For a number of consecutive years, Iceland has been running a current account deficit financed by foreign borrowing. Figure 1 shows Iceland's international investment position (IIP, i.e. foreign assets net of foreign debt) at year-end as a proportion of GDP. According to figures published by the Central Bank, fifteen years ago Iceland's IIP amounted to around 50% of its GDP. This ratio remained fairly steady until the beginning of this century, reflecting a current account that was close to balance during that period. In the wake of the upswing at the end of 1990s, the current account deficit has increased gradually and the IIP has decreased. Measured as a proportion of GDP, the IIP had declined to -237% by 2008.

In addition to the current account deficit, which affects foreign borrowing, and GDP growth, which influences the denominator of the IIP ratio, the relationship between the exchange rate and domestic price levels also affects this ratio. If the exchange rate is relatively high compared to the domestic price level (making debt in foreign currencies relatively low in krónur terms) the IIP ratio appears relatively low. Since this debt is calculated at the exchange rate applicable at year-end, and GDP at average price levels for the year, the situation at the end of the year as compared to the average for the year is also important. The króna exchange rate was comparatively low relative to domestic price level in 2008 and especially low at year-end compared to the average price level for the year. As a result, the IIP ratio at year-end 2008 was especially low if the traditional method of calculating it is used. If, however, the IIP ratio is reassessed by adjusting for the changes in exchange rate using the trade-weighted index and for changes in price level of GDP, the depiction of the change in the debt ratio changes markedly.1 Recalculating the debt ratios for the years before 2008 using yearend 2008 exchange rate and price level of GDP in 2008 shows, for instance, that around half of the decrease in the IIP as a ratio of GDP from -105% in 2007 to -237% in 2008 can be attributed to the low króna exchange rate relative to domestic price levels.

#### Changes in foreign assets and liabilities

Chart 2 shows how foreign assets and liabilities of Icelandic parties have developed as a ratio of GDP and the difference between them (the IIP). The chart is based on the Central Bank's official statistics, and the curve showing the IIP is exactly the same as in Chart 1.

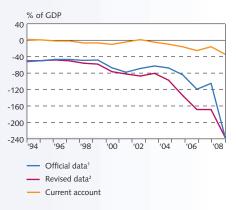
The chart shows that the net foreign debt of the public sector (including the Central Bank, the National Treasury and municipalities, but excluding public corporations such as Landsvirkjun and Reykjavík Energy) was very low at year-end 2007. The financial crisis and collapse of large domestic banks last autumn have transformed this picture, however.

Work has been underway recently on reassessing the foreign assets and liabilities of Icelandic parties with the help of information on corporate insolvencies. This work is not yet complete; in recent weeks large enterprises have become insolvent, and it is by no means certain that the wave of insolvencies has ended. Major issues have yet to be resolved with parties abroad, e.g. concerning foreign deposit accounts of the Icelandic banks, and the freeze on Landsbanki's UK assets is still in effect. Although Icelandic parties have lost enormous assets abroad, foreign investors have also had to write off huge debts owed by Icelandic parties. While the net public debt position will deteriorate considerably, more uncertainty

### Box VII-1

# Foreign debt and balance on income

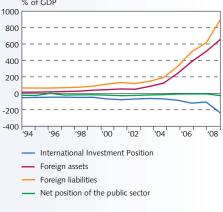
Chart 1 International investment position Annual data 1994-2008



 Assets and liabilities at end-of-year exchange rates and GDP at current prices.
Using GDP deflator in 2008 and end-2008 (trade-weighted) exchange rate.

Source: Central Bank of Iceland.

Chart 2 Foreign assets and liabilities Annual data 1994-2008



Source: Central Bank of Iceland.

This assumes that all debt owed to foreign parties is foreign-denominated. Until very recently this was literally the case, but in recent years foreign debt has to a growing extent been denominated in krónur. A similar trend appears if the US dollar is used instead of the trade-weighted index.

clouds the private debt position and that of the national economy as a whole.

#### Development of the balance on income

Part of the large-scale change in assets that has been taking place in the national position is recognised in official statistics as dividends and reinvested earnings.<sup>2</sup> A loss by a foreign company owned by Icelandic parties, for example, is regarded as negative dividends and reinvested earnings. This past year there were enormous losses by such companies due to their difficult financial situation and unfavourable market conditions. Table 1 shows that dividends and reinvested earnings were negative by 248 b.kr. in 2008. Of this amount, 197 b.kr. were recorded during the last quarter of the year. The table shows the dramatic reversal of the situation in 2008 from that of previous years, when there were high returns on foreign portfolios. A similar turnaround took place in the return on foreign investment in Iceland, which was negative by 102 b.kr. last year. Due to the negative IIP, interest expenditure naturally exceeded interest income, resulting in a negative balance on income of ISK 468 b.kr. in 2008, equivalent to 31.9% of GDP for the year. This negative balance on income reduced 2008 GNI by almost one-third from that of the previous year.

Table 1

	2004	2005	2006	2007	2008
Balance on income	-38,829	-38,393	-87,213	-65,342	-468,042
Revenues	32,944	91,153	180,829	322,267	-33,082
Wages	5,624	4,639	5,033	1,584	1,425
Dividends and rein. earnings	18,525	65,023	102,682	181,728	-247,771
Interest income	8,795	21,491	73,114	138,955	213,264
Expenditures	-71,773	-129,546	-268,042	-387,609	-434,960
Wages	-817	-1,533	-2,728	-3,443	-2,621
Dividends and reinv. earnings	-35,478	-66,606	-98,641	-91,394	102,459
Interest expence	-35,478	-61,407	-166,673	-292,772	-534,798

A loss of this magnitude naturally gives cause for considerable concern. On the other hand, it should be pointed out that the figures recognised in the balance on income reflect only part of the impact of the banking system's collapse on the Icelandic economy, as some changes in assets and liabilities are recorded as changes to the IIP without affecting the balance on income. This occurs, for example, when an Icelandic enterprise becomes insolvent and major liabilities owed to foreign creditors are written off. In the end, it is the foreign assets and liabilities of the entire economy that are significant, not only the changes recognised in the balance on income.

## Estimates of Iceland's current IIP

According to provisional figures on the foreign liabilities of domestic parties at the end of Q1/2009 – i.e., after Straumur-Burðarás, SPRON, Icebank and Baugur had all been declared insolvent – amounts owed by domestic parties to foreign creditors amounted to 2,500 b.kr., or to 175% of GDP forecast for 2009. Foreign debt of the Central Bank, the National Treasury and municipalities totalled 830 b.kr.; liabilities of deposit institutions now for the most part

<sup>2.</sup> The methodology used for estimating portfolio returns and expenditure is discussed in detail in the articles "Iceland's International Investment Position and Balance on Income", by Daníel Svavarsson and Pétur Örn Sigurðsson (Monetary Bulletin 2007/2) and "International Investment Position: Market valuation and the effects of external changes" by Daníel Svavarsson (Monetary Bulletin 2008/1).

publicly owned, amounted to 300 b.kr.; and that of public corporations was around 500 b.kr. Total liabilities of these parties amounted to 1,630 b.kr. Foreign debt of private parties, including companies owned by foreign parties, totalled 870 b.kr. These figures can be expected to increase by around 600 b.kr., later this year due to loans that will be taken by the Treasury to cover deposit guarantees in several European countries. Total debts of Icelandic parties could then reach around 3,100 b.kr., or the equivalent of 220% of GDP for the year. It should be pointed out that a large portion of this 600 b.kr. loan is expected to be repaid with proceeds from sale of Landsbanki's foreign assets in coming years. A report presented by the Minister of Finance on March 17 this year states that Landsbanki's Resolution Committee expects to obtain 527 b.kr. for the bank's assets, which can be used to repay this loan. If this proves correct, the net cost arising from the deposit insurance will therefore be 73 b.kr.<sup>3</sup> As is also mentioned in this report, all such estimates are clearly subject to considerable uncertainty.

Many of the assets still listed as foreign holdings of Icelandic parties are likely not of great value. Other assets, however, should be fairly accurately valued and secure; e.g., the Central Bank's foreign reserves amounting to 430 b.kr. and foreign assets of Icelandic pension funds of around 500 b.kr. If these assets, totalling 930 b.kr., are deducted from the liabilities of 3,100 b.kr., the outcome is net debt of 2,170 b.kr, or the equivalent of just over 150% of forecast GDP for this year. If assets of the old banks in Europe (which will be sold to pay off loans taken for deposit guarantees in these countries) amounting to around 500 b.kr. are included, the net debt decreases to 1,670 b.kr., or the equivalent of close to 120% of forecast GDP for this year. Iceland's IIP is around 300 b.kr. (or around 20% of GDP) lower due to equity in Icelandic companies held by foreign parties. The outcome is an IIP equivalent to -140% of the forecast GDP for this year.

These figures should be regarded as an upper limit for this debt burden, as some assets are likely undervalued and some additional debt can be expected to be written off by further insolvencies.

The baseline scenario in this issue of Monetary Bulletin assumes that the current account will show a 2% deficit this year and be in balance in 2010. After that, the current account should show a growing surplus. The net debt burden will therefore fall rapidly in coming years. Debt is forecast to be 100 b.kr., or 8% of GDP, lower in 2011 and to fall rapidly after that. All such forecasts are obviously highly sensitive to the interest rate assumptions used.

#### Estimated balance on income

Negative dividends and reinvested earnings could result in significantly negative balance on income this year, as was the case last year. On the other hand, it seems reasonable to assume that once the present wave of insolvencies concludes, returns on foreign portfolios owned by Icelandic parties (e.g., pension fund assets of around 500 b.kr.) will approach what could be considered normal and the same will be true of returns on portfolios of foreign parties in Iceland. Interest income will likely be minimal, as was the case prior to the banks' expansion abroad, and interest expense will be determined by the foreign debt remaining after the wave of bankruptcies is past. Bearing this in mind, the balance on income should be estimated based on estimates of the IIP and the interest terms on offer, rather than on highly uncertain figures for portfolio returns.

The report is available in Icelandic at http://www.island.is/media/frettir/thjodarbuskapur fjarmal.I.pdf

Due to the poor credit rating of Icelandic parties, foreign financial institutions demand a high risk premium on credit extended to them, amounting to as much as 10 percentage points over LIBOR. There is a good possibility of financing debt of Icelandic parties on more favourable terms through the involvement of foreign governments and the IMF. The Central Bank's baseline scenario assumes that it will be possible to finance foreign debt of public bodies through foreign-denominated loans with interest rates of 4-5%, while financial assets owned by non-residents in krónur will bear slightly higher interest in the near term. Given these assumptions, the balance on income is forecast to be negative by close to 10% of GDP for the next two years and improve rapidly thereafter.