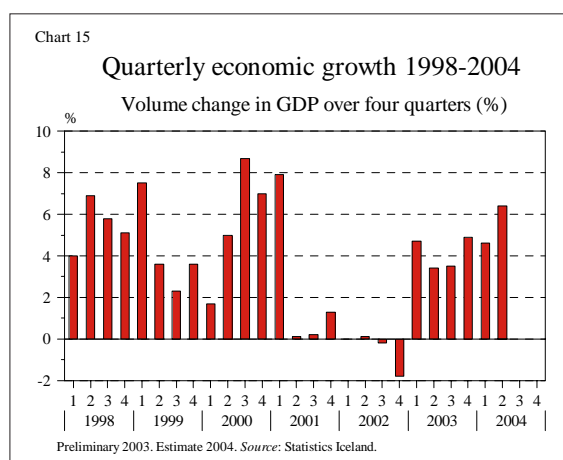


Table 10 Current account balance¹ (continued on next page)

	<i>In b.kr.</i>					<i>% change from previous year²</i>		
	2000	2001	2002	2003	Jan.-Oct. '04	3-mo.	6-mo.	12-mo.
<i>Trade in goods and services</i>								
Trade balance	-38.0	-6.7	13.1	-16.9	-31.8	.	.	.
Merchandise exports fob	149.3	196.4	204.3	182.6	165.3	14.0	9.3	6.7
Excluding ships and aircraft	146.1	193.1	202.0	181.2	164.9	14.4	9.6	7.6
Marine products	94.5	121.8	128.6	113.7	99.6	6.1	1.5	3.8
Aluminium and ferro-silicon.....	31.6	44.4	43.5	40.3	36.4	15.0	15.5	5.1
Other industrial products.....	15.1	19.0	14.5	21.6	22.6	50.4	31.4	24.5
Merchandise imports fob	187.3	203.1	191.2	199.5	197.1	18.3	18.3	17.7
Excluding ships and aircraft	177.5	190.1	180.0	195.7	191.2	17.2	14.5	17.8
Consumption goods.....	59.3	60.8	59.5	66.3	62.2	11.7	12.5	15.5
Investment goods	44.3	44.4	38.6	46.1	43.8	13.5	10.4	20.6
<i>Services and income balance</i>								
	2000	2001	2002	2003	2004/Q2	3-mo.	6-mo.	12-mo.
Services balance.....	-9.5	1.7	1.8	-7.8	-4.5	.	.	.
Services exports	82.4	106.5	104.5	105.2	28.5	14.8	8.1	7.8
Transportation	40.8	50.9	51.7	51.3	16.5	30.2	25.6	16.8
Travel	18.0	22.9	22.8	24.5	6.0	8.1	10.6	12.8
Other receipts	23.6	32.7	30.0	29.4	6.0	-9.2	-20.5	-10.9
Services imports	-91.9	-104.8	-102.7	-113.0	-33.0	16.0	13.5	15.7
Transportation	-32.7	-37.1	-39.3	-40.0	-12.2	31.4	23.6	16.3
Travel	-37.1	-36.4	-33.4	-39.8	-12.5	24.1	26.1	26.7
Other expenditure.....	-22.1	-31.3	-30.0	-33.2	-8.2	-9.1	-9.9	2.4
Balance on income	-19.4	-24.9	-8.1	-8.0	1.7	.	.	.
Receipts	11.6	16.9	27.9	28.8	12.5	97.5	39.1	7.0
Compensation of employees.....	5.5	5.8	5.4	6.2	1.2	-18.8	-8.6	2.5
Interest payments	3.5	3.4	4.9	4.4	1.8	68.0	69.9	26.0
Dividends and reinvested earnings ³ ..	2.6	7.8	17.6	18.2	9.4	153.2	49.8	4.1
Expenditures.....	-31.0	-41.9	-36.0	-36.7	-10.7	8.9	13.3	9.6
Compensation of employees.....	-0.8	-0.5	-0.7	-0.5	-0.2	15.5	41.8	13.9
Interest payments	-28.5	-41.1	-34.2	-31.7	-9.1	9.2	4.4	0.6
Dividends and reinvested earnings ³ ..	-1.6	-0.3	-1.1	-4.6	-1.5	6.4	69.1	101.8
Current transfer, net.....	-0.8	-1.0	1.2	-1.2	-0.3	18.5	-5.0	-211.8
Current account balance.....	-67.1	-30.1	8.9	-32.8	-16.7	.	.	.

Chart 17

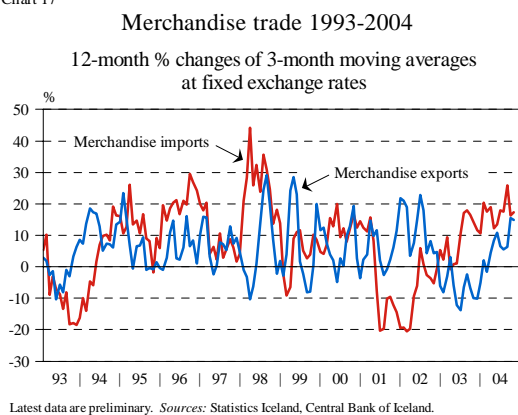


Chart 18

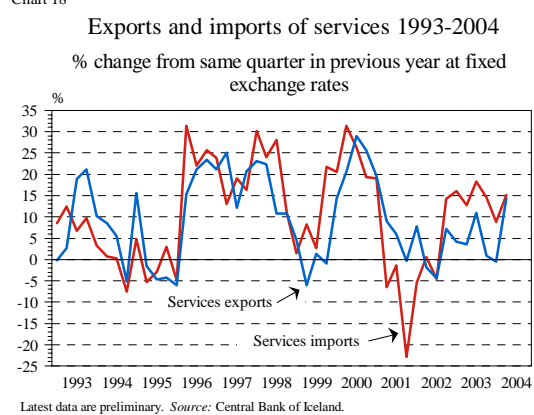


Table 10 (continued) Current account balance¹

	<i>In b.kr.</i>					<i>Change from prev. year (in b.kr.)²</i>		
	2000	2001	2002	2003	2004/Q2	3-mo.	6-mo.	12-mo.
<i>Capital and financial account</i>	71.9	18.6	2.9	28.4	15.6	.	.	.
Capital transfer, net.....	-0.2	0.4	-0.1	-0.4	-0.3	-0.2	-0.3	-0.5
Financial account ⁴	72.2	18.3	3.1	28.8	15.9	-1.2	7.8	29.6
Financial account excl. reserves.....	66.4	13.1	17.3	55.6	-	-30.4	-37.8	-15.2
Direct investment, net.....	-17.5	-16.4	-17.8	-6.9	-20.9	-9.5	-27.6	-15.5
Abroad.....	-31.0	-33.7	-29.6	-26.8	-21.6	-18.0	-34.7	-32.2
In Iceland.....	13.4	17.3	11.8	19.9	0.7	8.5	7.1	16.7
Portfolio investment, net.....	39.4	60.8	22.2	236.0	67.3	-6.1	79.0	234.3
Assets.....	-50.4	-5.6	-30.0	-45.3	-8.8	-2.4	-19.5	-29.0
Equities.....	-49.9	-5.8	-25.7	-40.6	-7.4	-2.4	-19.3	-30.2
Debt securities.....	-0.4	0.2	-4.3	-4.7	-1.4	0.1	-0.2	1.2
Liabilities.....	89.8	66.5	52.2	281.3	76.1	-3.7	98.4	263.3
Equities.....	-3.4	4.3	1.5	-2.6	-1.0	0.9	2.8	0.7
Debt securities.....	93.1	62.2	50.7	283.9	77.0	-4.6	95.6	262.5
Other investment, net ⁴	44.6	-30.9	4.4	-176.9	-27.6	17.3	-33.4	-158.5
Assets.....	-7.1	-47.1	-30.4	-148.7	-70.9	-28.4	-45.6	-140.1
Liabilities.....	51.7	16.2	34.8	-28.1	43.2	45.6	12.2	-18.3
Reserve assets.....	5.8	4.8	-5.7	-23.4	-2.9	-2.8	-10.1	-30.7
Net errors and omissions.....	-4.8	11.5	-11.9	4.4	1.1	.	.	.
<i>Memorandum items:</i>								
Long-term borrowing, net.....	143.0	36.3	45.1	78.9	45.1	9.7	50.1	73.9
Assets.....	-0.5	-42.1	-40.4	-176.9	-75.2	-31.3	-56.0	-171.8
Monetary authorities.....	7.0	4.8	-5.7	-23.3	-3.0	-2.9	-10.2	-30.8
General government.....	-	-	-	-	-	-	-	-
Deposit money banks.....	-4.1	-18.5	-33.3	-155.7	-69.3	-30.7	-41.0	-143.6
Other sectors.....	-3.5	-28.4	-1.4	2.1	-2.9	2.4	-4.8	2.6
Liabilities.....	143.5	78.4	85.4	255.8	120.3	41.0	106.2	245.7
Monetary authorities.....	9.4	-5.8	4.8	-15.9	-0.0	6.0	11.8	5.7
General government.....	16.2	42.2	17.5	-4.8	-7.2	-7.8	2.9	-3.3
Deposit money banks.....	73.9	12.9	54.2	264.1	121.1	46.0	96.1	242.2
Other sectors.....	44.0	29.1	8.9	12.4	6.4	-3.2	-4.6	1.1

1. Latest figures are preliminary. 2. At constant exchange rates, based on the latest period indicated. 3. Dividend payments and reinvestment of earnings on direct investment. 4. Positive value represents inflow of capital due to foreign borrowing or decrease in assets. Negative value accounts for outflow of capital, debt repayments or increase in assets. Source: Central Bank of Iceland.

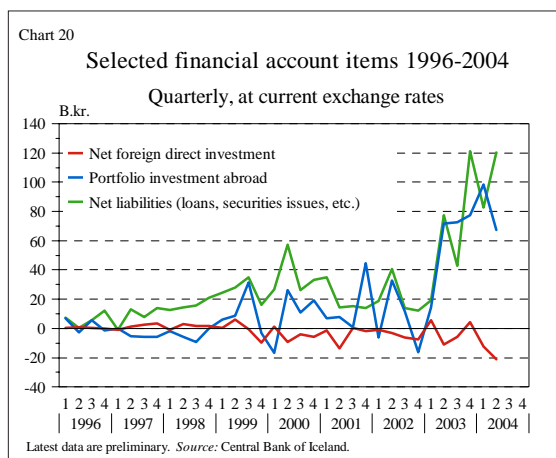
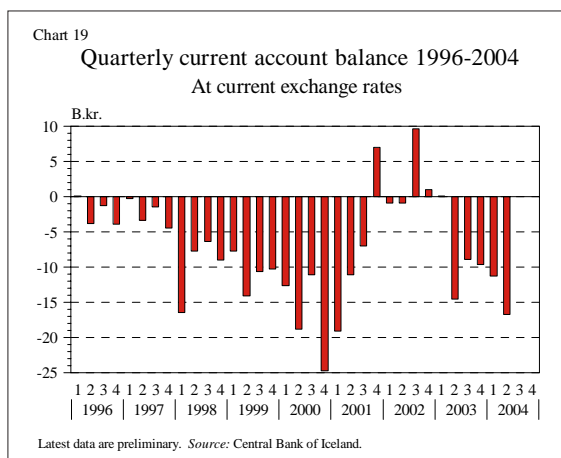


Table 11 International investment position

	Position at end of period, in b.kr.									
	1999	2000	2001	2002	2003	Sept. '03	Dec. '03	March '04	June '04	
International investment position	-302.3	-448.7	-587.5	-570.2	-550.1	-578.8	-550.1	-566.2	-596.6	
Total assets.....	244.1	315.8	421.5	395.4	676.8	537.4	676.8	747.2	841.7	
Direct investment abroad	33.0	56.2	86.8	87.5	118.7	108.3	118.7	127.2	146.7	
Equity capital	16.6	41.0	66.8	67.6	107.3	94.6	107.3	106.4	122.9	
Other capital	16.4	15.2	19.9	19.9	11.5	13.7	11.5	20.8	23.8	
Portfolio assets	138.8	186.3	202.9	159.7	241.7	210.2	241.7	269.0	281.8	
Equity capital	125.4	179.7	188.4	149.3	226.1	195.6	226.1	252.6	263.9	
Debt securities.....	13.4	6.6	14.6	10.4	15.5	14.6	15.5	16.3	17.9	
Other investment assets.....	36.6	39.1	95.2	111.1	258.3	172.6	258.3	284.3	344.7	
Reserves.....	35.8	34.2	36.6	37.2	58.1	46.4	58.1	66.7	68.5	
Total liabilities	546.4	764.5	1,009.0	965.7	1,226.9	1,116.1	1,226.9	1,313.5	1,438.3	
Direct investment in Iceland	34.9	41.5	70.8	63.3	74.9	61.8	74.9	76.5	81.7	
Equity capital	25.3	33.1	63.4	55.9	54.9	55.7	54.9	56.2	61.0	
Other capital.....	9.6	8.5	7.4	7.4	20.1	6.1	20.1	20.3	20.6	
Portfolio liabilities.....	227.4	346.7	468.0	468.3	754.7	664.8	754.7	879.1	956.9	
Equity capital	6.0	1.2	5.6	7.9	5.9	5.0	5.9	7.0	8.1	
Debt securities.....	221.4	345.5	462.4	460.4	748.8	659.8	748.8	872.1	948.8	
Other investment liabilities	284.2	376.2	470.2	434.1	397.2	389.5	397.2	357.8	399.7	
Long-term debt.....	229.2	289.0	377.0	296.2	251.5	269.7	251.5	234.5	248.4	
Short-term debt.....	55.0	87.2	93.2	137.8	145.7	119.8	145.7	123.3	151.3	
<i>Memorandum items:</i>										
Equity capital, net.....	117.6	193.1	198.7	165.5	264.0	237.0	264.0	296.3	320.8	
Net external debt position.....	-419.9	-641.8	-786.2	-735.8	-814.1	-815.7	-814.1	-862.6	-917.4	
Monetary authorities.....	32.2	18.6	21.7	20.8	58.1	46.2	58.1	66.5	68.3	
General government	-138.2	-167.4	-239.6	-226.9	-218.6	-221.9	-218.6	-225.1	-217.1	
Deposit money banks	-145.2	-329.5	-377.4	-368.0	-483.0	-476.6	-483.0	-541.3	-602.3	
Other sectors.....	-168.6	-163.4	-191.0	-161.7	-170.6	-163.5	-170.6	-162.7	-166.3	
<i>Percent of gross domestic product¹</i>										
International investment position	-49.4	-63.8	-75.7	-78.9	-69.3	-70.9	-69.3	-65.5	-69.4	
Net external debt ²	68.6	91.2	101.2	101.8	102.6	100.0	102.6	99.8	106.6	
External debt position ²	82.5	102.5	120.1	123.8	144.5	128.6	144.5	142.3	156.8	
Long-term debt.....	67.1	83.6	97.4	94.7	109.7	98.0	109.7	112.8	122.0	
Short-term debt.....	15.4	18.9	22.7	29.1	34.8	30.6	34.8	29.5	34.8	

1. Foreign debt at year-end at annual average exchange rates (based on SDR). Quarterly ratios as percent of estimated annual GDP. 2. Direct investment capital and portfolio equities excluded. Source: Central Bank of Iceland.

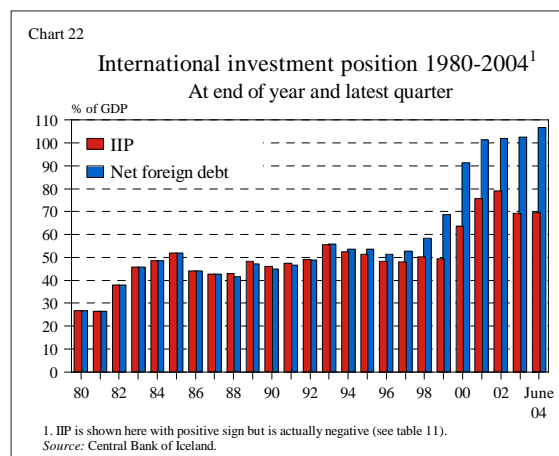
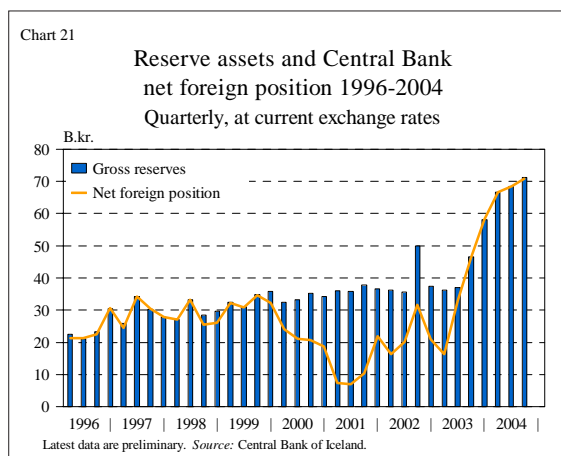


Table 12 Summary of Treasury finances¹

<i>In b.kr.</i>	<i>Accruals basis</i>			<i>Jan.-Dec.</i>		<i>% ch. from prev. year</i>	<i>June-Sept.</i>		<i>% ch. from prev. year</i>
	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2002</i>	<i>2003</i>		<i>2003</i>	<i>2004</i>	
Revenues	237.4	259.2	274.6	233.8	259.8	11.1	78.6	92.0	17.1
Expenditures	228.7	267.3	280.7	246.8	268.7	8.9	89.5	101.3	13.2
Financial balance.....	8.6	-8.1	-6.1	-13.0	-8.9	.	-10.9	-9.3	.
Miscell. short-term accounts	-6.1	-14.4	8.9	1.7	9.8	.	-0.9	0.7	.
Net lending	-12.6	11.3	5.7	10.6	6.5	.	3.5	6.9	.
Equity transactions	-11.5	0.7	4.8	-3.4	4.5	.	-0.1	0.0	.
Balance before financing.....	-21.5	-10.5	13.3	-4.1	11.8	.	-8.5	-1.7	.
Pension funds	-18.8	-4.2	-9.9	-9.0	-7.5	.	-2.5	-2.5	.
Net borrowing	41.6	13.5	-2.9	10.6	-6.0	.	13.4	-2.6	.
Short-term domestic	6.0	0.0	8.5	0.0	8.5	.	6.0	-2.6	.
Long-term domestic	1.8	3.0	4.6	0.1	1.6	.	7.6	0.4	.
From abroad	33.9	10.5	-16.0	10.5	-16.0	.	-0.2	-0.5	.
Cash balance.....	1.4	-1.2	0.5	-2.5	-1.6	.	2.4	-6.8	.
<i>Revenues and expenditures</i>									
Total revenues.....	237.4	259.2	274.6	233.8	259.8	11.1	78.6	92.0	17.1
Personal income taxes, gross.....	52.5	55.1	58.0	52.6	55.8	6.1	16.1	18.4	14.4
Other income and property taxes ...	27.0	27.5	30.8	25.5	28.1	10.4	6.2	9.6	53.4
Value-added tax	72.1	76.3	80.9	73.6	80.3	9.0	27.8	31.0	11.4
Taxes on commodities & imports...	15.9	15.4	17.6	15.6	17.5	12.4	6.5	7.7	18.6
Payroll taxes	21.9	23.4	26.3	22.6	25.2	11.5	9.1	9.5	4.4
Other taxes.....	22.3	22.9	25.2	22.1	23.7	6.8	8.7	9.6	10.3
Interest, dividends and rent	16.6	18.7	14.4	11.3	11.0	-3.2	1.7	3.7	116.3
Profits from asset sales.....	1.1	11.7	12.0	4.4	11.6	164.9	0.4	0.0	-89.2
Other revenues.....	7.9	8.3	9.3	6.0	6.7	11.1	2.0	2.5	21.1
Total expenditures ²	228.7	267.3	280.7	246.8	268.7	8.9	89.5	101.3	13.2
Expenditure on goods and services	91.7	116.8	110.1	106.7	120.6	13.1	39.1	48.7	24.6
Current transfers	96.1	112.6	129.5	101.7	108.7	6.9	38.6	41.8	8.3
Interest payments.....	17.9	16.0	15.3	17.8	14.9	-16.0	2.3	3.1	33.7
Maintenance.....	5.7	6.1	6.3	4.9	5.0	2.1	1.6	2.0	21.2
Capital expenditures	17.3	15.8	19.6	15.8	19.4	23.4	7.9	5.7	-27.4

1. First three columns on accruals basis as in the Treasury accounts but latest figures on cash basis. 2. The most recent expenditure figures are not comparable with earlier data due to changes in the presentation of the accounts.

Source: State Accounting Office.

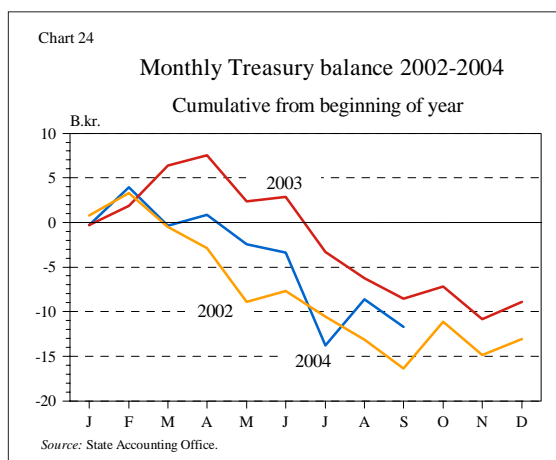
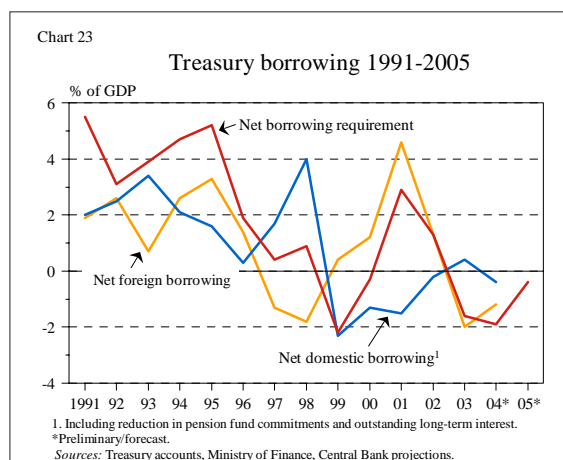


Table 13 Public sector finances¹

In b.kr.

	1996	1997	1998	1999	2000	2001	2002	2003	<i>Estimate</i>	
									2004	2005
<i>General government</i>										
Revenues	197.2	213.2	242.9	278.6	301.1	328.5	352.0	373.2	407.0	447
Expenditures	205.0	213.3	240.0	264.0	284.6	327.2	355.4	386.5	399.8	423
Financial balance.....	-7.7	-0.1	2.8	14.6	16.6	1.3	-3.4	-13.3	7.1	25
Net debt	191.5	196.5	180.7	147.0	158.7	199.3	182.2	191.0	185.9	163
Gross debt.....	274.4	279.4	280.5	271.5	278.0	354.6	340.7	339.0	326.4	310
<i>Central government</i>										
Revenues	155.7	162.4	183.9	213.8	228.7	245.4	257.3	272.3	301.0	332
Expenditures	163.0	159.6	177.8	198.2	211.7	240.9	262.0	287.0	295.0	310
Financial balance.....	-7.3	2.7	6.2	15.6	16.9	4.6	-4.7	-14.6	6.0	22
Net debt	168.2	172.3	151.3	118.8	127.4	168.8	148.4	158.0	153.0	131
Gross debt.....	239.2	241.6	237.8	226.0	228.5	298.3	281.1	277.0	262.9	246
<i>Local government</i>										
Revenues	46.9	55.5	62.9	69.9	77.7	89.5	101.2	103.6	109.0	119
Expenditures	47.4	58.5	67.2	72.8	80.3	94.8	101.4	103.4	108.8	117
Financial balance.....	-0.4	-3.0	-4.3	-2.9	-2.6	-5.3	-0.2	0.2	0.2	1
Net debt	24.2	25.0	30.1	28.7	31.7	30.7	32.8	33.0	32.8	32
Gross debt.....	35.7	38.4	43.3	46.1	49.8	56.6	60.2	62.0	63.4	64
<i>General government, % of GDP</i>										
Revenues	40.6	41.5	42.7	45.7	45.4	44.1	45.2	46.0	45.8	45.2
Expenditures	42.2	41.5	42.2	43.3	42.9	44.0	45.6	47.7	45.0	42.7
Financial balance.....	-1.6	0.0	0.5	2.4	2.5	0.2	-0.4	-1.6	0.8	2.5
Net debt	39.0	37.8	31.6	23.5	23.5	25.8	23.2	23.3	20.6	16.3
Gross debt.....	55.9	53.8	49.0	43.4	41.1	45.8	43.4	41.3	36.1	30.9

1. The public sector includes the central and local governments and the social security system. Revenues and expenditures are as itemised by Statistics Iceland, according to the UN system of national accounts. The main differences from the Treasury accounts are that a) in each year only pension liability increases due to activities during that year are shown; b) instead of showing depreciation of tax claims as expenditures, a precautionary deduction is made on the revenue side; c) profits from the sale of government assets are not shown as revenues. Instead, they are shown as a part of lending and borrowing transactions. Figures for 2004 and 2005 are Central Bank projections of estimates in the budget and medium-term fiscal programme, based on the Central Bank macroeconomic forecast.

Sources: Ministry of Finance, Statistics Iceland, Central Bank of Iceland.

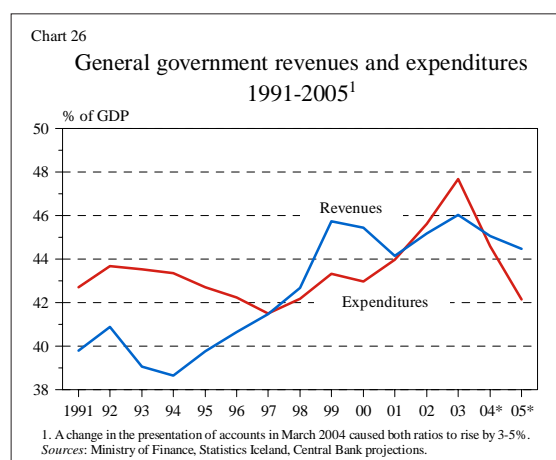
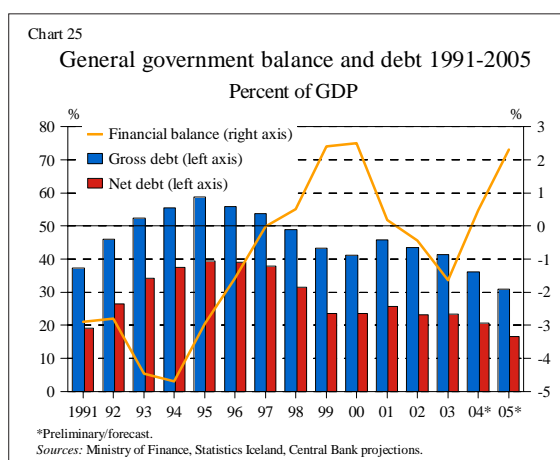


Table 14 Turnover¹

<i>M.kr.</i>	<i>January-August</i>			<i>% ch. on prev. year, Jan.-August²</i>		
	2002	2003	2004	2002	2003	2004
Industries, total	212,440	203,079	221,061	-0.2	-6.2	5.8
Industries, excluding fish processing	130,049	133,420	143,800	-3.2	0.7	4.8
Industries, excl. fish proc. and power-intensive ...	101,554	108,024	116,831	-3.7	4.4	5.1
Retail trade	117,104	119,611	128,436	-1.1	2.5	6.3
Wholesale trade	183,557	197,077	230,498	-5.0	6.8	14.8
Wholesale trade, excluding fuels	155,418	168,219	198,409	-4.6	8.7	16.7
Construction	47,098	55,527	68,743	-20.0	15.7	20.3
Total	839,753	856,477	972,270	-3.1	0.1	10.3
Total, excluding fuels	811,614	827,619	940,182	-3.7	2.4	12.4

1. Based on VAT reports. Figures are not comparable with the period before 1998 due to new methodology. 2. Based on price-adjusted turnover, deflated by the consumer price index. *Sources:* Statistics Iceland, Central Bank of Iceland.

Table 15 Real effective exchange rate of the Icelandic króna¹

	<i>Annual averages</i>					<i>Q3</i>	<i>% change on prev. year</i>		
	1999	2000	2001	2002	2003	2004	Q1'04	Q2'04	Q3'04
Real effective exchange rate (1980=100)									
based on relative consumer prices (CPI)	93.6	96.2	83.6	88.4	93.8	97.0	2.3	-0.2	5.4
based on relative unit labour costs (ULC)	90.5	91.7	80.5	85.1	88.9	89.3	-0.6	-3.7	4.1
<i>% change on previous year</i>	1996	1997	1998	1999	2000	2001	2002	<i>Prelim.</i> 2003	<i>Forecast</i> 2004
Nominal effective exchange rate	0.0	1.2	1.5	0.0	0.2	-16.6	2.5	6.2	1.4
Foreign consumer prices	2.0	2.1	1.6	1.6	2.3	2.2	1.8	2.1	1.3
Domestic consumer prices	2.3	1.8	1.7	3.4	5.1	6.6	4.8	2.1	3.2
Real exchange rate based on relative CPI	0.3	0.9	1.6	1.8	2.9	-13.1	5.7	6.1	3.3
Foreign productivity	1.5	1.5	1.2	1.2	1.9	1.2	1.0	1.1	1.5
Domestic productivity	2.1	2.0	1.8	1.4	3.4	0.6	0.0	5.5	3.4
Foreign wages	3.5	3.2	3.0	3.3	3.2	3.3	3.1	3.0	2.7
Domestic wages	5.2	5.8	7.1	5.5	5.7	8.0	5.8	5.5	4.5
Real exchange rate based on relative ULC	1.1	3.3	5.3	1.7	1.2	-12.2	5.8	4.4	1.1

1. Latest values are preliminary. *Source:* Central Bank of Iceland.

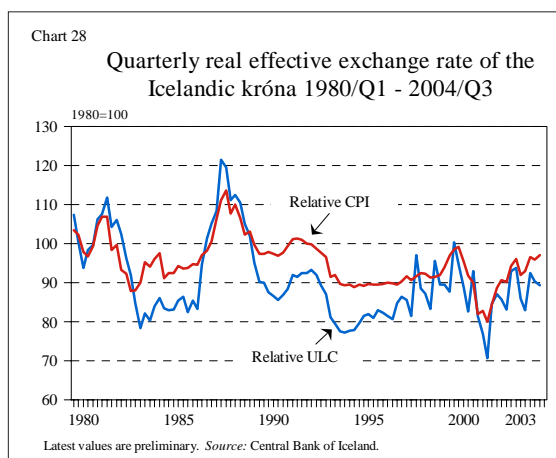
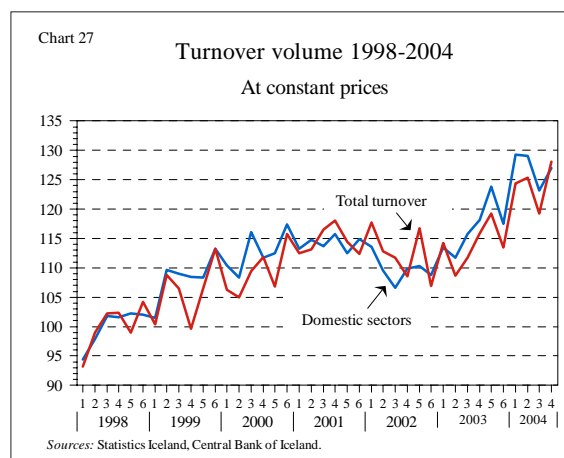


Table 16 Real estate market and asset prices

<i>Real estate market</i> ¹	2001	2002	2003	<i>1-mo. % change</i>			<i>12-mo. % change</i>		
				Oct. '04	Sept. '04	Oct. '04	Oct. '02	Oct. '03	Oct. '04
Residential housing price index ²	151.8	158.9	177.7	209.3	1.6	1.1	6.9	13.3	12.5
Apartment housing price index ²	156.0	161.1	180.7	208.5	1.3	1.0	6.8	13.2	11.0
New housing loans at market prices (b.kr.) ³	28.6	32.2	49.6	...	...	...	6.4	55.8	...
Number of Housing Fin. Fund loan applications ⁴	2,846	2,535	3,271	...	...	...	-18.0	57.6	...
<i>Fish quota prices (period averages. kr./kilo)</i>									
Price of long-term cod quota (kr./kilo)	709	930	1,223	1,130	-0.5	5.1	38.9	25.0	-9.6
Price of short-term cod quota (kr./kilo).....	117	156	132	120	-2.5	2.6	-	-20.7	4.3
<i>Equity market</i>									
<i>Equity prices, Dec. 31, 1997 = 1,000</i>	<i>At end of year</i>				<i>Nov. 26, 2004</i>	<i>% change to Nov. 26, 2004</i>			
	2000	2001	2002	2003		1-mo.	3-mo.	6-mo.	12-mo.
ICEX-15	1,305.9	1,159.0	1,352.0	2,114.3	3,529.2	-0.6	3.9	33.0	76.3
ICEX-MAIN (The Main List index).....	1,303.3	1,180.8	1,436.2	2,075.2	3,318.1	-1.5	4.0	29.6	68.0
<i>ICEX industry indices Dec. 31, 1997 = 100</i>									
Fisheries	74.5	86.7	107.3	100.0	122.9	0.7	9.6	13.9	22.3
Finance and insurance.....	163.4	157.9	164.3	252.4	492.6	0.5	7.3	43.8	97.0
Transport	117.6	80.5	118.8	139.4	239.5	-6.9	0.6	28.5	80.2
Industry and manufacturing.....	156.3	120.3	142.8	172.8	270.6	-0.3	2.8	26.3	55.6

1. Changes are based on 3-month moving averages. 2. Greater Reykjavik Area (GRA). January 1994=100. 3. Percentage changes are price-adjusted using the price index for residential housing in the GRA. 4. Housing Financing Fund applications for new and renovated housing.

Sources: The Land Registry of Iceland, Federation of Icelandic Fishing Vessel Owners, Housing Financing Fund, The Icelandic Quota Exchange, Iceland Stock Exchange (ICEX), Central Bank of Iceland.

Table 17 Households and firms: assets and debt

<i>B.kr. unless otherwise stated</i>	1996	1997	1998	1999	2000	2001	<i>Preliminary</i>		<i>% change 2002-2003</i>
							2002	2003	
Household assets in resident. housing and cars ¹	648.8	676.0	724.1	842.6	953.2	1,043.9	1,108.3	1,235.8	11.5
Assets in pension funds.....	302.0	345.6	398.2	507.3	557.3	640.1	664.6	786.0	18.3
Household debt with the credit system ²	350.7	386.2	442.6	510.6	613.8	710.4	758.6	776.0	2.3
Household debt as % of disposable income ²	133.4	134.7	146.1	157.3	165.4	176.8	182.4	178.5	.
Firms' debt with the credit system ²	359.2	420.7	509.4	668.8	804.4	962.3	973.1	1,158.7	19.1
Debt of firms in fisheries sector.....	116.1	123.5	139.7	160.3	165.2	195.5	191.9	185.5	-3.3

1. National Economic Institute national wealth estimates. 2. Due to reclassification of lending within the credit system, household debt is 50.3 b.kr lower than would otherwise have been the case at the end of 2003 and corporate debt 27.9 b.kr. lower, compared with the former classification. Year-on-year changes are based on the former classification. Sources: National Economic Institute and Central Bank of Iceland.

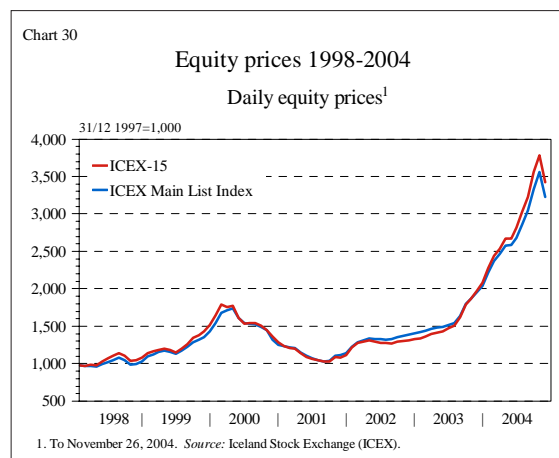
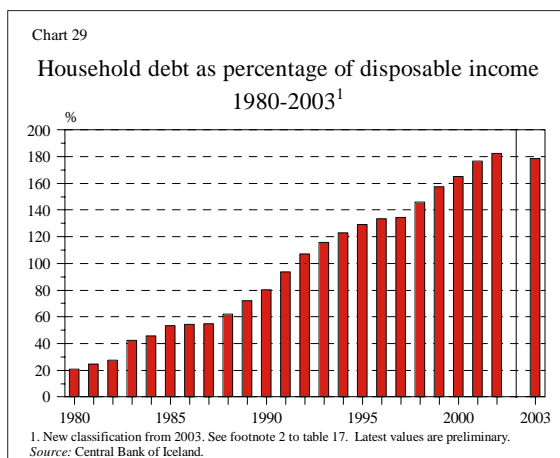


Table 18 Icelandic firms' financial accounts

<i>Accounts of publicly listed firms¹</i>	<i>Jan.-Dec.</i>		<i>% of turnover</i>		<i>Jan.-Sept.</i>		<i>Change</i>	<i>% of turnover</i>	
	<i>2002</i>	<i>2003</i>	<i>2002</i>	<i>2003</i>	<i>2003</i>	<i>2004</i>		<i>'03-'04</i>	<i>2003</i>	2004
<i>All amounts in b.kr</i>									
Profit before financial exp. & depreciation.....	33.4	34.8	11.6	10.9	23.8	32.3	8.5	10.6	12.3
Fisheries.....	10.8	8.4	23.6	21.1	4.8	5.2	0.4	18.2	21.7
Transport.....	2.6	3.2	10.6	10.8	1.0	1.7	0.7	9.7	5.9
IT industry.....	8.1	9.8	22.7	23.7	8.0	8.8	0.8	20.1	20.1
Industry and manufacturing.....	8.7	9.9	13.4	11.2	7.6	12.6	5.0	15.1	18.8
Profit after taxes.....	16.7	16.1	6.5	5.1	8.9	11.8	2.9	4.3	4.7
Fisheries.....	8.7	3.5	19.0	8.8	2.2	2.1	-0.1	10.0	7.4
Transport.....	2.3	4.4	9.6	14.6	0.5	0.6	0.1	0.1	3.4
IT industry.....	1.2	1.6	3.5	3.8	1.5	3.1	1.6	4.9	8.5
Industry and manufacturing.....	5.3	5.8	8.1	6.6	4.0	6.7	2.7	8.0	10.0
Equity ratio.....	37.0	35.5	.	.	35.2	32.4	.	.	.
Return on equity.....	13.0	15.5	.	.	11.3	13.6	.	.	.
Sample size at end of period.....	24	24	.	.	28	28	.	.	.
 <i>Accounts of commercial banks and savings banks²</i>					<i>% change</i>			<i>Jan.-June</i>	<i>% change</i>
<i>All amounts in b.kr.</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>'02-'03</i>	<i>2003</i>	<i>2004</i>	<i>'03-'04</i>	
Net interest income.....	21.1	29.4	29.6	36.0	21.6	16.6	22.2	33.7	
Other operating income.....	13.4	10.3	27.9	45.6	63.5	19.6	40.8	108.1	
Net operating income.....	34.6	39.6	57.5	81.6	41.9	36.2	63.0	74.0	
Operating expenses.....	22.7	25.4	34.1	44.9	31.5	20.9	27.0	29.2	
Provisions for bad and doubtful debts.....	4.0	7.4	9.3	13.2	41.9	5.9	6.7	13.0	
Value adjustments.....	1.7	-	-	-	-	-	-	-	
Taxes.....	1.9	-0.1	1.2	2.9	144.1	1.6	4.3	165.9	
Profit.....	4.4	6.9	12.5	18.6	48.4	7.7	21.3	176.5	
Total assets at end of period.....	789.7	941.0	1,161.1	1,597.3	37.6	1,345.3	1,886.3	40.2	
Stockholders' equity at end of period.....	49.1	60.8	84.5	113.5	34.4	86.2	133.2	54.5	
 <i>% at end of period</i>									
Return on equity.....	9.8	13.9	18.5	22.5	.	19.9	41.5	.	
Cost ratio ³	65.6	64.0	59.4	55.0	.	57.8	42.9	.	
Capital ratio.....	9.7	11.3	12.2	12.3	.	10.9	13.1	.	
Capital ratio excluding subordinated loans.....	6.6	8.0	9.1	9.2	.	8.1	9.0	.	

1. Companies listed on Iceland Stock Exchange (ICEX), excluding the finance and insurance sector. Paired comparison. 2. The sample includes the largest commercial banks (three) and the six largest savings banks. 3. Operating expenses as a percentage of net operating income.

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

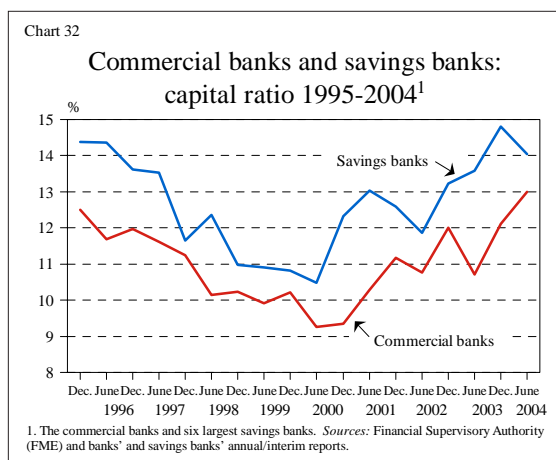
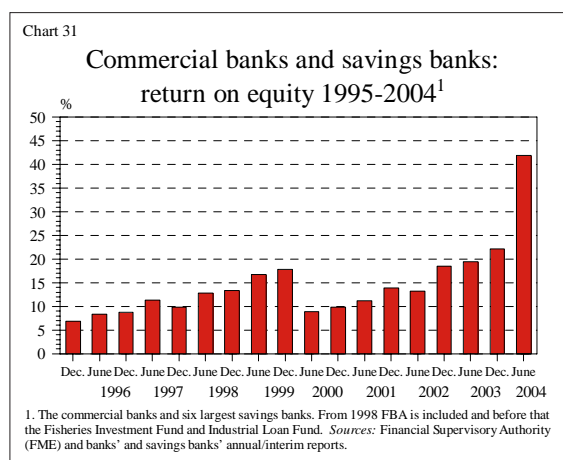


Table 19 International comparison

Based on latest monthly data for each region:	EU-25	EMU-12	USA	UK	Japan	Sweden	Norway	Finland	Denmark	Iceland
Inflation in previous 12 months.....	2.3	2.4	3.2	3.3	0.5	0.8	1.4	0.9	1.7	3.8
Unemployment ¹	9.0	8.9	5.5	4.6	4.6	4.9	4.4	8.7	6.3	3.3
Economic growth ²	2.1	1.9	3.9	3.2	3.8	3.5	4.1	2.7	2.6	6.4
Long-term interest rates (nominal yield) ³....	.	3.0	3.6	4.5	0.6	3.5	3.1	2.9	3.1	7.8
Long-term interest rates (real yield) ^{3, 4}.....	.	.	0.8	1.7	.	1.5	.	.	.	3.6
Short-term interest rates ⁵.....	.	2.1	2.2	4.8	0.0	2.0	1.8	2.2	2.0	7.5
<i>In 2003 (unless otherwise stated):</i>										
GDP per capita based on PPP, in thous. US\$ ⁶	.	25.6	36.1	27.9	26.9	27.3	35.5	26.5	29.2	28.4
Gross saving, % of GDP ⁷.....	.	.	14.6	14.7	25.7	21.6	30.8	24.2	22.7	15.8
Gen. government fin. balance, % of GDP.....	.	-2.7	-4.8	-3.2	-8.0	0.5	9.0	2.1	1.2	-1.4
Gen. government gross debt, % of GDP.....	.	76.2	62.8	51.6	157.3	61.5	34.4	51.6	50.1	41.3
Gen. government expenditure, % of GDP.....	.	49.0	35.7	42.6	37.7	58.2	48.4	50.6	56.1	47.9
Current account balance, % of GDP.....	.	0.4	-4.9	-1.7	3.1	6.3	13.0	5.7	3.0	-5.6

1. Seasonally adjusted. 2. Annual GDP growth based on latest quarterly figures. Seasonally adjusted except for Iceland. 3. Five-year Treasury bonds. 4. Figures are omitted where price indexation is not applied. 5. Three-month money market rates. 6. 2002. Converted to US dollars at an exchange rate that eliminates the difference in price levels between the countries. 7. 2002 for Japan. Sources: EcoWin, Eurostat, OECD.

Table 20 International economic developments

	1997	1998	1999	2000	2001	2002	Prelim. 2003	Forecast	
								2004	2005
<i>Annual economic growth (%)¹</i>									
World.....	4.2	2.8	3.7	4.7	2.4	3.0	3.9	5.0	4.3
Euro area.....	2.3	2.9	2.8	3.5	1.6	0.8	0.5	1.9	1.9
United Kingdom.....	3.3	3.1	2.9	3.9	2.3	1.8	2.2	3.2	2.6
United States.....	4.5	4.2	4.4	3.7	0.8	1.9	3.0	4.4	3.4
Japan.....	1.8	-1.2	0.2	2.8	0.4	-0.3	2.5	4.3	1.8
Other emerging market and developing countries ²	5.3	3.0	4.0	5.9	4.0	4.8	6.1	6.6	5.9
<i>Annual growth in world trade (%)</i>	10.5	4.4	5.9	12.5	0.2	3.3	5.1	8.8	7.2
<i>Consumer price inflation (%)</i>									
Euro area.....	1.6	1.1	1.1	2.0	2.4	2.3	2.1	2.2	1.9
United Kingdom.....	1.8	1.6	1.4	0.8	1.2	1.3	1.4	1.4	1.7
United States.....	2.3	1.5	2.2	3.4	2.8	1.6	2.3	2.6	2.4
Japan.....	1.7	0.6	-0.3	-0.9	-0.8	-0.9	-0.2	-0.1	0.0
<i>Unemployment, % of labour force</i>									
Euro area.....	10.8	10.2	9.4	8.5	8.0	8.5	8.9	8.9	8.8
United Kingdom.....	7.1	6.3	6.0	5.5	5.1	5.2	5.0	2.8	2.7
United States.....	4.9	4.5	4.2	4.0	4.8	5.8	6.0	5.5	5.3
Japan.....	3.4	4.1	4.7	4.7	5.0	5.4	5.3	4.7	4.5
<i>Gen. government fin. balance, % of GDP³</i>									
Euro area.....	-2.6	-2.3	-1.3	0.1	-1.7	-2.3	-2.7	-2.8	-2.7
United Kingdom.....	-2.2	0.1	1.1	3.9	0.7	-1.6	-3.2	-2.9	-2.9
United States.....	-0.8	0.4	0.9	1.6	-0.2	-3.3	-4.8	-4.7	-3.9
Japan.....	-3.8	-5.5	-7.2	-7.5	-6.1	-7.9	-8.0	-7.1	-6.6
<i>Long-term interest rates⁴</i>									
Euro area.....	5.9	4.7	4.6	5.4	5.0	4.9	4.1	4.1	4.7
United Kingdom.....	7.1	5.5	5.1	5.3	4.9	4.9	4.5	5.1	5.6
United States.....	6.4	5.3	5.6	6.0	5.0	4.6	4.0	4.5	5.3
Japan.....	2.4	1.5	1.7	1.7	1.3	1.3	1.1	1.4	1.7

1. Real GDP percent change between years. 2. In May 2004, the IMF revised its world economic classifications into two categories of countries. The category 'Other emerging market and developing countries' comprises 146 countries. 3. General government, e.g. central government, local governments and social security transactions. 4. Yields on ten-year Treasury bonds. Sources: Consensus Forecasts, International Monetary Fund, OECD.

Table 21 Historical economic indicators (continued on next page)

	Consumer prices ¹		Króna effective exchange rate ²		Interest rates (%)		Money and credit			Ratio of gr. reserves to merch. imports ⁶	External debt, % of GDP ⁷	Growth of real GDP(%)		
	Consumer price index	CPI inflation (%)	Nominal exchange rate ³	Real exchange rate ⁴		Gov. bonds average yield ⁵	Banks' secured lending (real yield)		DMBs' lending				Credit system lending	
				Relative CPI	Relative ULC		Non-ind.	Indexed						
1975	1.4	49.4	7.5	92.4	96.9	3.9	-15.7		29.0	32.1	46.4	1.3	42.8	0.7
1976	1.8	32.4	8.5	103.3	106.4	5.8	-7.4		32.5	26.8	32.2	2.2	40.7	6.0
1977	2.4	30.3	9.7	113.1	114.2	3.5	-9.5		43.9	40.5	41.8	2.0	37.6	8.8
1978	3.5	44.0	13.9	105.3	106.6	3.3	-13.4		48.7	47.3	62.8	2.6	39.2	5.9
1979	5.0	44.5	18.7	100.0	100.7	3.5	-15.4		55.9	58.1	46.4	2.5	39.7	4.9
1980	8.1	61.8	25.9	100.0	100.0	3.5	-8.3	2.3	65.4	66.4	71.1	2.4	35.9	5.7
1981	12.2	50.8	34.7	104.4	106.3	3.2	-1.7	2.5	70.5	72.2	54.1	3.0	36.5	4.3
1982	18.4	51.0	54.5	95.8	102.2	3.5	-9.4	2.9	58.0	92.0	100.2	2.1	46.4	2.1
1983	33.9	84.2	100.0	90.3	84.3	3.8	-14.2	3.0	78.7	85.6	82.9	2.5	57.2	-2.2
1984	43.7	29.2	116.3	94.7	83.4	7.0	3.4	5.5	33.4	43.0	40.2	2.1	60.2	4.1
1985	57.9	32.4	148.7	93.2	84.5	6.9	-2.3	5.0	47.6	29.7	35.2	2.8	63.6	3.3
1986	70.2	21.3	171.0	95.0	86.4	8.5	4.3	5.2	35.0	19.1	20.1	3.6	56.5	6.2
1987	83.4	18.8	177.3	104.1	109.0	8.7	4.7	7.7	35.2	42.1	31.4	2.4	49.4	8.6
1988	104.6	25.4	202.6	109.4	113.4	8.7	11.8	9.2	24.0	37.2	34.0	2.4	51.3	-0.1
1989	126.7	21.1	254.7	100.6	98.1	7.4	6.5	7.8	27.2	25.2	33.8	3.0	56.8	0.3
1990	145.5	14.8	283.7	97.3	87.4	7.0	9.3	8.0	14.9	11.0	12.5	3.3	55.2	1.1
1991	155.4	6.8	283.6	99.9	89.6	8.1	10.0	9.2	14.4	11.6	15.4	3.2	56.0	0.1
1992	161.2	3.7	285.0	99.8	92.5	7.4	11.8	9.3	3.8	5.3	11.8	4.0	58.8	-3.3
1993	167.8	4.1	308.8	94.4	84.3	6.7	11.5	9.1	6.5	5.0	11.1	4.3	66.7	0.8
1994	170.3	1.5	324.8	89.3	77.6	5.0	9.5	7.9	2.3	-1.3	4.5	2.6	63.4	4.0
1995	173.2	1.7	322.3	89.4	81.0	5.6	10.1	8.7	2.2	0.0	5.9	2.4	63.4	0.1
1996	177.1	2.3	322.9	89.7	81.9	5.5	10.5	8.9	6.8	11.8	9.3	3.0	62.9	5.2
1997	180.3	1.8	318.7	90.5	84.5	5.3	11.1	9.0	8.7	16.8	11.8	2.6	64.8	4.7
1998	183.3	1.7	313.6	91.9	89.0	4.7	11.8	8.8	15.2	25.6	15.1	2.2	70.0	5.5
1999	189.6	3.4	313.1	93.6	90.5	4.4	8.0	8.6	16.9	22.8	17.3	2.6	82.5	4.2
2000	199.1	5.0	313.3	96.2	91.7	5.1	12.7	9.5	11.2	26.2	17.3	2.1	102.6	5.7
2001	212.4	6.7	376.3	83.6	80.5	5.1	9.3	10.2	14.9	13.4	19.2	2.1	120.3	2.2
2002	222.6	4.8	365.2	88.4	85.1	5.2	13.1	10.1	15.3	2.0	3.2	2.5	123.9	-0.5
2003	227.3	2.1	343.3	93.8	88.9	4.4	9.0	9.1	22.4	14.8	11.0	3.5	144.5	4.1

1. Annual averages (May 1988=100) and changes between years. 2. Annual averages. Exchange rate of the króna against a trade-weighted average of foreign currencies. 3. 1983=100. 4. 1980=100. ULC= unit labour cost. 5. Annual average yield of indexed Treasury bonds of all maturities. Yields on Iceland Stock Exchange from 1987. Before that, primary market yields. 6. Gross foreign exchange reserves at end of period as a ratio of the average monthly value of merchandise imports. Calculated at fixed exchange rates. 7. Gross debt. Direct investment capital excluded.

Table 21 (continued) Historical economic indicators

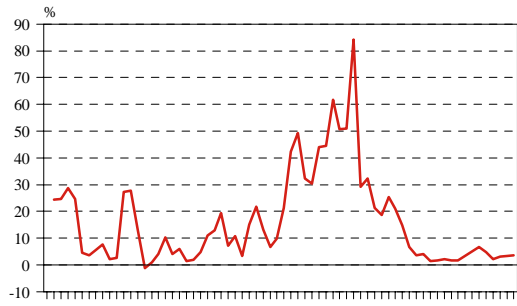
	Components of GDP (% change from previous year)			External trade (% change from prev. year)			Gen. government (% of GDP) ⁸			Labour market (% of labour force)		Wages (% change from previous year)		
	Private consump- tion	Gross fixed cap. formation	National expendi- ture	Goods & services (volume changes)	Exports	Imports	Terms of trade	Curr. acc. balance (% of GDP)	Financial balance	Revenues	Expen- ditures	Unem- ployment	Labour particip.	Real wages ⁹	Real disposable income
1975.....	-9.6	-8.8	-5.5	2.6	-12.8	-11.1	-10.2	-2.7	33.0	35.7	0.5	72.2	.	-15.1
1976.....	5.4	-2.7	-3.5	13.1	-3.6	7.8	-1.5	1.1	32.1	31.1	0.5	73.4	.	2.3
1977.....	12.9	11.5	15.0	8.9	20.6	7.0	-2.3	-0.2	30.5	30.7	0.3	72.5	.	15.5
1978.....	9.0	-5.8	2.1	15.2	3.7	0.3	1.2	0.1	31.0	30.9	0.3	73.6	.	8.5
1979.....	2.8	-1.5	3.5	6.3	2.5	-8.6	-0.7	0.9	32.4	31.4	0.4	73.0	.	2.0
1980.....	3.4	13.5	5.7	2.7	3.0	-2.8	-1.9	1.3	33.8	32.5	0.3	74.1	.	1.1
1981.....	6.2	1.2	5.6	3.2	7.1	-0.5	-4.0	1.3	34.9	33.6	0.4	76.8	0.7	5.5
1982.....	5.0	0.1	5.0	-8.9	-0.6	-0.8	-7.9	1.7	36.0	34.3	0.8	77.6	1.7	2.2
1983.....	-5.6	-12.7	-8.6	11.0	-9.7	-1.3	-1.9	-2.0	34.0	36.1	1.0	77.4	-16.7	-12.5
1984.....	3.7	9.4	6.4	2.4	9.2	0.6	-4.6	2.2	35.4	33.1	1.3	77.6	-3.1	-2.5
1985.....	4.2	1.0	2.7	11.1	9.4	-0.9	-3.9	-1.7	34.0	35.7	0.9	79.3	1.2	10.8
1986.....	6.9	-1.9	4.5	5.9	0.9	5.4	0.5	-4.0	33.7	37.8	0.7	80.9	5.7	9.5
1987.....	16.2	19.1	15.7	3.3	23.3	4.3	-3.4	-0.9	33.9	34.7	0.4	84.1	9.0	25.8
1988.....	-3.8	-0.1	-0.6	-3.6	-4.6	-0.8	-3.5	-2.0	37.4	39.5	0.6	80.1	2.2	-2.7
1989.....	-4.2	-7.8	-4.4	2.9	-10.3	-3.9	-1.3	-4.6	37.5	42.0	1.6	78.7	-9.1	-9.4
1990.....	0.5	2.6	1.5	0.0	1.0	-2.0	-2.1	-3.3	38.2	41.4	1.8	77.5	-4.9	-4.6
1991.....	2.9	3.3	3.8	-5.9	5.3	3.5	-4.0	-2.9	39.8	42.7	1.5	76.2	1.4	2.1
1992.....	-3.1	-11.1	-4.5	-2.0	-6.0	-0.6	-2.4	-2.8	40.9	43.7	3.0	75.5	-0.8	-1.9
1993.....	-4.6	-10.7	-3.8	6.5	-7.8	-3.9	0.7	-4.5	39.1	43.5	4.4	75.3	-2.6	-7.6
1994.....	2.8	0.5	2.1	9.5	4.1	0.4	1.9	-4.7	38.7	43.4	4.8	75.4	-0.3	0.0
1995.....	2.2	-1.1	2.3	-2.2	3.9	1.3	0.7	-3.0	39.7	42.7	5.0	75.7	2.8	3.8
1996.....	5.4	25.6	7.1	9.8	16.5	-3.1	-1.8	-1.6	40.6	42.2	4.3	76.4	4.0	4.1
1997.....	5.0	10.0	5.5	5.3	7.7	2.1	-1.8	0.0	41.5	41.5	3.9	76.6	3.6	2.5
1998.....	9.9	32.9	13.4	2.1	23.5	5.6	-6.9	0.5	42.7	42.2	2.8	77.1	7.6	8.7
1999.....	7.3	-3.0	4.2	4.0	4.2	-0.8	-7.0	2.4	45.7	43.3	1.9	77.3	3.3	3.0
2000.....	4.0	14.8	6.8	5.0	8.0	-2.7	-10.1	2.5	45.4	42.9	1.3	77.3	1.6	1.3
2001.....	-3.8	-7.6	-4.2	7.7	-9.0	0.3	-4.0	0.2	44.1	44.0	1.4	77.5	2.0	1.6
2002.....	-1.1	-15.1	-2.9	3.6	-2.5	0.5	1.1	-0.4	45.2	45.6	2.5	77.3	2.2	-0.1
2003.....	6.7	17.7	8.4	0.3	9.6	-4.2	-4.1	-1.6	46.0	47.7	3.4	76.6	3.4	5.3

8. Central and local governments and the social security system. 9. Deflated by consumer prices.

Sources: Directorate of Labour, Iceland Stock Exchange, Ministry of Finance, Statistics Iceland, Central Bank of Iceland.

Chart 33

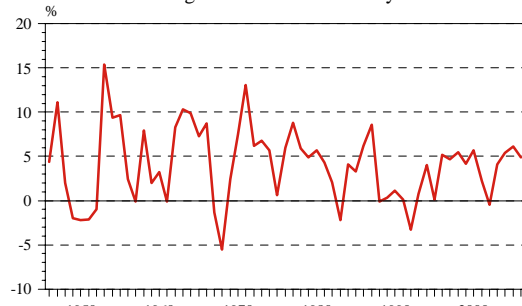
Consumer price inflation 1939-2006
% change between annual averages



Central Bank forecast for 2004-2006. Sources: Statistics Iceland and Central Bank of Iceland.

Chart 34

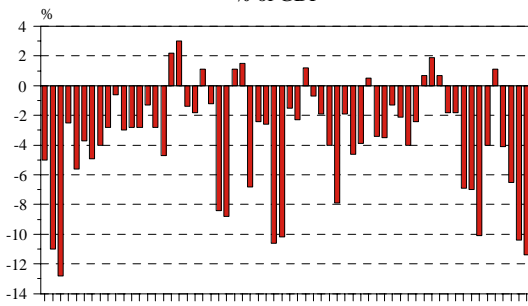
Economic growth 1945-2006
% change in real GDP between years



Preliminary/forecast 2003-2006. Sources: Statistics Iceland and Central Bank of Iceland.

Chart 35

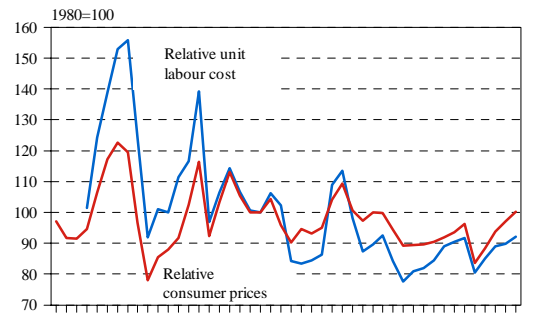
Current account balance 1945-2006
% of GDP



Preliminary/forecast 2003-2006. Sources: Statistics Iceland and Central Bank of Iceland.

Chart 36

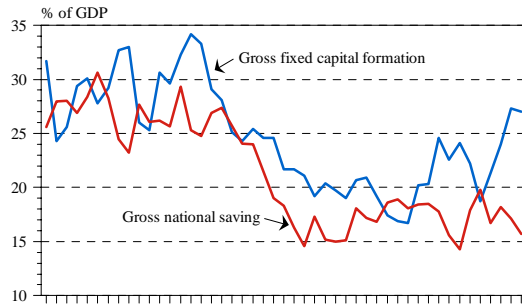
Real effective exchange rate of the Icelandic króna 1960-2005



Preliminary/forecast 2003-2005. Source: Central Bank of Iceland.

Chart 37

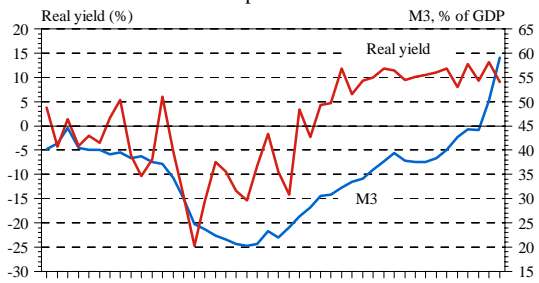
Gross national saving and fixed capital formation 1960-2006
% of GDP



Preliminary/forecast 2003-2006. Sources: Statistics Iceland and Central Bank of Iceland.

Chart 38

Real yield and broad money 1960-2003
Real yield on non-indexed bank loans and M3 as percent of GDP



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

Table 22 Structural indicators for the Icelandic economy

<i>I. Population and labour force (thous.)</i>		1970	2003	<i>IV. National income and expenditure</i>		1970	2003 ¹
Population at end of year.....		204.8	290.6	Gross domestic product (GDP), b.kr.....		0.4	807.8
under 16 years of age.....		70.6	70.4	GDP, billion US\$.....		0.5	10.5
16-74 years of age.....		127.3	204.3	National income per capita, thous. US\$.....		2.0	36.2
above 74 years of age.....		7.0	15.8	GDP per capita, thous. US\$, PPP-converted ²		2.7	30.0
Average popul. growth in prev. 5 years (%)		1.1	1.1	Gross capital formation, % of GDP.....		25.3	21.3
Labour force (thous. man-years).....		82.7	146.4	Gross national saving, % of GDP.....		26.1	16.7
Males.....		54.7	84.1	Net national saving, % of net national product		13.8	4.8
Females.....		28.0	62.3	Exports of goods and services, % of GDP.....		46.4	35.6
<i>II. Employment by industry (%)</i>		1970	2001	Public consumption, % of GDP.....		12.7	26.4
Agriculture.....		12.4	3.3	Gen. government total expend., % of GDP ³ ...		28.9	47.7
Fisheries.....		6.6	3.9	Total taxes, % of GDP ³		28.9	39.0
Fish processing.....		7.8	5.1	<i>V. Capital and indebtedness</i>		1970	2003 ¹
Manufacturing industry.....		15.2	12.1	<i>% of GDP unless otherwise stated</i>			
Construction, electricity and water.....		11.3	10.3	Fixed assets, % of GDP.....		3.4	3.4
Wholesale & retail trade, restaur. & hotels....		13.5	16.7	Fixed assets, billion USD.....		1.8	37.2
Transport, storage and communication.....		8.4	6.7	Net external debt.....		20.1	102.6
Finance, insurance, real estate, business serv.		4.0	9.5	Debt service, % of export revenue.....		11.3	61.6
Producers of government services.....		12.4	18.9	General government total debt.....		13.0	41.3
Other services.....		8.3	13.4	General government net debt.....		-2.3	23.3
<i>III. Merchandise exports</i>		1970	2003	Broad money (M3).....		37.5	58.9
<i>By category (%):</i>				Credit system total lending.....		484.8	268.1
Marine products.....		77.1	62.3	to industries.....		53.6	141.2
Manufactures.....		18.4	33.9	to households.....		21.2	94.5
thereof aluminium and ferro-silicon.....		13.2	22.1	Market capitalisation of listed equities.....		.	81.6
Agricultural products.....		3.4	1.9	<i>By regions (%):</i>			
<i>By regions (%):</i>				United States.....		30.0	9.3
United States.....		30.0	9.3	European Union.....		52.8	72.1
European Union.....		52.8	72.1	Other.....		17.2	18.7
Other.....		17.2	18.7				

1. Preliminary data. 2. Converted to US dollars at an exchange rate that eliminates the difference in price levels between the countries. 3. National accounts basis.

Sources: Iceland Stock Exchange, National Economic Institute, OECD, Statistics Iceland, Central Bank of Iceland.

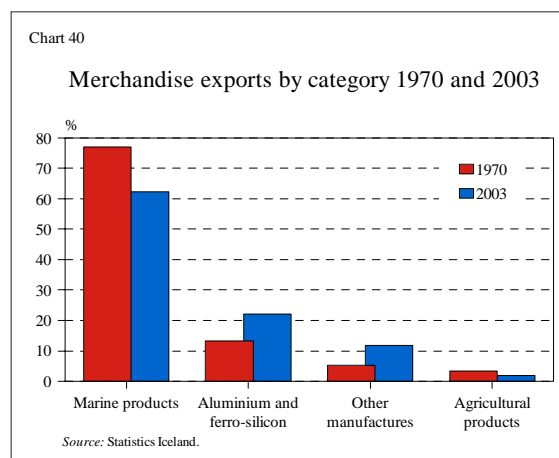
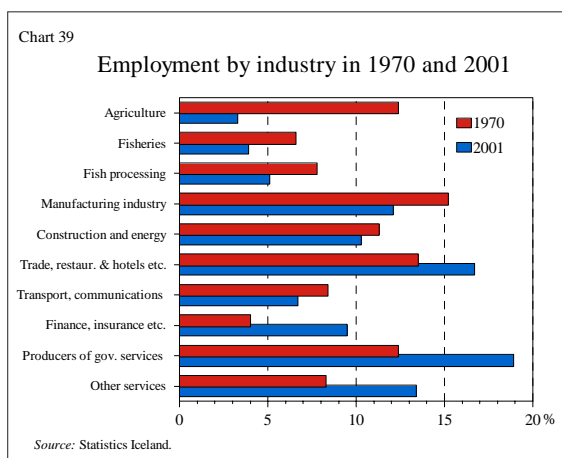


Table 23 Merchandise exports and imports by regions¹

	Share of total (%)						In b.kr.	
	1970	1980	1990	2000	2003	Jan.-Oct. 2004	2003	Jan.-Oct. 2004
<i>Merchandise exports, fob</i>								
European Union	52.8	52.3	70.7	67.4	72.1	74.4	131.6	123.0
Euro area	25.4	30.2	37.6	42.3	48.2	50.0	87.9	82.6
Other EU countries	27.4	22.0	33.1	25.1	23.9	24.4	43.7	40.3
United Kingdom	13.2	16.5	25.3	19.3	17.5	18.8	32.0	31.1
Other Western European countries	2.8	2.3	3.4	7.8	7.8	5.8	14.3	9.6
Eastern Europe and former Soviet Union.....	9.6	8.8	2.9	1.4	2.6	3.4	4.8	5.6
Russia	6.8	5.4	2.5	0.4	0.6	1.0	1.0	1.7
United States	30.0	21.6	9.9	12.2	9.3	9.6	16.9	15.9
Japan.....	0.1	1.5	6.0	5.2	3.2	3.3	5.9	5.5
Other OECD countries.....	0.5	0.6	0.5	2.0	0.3	1.4	0.6	2.3
Developing countries	4.2	12.9	5.5	3.0	3.9	1.3	7.2	2.2
Other countries.....	0.0	0.0	1.1	1.0	0.8	0.8	1.4	1.3
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	182.6	165.3
<i>Merchandise imports, cif</i>								
European Union	64.9	58.0	59.9	57.0	56.9	60.1	123.2	128.6
Euro area	32.0	33.2	35.5	33.5	34.9	39.8	75.6	85.0
Other EU countries	33.0	24.8	24.4	23.6	22.0	20.4	47.6	43.6
United Kingdom	14.3	9.5	8.1	9.0	7.4	7.0	16.1	15.0
Other Western European countries	5.4	8.1	5.2	9.7	8.7	11.8	18.9	25.3
Eastern Europe and former Soviet Union.....	10.4	10.9	6.5	5.7	10.4	8.2	22.6	17.5
Russia	7.2	9.7	5.0	1.8	2.8	1.2	6.1	2.6
United States	8.2	9.4	14.4	11.0	7.4	10.4	16.1	22.3
Japan.....	2.9	4.0	5.6	4.9	3.8	3.9	8.3	8.4
Other OECD countries.....	0.4	5.8	3.7	4.5	2.3	2.7	4.9	5.8
Developing countries	7.2	2.7	3.1	5.6	9.0	1.6	19.6	3.4
Other countries.....	0.6	1.1	1.4	1.5	1.4	1.2	3.0	2.5
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	216.5	213.8

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

Source: Statistics Iceland.

