

IV The domestic real economy

GDP growth measured 4% in 2015, reflecting robust growth in domestic demand, while the contribution from net trade was negative in spite of strong growth in services exports. GDP growth for the year was broad-based, although increased output from tourism-related activities weighed heavily. Indicators imply robust domestic demand growth year-to-date, and the outlook is for strong growth in private consumption, supported by a steep rise in purchasing power, increased employment, and an improved equity position. In spite of a recent surge in spending, households have stepped up their saving in the past two years and appear likely to continue in 2016. GDP growth is projected at 4.5% this year and about 4% in 2017. If the forecast materialises, it will be the third consecutive year with a GDP growth rate of 4% or more. Jobs have risen rapidly in number, and the labour participation rate is close to its 2007 high. Productivity growth has remained weak, however. It is becoming increasingly difficult to fill available positions, and most indicators imply that the slack in the labour market has disappeared. The slack in output is estimated to have disappeared in 2015, and the positive output gap is projected to continue widening this year.

GDP growth and domestic private sector demand

GDP growth in 2015 in line with February forecast

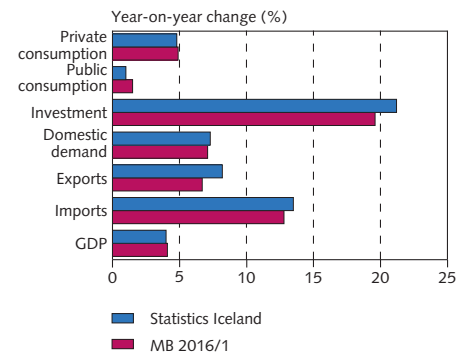
Year-2015 GDP growth measured 4%, in line with the Bank's February forecast. Of the main components of GDP, export growth was the main driver, although business investment and private consumption also contributed strongly (Chart IV-1). It is likely that rapid growth in exports – services exports in particular – play a role in the fact that business investment and private consumption grew as much as Statistics Iceland figures indicate, as extensive tourism activity calls for investment in the sector, as well as creating jobs, thereby increasing households' disposable income. Growth in domestic demand was accompanied by a surge in imports, causing the overall contribution from net trade to be negative by nearly 2 percentage points of GDP.

Year-2015 GDP growth was more than 1 percentage point above the thirty-year average, and growth in domestic demand was at its strongest since 2006. Output growth was somewhat stronger in Iceland than in trading partner countries, where it has been somewhat below its long-term average (Chart IV-2). In Q4/2015, Iceland's seasonally adjusted GDP was more than 16% above the 2010 trough and more than 3% above the pre-crisis peak.

The tradable sector generated the majority of 2015 GDP growth

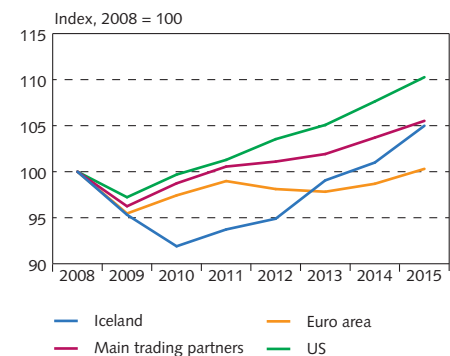
In the production accounts, it can be seen clearly how important a role the tourism sector played in last year's output growth. Real gross factor income rose by 4.4% in 2015, half of it stemming from industries falling under the tradable sector, to which tourism is a major contributor (Chart IV-3). It is interesting to see how broad-based 2015 GDP growth was. After the tradable sector, the main contributors were do-

Chart IV-1
National accounts 2015



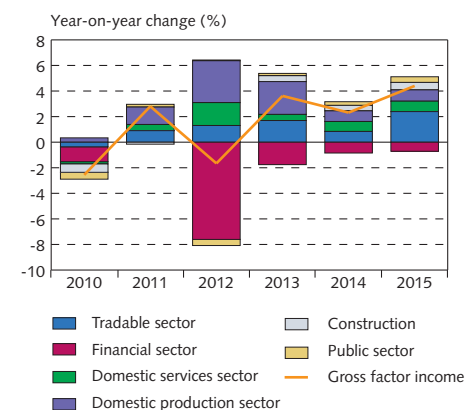
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-2
GDP in Iceland and its main trading partners 2008-2015



Sources: Macrobond, Statistics Iceland, Central Bank of Iceland.

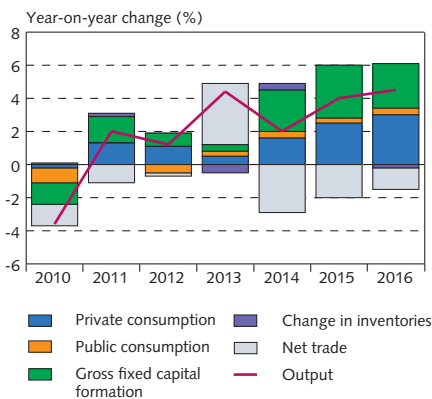
Chart IV-3
Gross factor income and sectoral contributions 2010-2015¹



1. Gross factor income measures the income of all parties involved in production. It is equivalent to GDP adjusted for indirect taxes and subsidies. Included in the tradable sector are fisheries, fish product processing, manufacture of metals and pharmaceuticals, and 75% of electricity, gas, heat, and water utilities. Other sectors are considered non-tradable and are classified as construction, financial sector, services (excl. financial services), and production.

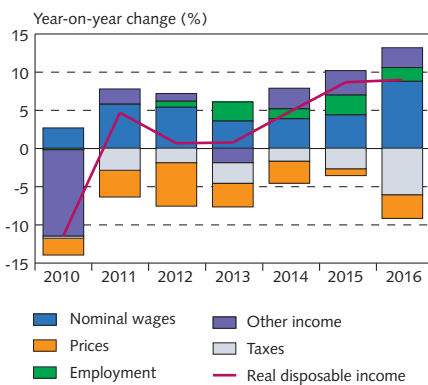
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-4
GDP growth and contribution of underlying components 2010-2016¹



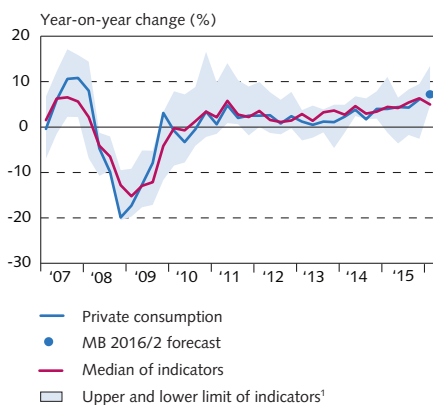
1. Central Bank baseline forecast 2016.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-5
Real disposable income and its main components 2010-2016¹



1. Central Bank baseline forecast 2015-2016. The contribution of the main underlying components to annual changes in real disposable income is calculated based on each component's weight in disposable income. The combined contribution of underlying components does not add up to the total change due to rounding and incomplete income accounts for households from Statistics Iceland.
Sources: Statistic Iceland, Central Bank of Iceland.

Chart IV-6
Indicators of private consumption
Q1/2007 - Q1/2016



1. Indicators are payment card turnover, groceries turnover, share prices, housing prices, consumer goods imports, new motor vehicle registrations, wages, and unemployment. The indicators are rescaled so that their average and standard deviation are the same as those for private consumption.
Sources: Centre for Retail Studies, Statistics Iceland, Central Bank of Iceland.

domestic production and domestic non-financial services. The construction industry also contributed more to gross factor income last year than at any time since the economic recovery began. Financial services made a negative contribution last year, however, albeit to a lesser degree than in the previous three years.

Outlook for stronger GDP growth in 2016 than previously projected

Output growth is expected to continue this year and to gain pace slightly. The composition of growth is forecast to be broadly similar to that in 2015, with growth in domestic demand offset by a negative contribution from net trade due to robust import growth (Chart IV-4). GDP growth is forecast at 4.5%, or 0.5 percentage points more than in 2015, owing mainly to increased private and public consumption and a less strongly negative contribution from net trade. In 2017 and 2018, GDP growth will lie in the 3-4% range, as the contribution from private consumption and investment will decline and the contribution from net trade will be positive in both years.

In comparison with the Bank's February forecast, the current GDP growth forecast for 2016 assumes a stronger contribution from private consumption, investment, and exports, but it also assumes that import growth will be stronger than was projected in February and that the contribution from net trade will therefore be weaker.

Households' purchasing power has risen sharply ...

Households' real disposable income rose sharply in 2015, largely because of nominal wage increases (Chart IV-5). This stimulated household demand during the year. Towards the end of the year, private consumption growth gained pace in comparison with previous quarters, measuring 6% in Q4, the fastest growth rate since Q1/2008. A number of factors supported growing household demand, including increased real wages, rising asset prices, and an improved equity position. This resulted in increased optimism among households and a rise in the Gallup consumer sentiment index. The trend has continued in 2016. Purchasing power has continued to rise steeply, in line with pay increases and low inflation, and household optimism is close to the 2003-2007 average.

... supporting demand in 2016

Increased optimism among households, concurrent with rising purchasing power and an improved equity position, gives cause to reassess year-2016 private consumption growth. This is particularly applicable in view of indicators such as payment card turnover, which suggest that private consumption growth accelerated year-on-year in Q1, to an estimated 7.2% (Chart IV-6). It is assumed that growth for the year as a whole will be 6% and that real disposable income will rise by nearly 9% for the second year in a row (Chart IV-7). Private consumption growth is projected to ease over the next two years and, if the forecast materialises, the ratio of private consumption to GDP will rise from just under 51% to about 52½% by 2018. This is somewhat below both the historical average and the estimated long-term

equilibrium ratio (see Box 3), but in line with the experience of other countries, where domestic saving has generally risen in the wake of financial crises.

Given that conditions have been favourable for rapid private consumption growth in the recent term, the rate of growth has been relatively modest as yet. Households have been more cautious with consumption than often before and have accumulated savings. In view of the experience from before the financial crisis, however, private consumption growth could be underestimated, as is described in the alternative scenario in Chapter I.

Business investment above its long-term average in 2015

After the financial crisis, the ratio of business investment to GDP was far below its long-term average. This reflected both a high capital-to-output ratio and firms' limited desire to undertake new investment under the economic conditions then prevailing. Investment has picked up in the recent term, however, and business investment measured 13.6% of GDP in 2015. It was the first time since 2008 that the ratio of business investment to GDP had risen above its thirty-year average. It is also worth noting that the distribution across types of investment has changed somewhat (Chart IV-8). In 2010-2012, business investment relied heavily on investment in the energy-intensive sector, on the one hand, and ships and aircraft, on the other. These two categories are still quite important, but the construction industry has rallied in the past two years, and construction and construction-related investment accounted for over half of last year's nearly 30% growth in business investment. This can also be seen in the Gallup survey carried out in March, in which executives from the 400 largest companies in Iceland were asked for their assessment of the economic situation and outlook. According to the survey, construction executives are optimistic and expect to increase their staffing levels in the coming term.

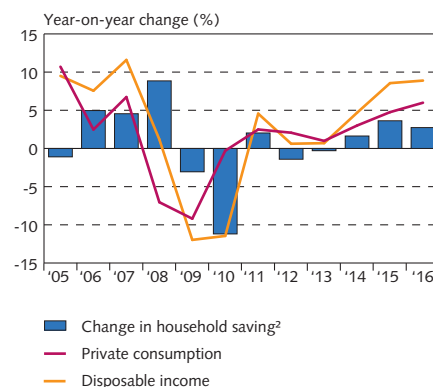
Business investment growth to accelerate in 2016

Business investment is expected to continue growing strongly this year, albeit at a slightly slower pace than in 2015. Investment in energy-intensive industry and ships and aircraft will contribute more to the increase than in 2015, while general business investment is expected to grow a little more slowly than it did last year. Excluding energy-intensive investment, the components of business investment are projected to be somewhat stronger this year than was assumed in February. Total business investment is now forecast to grow by 19% this year, some 4 percentage points more than in the February forecast.

Firms plan increased investment

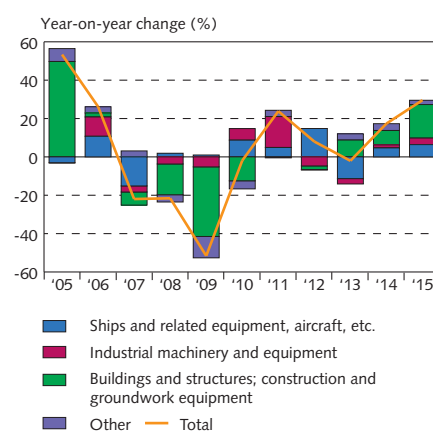
The Central Bank conducted a survey of over 100 firms' investment plans this spring. The survey showed that 2015 investment was stronger than had been indicated in a comparable survey carried out last autumn (Table IV-1). When asked about their investment plans for 2016, respondents indicated that they expect to invest more this year than they projected last autumn. The greatest increase can be seen in the transport/tourism and fishing industries. The survey also includes questions on investment financing, and it is noteworthy that

Chart IV-7
Private consumption and disposable income 2005-2016¹



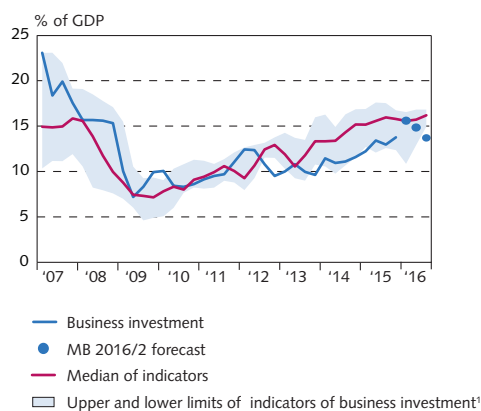
1. Central Bank baseline forecast 2015-2016. 2. Change in the ratio of disposable income to private consumption.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-8
Business investment and contribution by type 2005-2015



Sources: Statistics Iceland, Central Bank of Iceland.

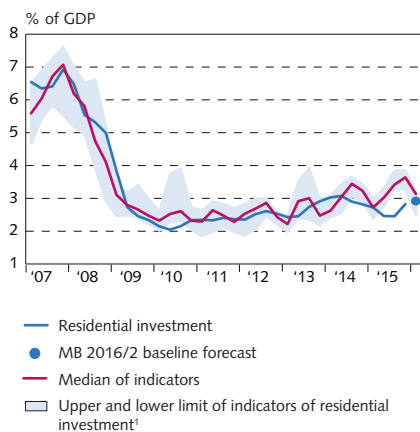
Chart IV-9
Indicators of business investment
Q1/2007 - Q3/2016



1. The indicators are imports of investment goods at constant prices and responses to four questions from the Gallup survey of Iceland's 400 largest companies. The questions centre on executives' assessment of (a) the economic outlook six months ahead, (b) how they expect domestic demand for their goods or services to develop in the next six months, (c) whether they expect their company's investment to increase year-on-year in the current year, and (d) whether they expect their margins to increase year-on-year. In assessing the range, all variables are rescaled so that their average and standard deviation are the same as those for business investment. Two-quarter moving averages. Investment indicators are lagged by two quarters.

Sources: Gallup, Statistics Iceland, Central Bank of Iceland.

Chart IV-10
Indicators of residential investment
Q1/2007 - Q1/2016



1. The indicators are imports of reinforcing steel, imports of other construction materials, and cement sales to buyers other than energy-intensive firms. In assessing the range, the variables are rescaled so that their average and standard deviation are the same as those for measured residential investment. The chart shows a two-quarter moving average. Sources: Aalborg Portland Iceland, Sementsverksmiðjan ehf., Statistics Iceland, Central Bank of Iceland.

only about a third of investment will be credit-financed. Nevertheless, this represents an increase from the Bank's previous survey, which indicated that 20-30% of investment would be financed with credit. The survey does not cover hotel construction, but according to information from developers, a sizeable increase in hotel construction can be expected this year. In addition to this is investment in ships and aircraft, based on new information not available at the beginning of 2016. These indications are in line with other information suggesting relatively rapid growth in business investment (Chart IV-9).

Table IV-1 Survey of corporate investment plans (excluding ships and aircraft)¹

Largest 101 (98) firms Amounts in ISK billions	2014	2015	2016	Change between	Change between
				2014 and 2015 (%) (last survey)	2015 and 2016 (%) (last survey)
Fisheries (16)	5.9	12.2	15.7	106.1 (49.3)	28.1 (1.7)
Industry (18)	4.8	4.3	4.6	-9.9 (-20.4)	8.1 (-0.8)
Wholesale and retail sale (23)	5.1	7.4	7.9	46.2 (24.1)	7.1 (16.7)
Transport and tourism (7)	13.8	18.2	34.0	31.5 (45.3)	86.9 (38.1)
Finance/Insurance (9)	5.1	4.1	6.2	-19.5 (-8.5)	51.7 (32.5)
Media and IT (7)	7.3	7.3	7.3	-0.4 (-2.9)	-0.4 (3.3)
Services and other (21)	14.6	16.4	15.6	12.6 (3.5)	-5.2 (-4.5)
Total 101 (98)	56.6	69.9	91.3	23.5 (16.4)	30.6 (15.0)

1. In parentheses is a comparison with the last survey, in which respondents from 98 firms were asked about investment plans for 2015-2016 (*Monetary Bulletin* 2015/4).

Source: Central Bank of Iceland.

Residential investment to rise marginally this year and pick up strongly in 2017

Residential investment contracted by more than 3% year-on-year in 2015, while the forecast in the last *Monetary Bulletin* assumed a 3% increase. The contraction was somewhat surprising, but new information suggests that the indicators generally used to project residential investment led to an overestimation (Chart IV-10). As is mentioned above, the Gallup survey among Iceland's 400 largest firms indicates that construction industry executives are very optimistic about the near-term economic outlook, but this may reflect planned activity in hotel construction rather than residential construction. This would be in line with the assessment of the Federation of Icelandic Industries, which indicates that fewer residential properties were built in 2015 than previously estimated. Housing starts appear to be increasing in line with previous estimates, however, but the time to completion has lengthened, as contractors have shifted their emphasis to hotel construction. Residential investment is expected to grow by just under 6% this year and nearly a fifth per year, on average, in 2017 and 2018. In spite of this, the ratio of residential investment to GDP will still be below its thirty-year average at the end of the forecast horizon.

Investment in line with its long-term average during the forecast horizon

As is mentioned above, business investment rose above its thirty-year average in 2015, for the first time since 2008. Total investment was still about 1 percentage point below its long-term average, but it has been growing steadily in recent years. According to the forecast, in-

vestment will grow by about 14% this year, driven largely by general business investment and energy-intensive investment (Chart IV-11). The weight of these two investment categories will decline sharply in the next two years, however, and according to the forecast, residential investment will be the largest contributor. If this forecast materialises, the investment-to-GDP ratio will be about 20% this year and in the 19-20% range in 2017 and 2018.

Public sector

Modest growth in public expenditure throughout the forecast horizon

Public spending, particularly central government spending, has been restricted since the financial crisis struck. In 2015, public consumption grew by 1.1%, a decline of ½ a percentage point from the year before, indicating that the sizeable cost increases due to public employees' pay rises have crowded out real growth in public consumption. The forecast assumes that this is the case; therefore, public consumption is projected to grow by an average of only 1½% per year throughout the forecast horizon. The same applies to public investment, which is forecast to grow by an average of 3½% per year over the horizon. This forecast is based on the assumption that the ratio of investment to GDP will remain unchanged throughout the forecast horizon, at just under 3%. A similar assumption concerning public investment can be found in the Ministry of Finance and Economic Affairs' investment strategy. No spending for the construction of the new national hospital is assumed, apart from that already included in the National Budget for 2016, as it is clear that the majority of the construction will take place outside the current forecast horizon.

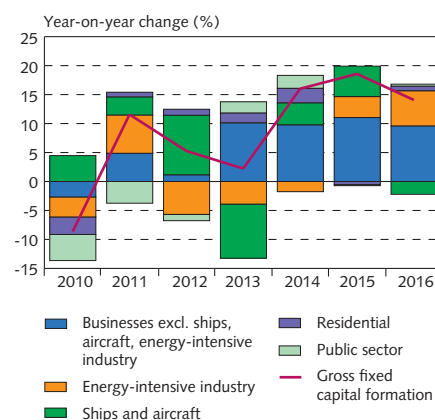
Public investment high compared to other countries hit hard by the financial crisis

At the end of 2015, the real value of public investment in Iceland was 40% lower than in 2008, when it amounted to 4.7% of GDP. By the end of last year, however, that ratio had fallen by nearly 2 percentage points, to 2.9%. Ireland is the European country that reduced public investment the most in the wake of the crisis, with a decline amounting to 3.4 percentage points of GDP between 2008 and 2013 (Chart IV-12). Spain and Greece were next, with a reduction of over 2 percentage points of GDP. Ireland's investment-to-GDP ratio is also lowest, at 1.8%.

Central and general government performance slightly poorer than forecast in 2015

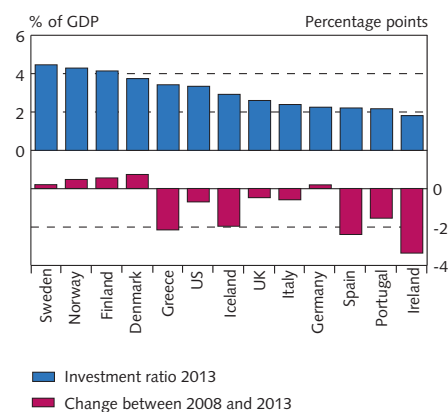
According to preliminary figures from Statistics Iceland, public sector operations were close to being in balance in 2015, with a deficit of 0.5% of GDP, as opposed to a deficit of 0.1% in 2014. The forecast in the November *Monetary Bulletin* assumed, however, that operations for the year would be in balance. Regular public sector revenues were overestimated by 0.6% of GDP in the forecast, and total expenditures were overestimated by 1.1% of GDP.

Chart IV-11
Gross fixed capital formation and contribution of main components 2010-2016¹



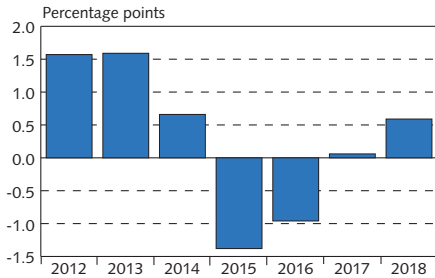
1. Central Bank baseline forecast 2016.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-12
Public investment in selected industrialised countries 2013



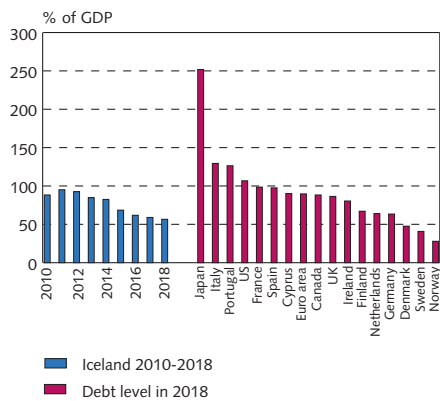
Sources: OECD, Statistics Iceland.

Chart IV-13
Change in central government cyclically adjusted primary balance 2012-2018¹



1. Central Bank baseline forecast 2015-2018. Primary balance is adjusted for one-off revenues and expenditures (e.g., dividends and the accelerated write-down of indexed mortgage loans).
Sources: Financial Management Authority, International Monetary Fund, Central Bank of Iceland.

Chart IV-14
General government gross debt



Sources: International Monetary Fund, Ministry of Finance and Economic Affairs, Central Bank of Iceland.

Chart IV-15
Exports and trading partner demand 2008-2015



Sources: Macrobond, Statistics Iceland, Central Bank of Iceland.

New fiscal strategy and plan for 2017-2021

According to the Act on Public Finances, Parliamentary resolutions on a fiscal policy and a fiscal plan for the next five years were presented before Parliament for discussion at the end of April. The plan assumes that central and general government results will be positive by at least 1% of GDP in all five years. Municipalities' performance is thus projected to be in balance over the same period. The fiscal strategy is similar to what was provided for in the medium-term plan accompanying the fiscal budget proposal for 2016. The forecast in *Monetary Bulletin* assumes that the Treasury outcome will be 0.5% of GDP weaker per year than in the fiscal strategy over the next two years, or 0.6% of GDP in 2017 and a surplus of just below 1% of GDP in 2018.

Significant fiscal easing two years in a row

Excluding revenues from stability contributions, central government performance will deteriorate in 2016 according to the Bank's baseline forecast and then improve slightly in the following two years. The positive output gap is projected to widen this year and remain relatively sizeable for the majority of the forecast horizon. This year's cyclically adjusted primary balance will therefore deteriorate by about 1% of GDP year-on-year. The fiscal easing by this amount comes on the heels of easing in 2015 by about 1.4%, for a total of 2.4% in 2015 and 2016 combined, which is somewhat more than was assumed in the Bank's February forecast. The current forecast assumes slight fiscal tightening amounting to 0.7% of GDP in the next two years, which is virtually identical to the February forecast (Chart IV-13). The vast majority of the tightening will take place on the expenditures side.

Public sector debt declines rapidly, but slower than previously assumed

Estimates of the decline in Treasury debt have assumed that the 30% stake in Landsbankinn will be sold during the current electoral term; however, this is unlikely to happen because Parliamentary elections are to be held early. As a result, it is now assumed that Treasury debt will amount to 54% of GDP at the end of 2016 instead of just under 50%, as was assumed in the forecast in *Monetary Bulletin* 2015/4. Public sector debt will total 62% of GDP at the same time, and 57% by the end of the forecast horizon (Chart IV-14).

External trade and the current account balance

Outlook for strong export growth for the second year in a row

Goods and services exports increased by 8.2% year-on-year in 2015, due mainly to services exports, which rose by nearly 14%. This is somewhat more than was forecast in February, primarily because of increased revenues from transport services. Goods exports also increased more than was projected in February, due to strong aluminium exports in Q4/2015. Total export growth therefore outpaced the February forecast by about 1½ percentage points. This year's strong services exports come in addition to the upsurge in the past few years, with annual growth averaging about 7½% over the past five years.

This sizeable increase, which is well in excess of growth in goods exports, is particularly noteworthy because demand in trading partner countries has been relatively weak and the real exchange rate has risen somewhat over the same period (Chart IV-15).

Goods exports have contracted somewhat year-on-year so far in 2016, but indicators suggest that services exports will continue to grow briskly. For instance, figures on tourist departures via Keflavík International Airport show a 35% increase year-on-year in the first four months of 2016. Furthermore, Iceland's two largest airlines have indicated that they will increase their seat offerings by a third year-on-year in 2016. The outlook is for services exports to grow at about the same pace as in 2015, and if this materialises, it will be the second year in a row with a growth rate of more than 12% year-on-year. Growth in goods exports is also expected to be broadly unchanged from 2015. As a result, total exports are forecast to grow by nearly 8% year-on-year, over 1 percentage point more than was forecast in February. The deviation is due mainly to stronger growth in tourism.

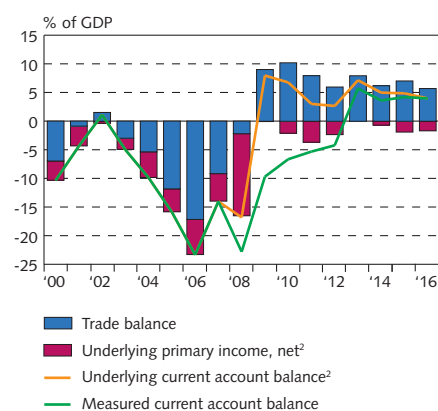
Significant growth in consumer and investment goods imports

Goods and services imports grew by 13.5% in 2015, the largest single-year increase since 2005. Imports of ships and aircraft were sizeable, but excluding these, imports grew by 12% year-on-year, which is well in line with the Bank's February forecast. This surge in growth reflects rapid growth in domestic demand, which is reflected, among other things, in robust imports of consumer durables. Statistics Iceland's external trade figures imply that import growth has continued in this vein year-to-date, with significant imports of consumer goods – motor vehicles in particular – and investment goods. As a result, the outlook is for year-2016 goods imports to be consumer-driven to a large degree, as growth in domestic demand and services exports is forecast to increase during the year. Furthermore, Icelandic Tourist Board figures on Icelanders' departures via Keflavík International Airport indicate that services imports will increase year-on-year and be somewhat stronger than was forecast in February. In addition, imports of ships and aircraft are expected to rise, and total imports will therefore increase by nearly 12% year-on-year. This is somewhat more than was forecast in February, as the outlook is for stronger growth in domestic demand than was envisioned then.

Negative contribution of net trade to GDP growth despite robust export growth

Imports have a general tendency to move in line with domestic demand, as they did in 2015, when the contribution from net trade was negative by 2 percentage points of GDP despite strong growth in exports. This year, growth in both imports and exports is expected to be somewhat weaker than in 2015, but the slowdown in import growth will be greater, and as a result, net trade will be less of a drag on GDP growth than it was last year. This will gradually turn around as the forecast horizon progresses, and the contribution from net trade will be positive by the end of the period, as the new silicon plants are expected to have begun export manufacturing by then.

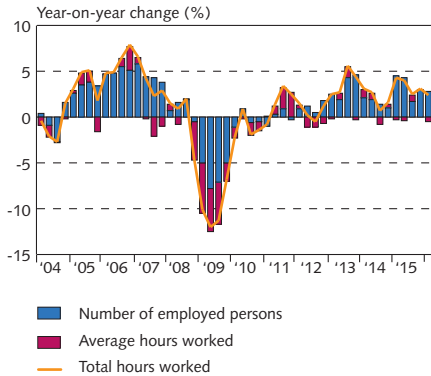
Chart IV-16
Current account balance 2000-2016¹



1. Including secondary income. Central Bank baseline forecast 2016.
2. Excluding the calculated income and expenses of DMBs in winding-up proceedings and the effects of pharmaceuticals company Actavis on the balance on income until 2012. Also adjusted for the failed DMBs' financial intermediation services indirectly measured (FISIM). With the recent settlement of the failed banks' estates, as of 2016 there is no longer any difference between headline and underlying current account numbers.

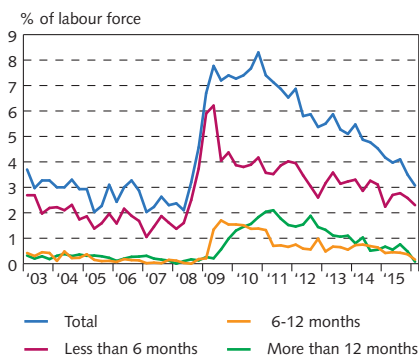
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-17
Changes in employment and hours worked
Q1/2004 - Q1/2016



Source: Statistics Iceland.

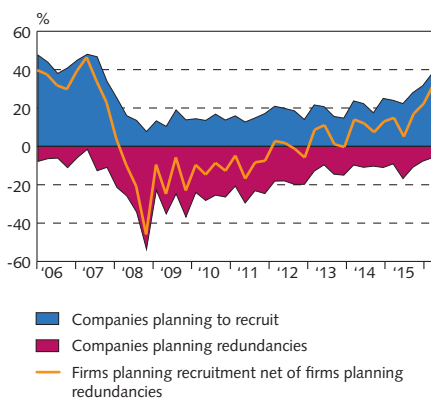
Chart IV-18
Unemployment by duration¹
Q1/2003 - Q1/2016



1. Seasonally adjusted.

Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-19
Companies planning to change staffing
levels within 6 months
Q1/2006 - Q1/2016



Source: Gallup.

Outlook for shrinking current account surplus

Last year's trade surplus amounted to 7% of GDP, which is broadly in line with the February forecast. If the forecast materialises, this year's surplus will be somewhat smaller than was forecast in February, or about 5½%, because of the increase in imports of ships and aircraft.

The underlying current account surplus totalled 108 b.kr. in 2015, or about 4.9% of GDP, about the same as in 2014 (Chart IV-16). The current account surplus is expected to narrow to 4% of GDP this year, in line with a shrinking trade surplus, and continue to decline for the remainder of the forecast horizon.¹ If this forecast materialises, gross national saving will be about 23-24% of GDP during the forecast horizon.

Labour market

Strong growth in labour demand

In Q1, year-on-year growth in labour demand was broadly in line with the February forecast. According to the Statistics Iceland labour force survey (LFS), total hours worked rose by 2.3%, while the forecast assumed an increase of 2.1%. The rise in total hours is due to a 2.8% increase in the number of employed persons, whereas average hours worked declined by 0.5% as hours worked by the youngest age group fell by nearly 4% (Chart IV-17). The labour participation rate and the employment rate also rose between years, and the number of persons outside the labour market continued to fall. Seasonally adjusted unemployment measured 3.1% in Q1, having declined by 0.4 percentage points between quarters.² It declined by less than the increase in the employment rate, as the participation rate also rose. Figures on unemployment also show a continued decline in long-term unemployment. The share of unemployed persons who have been out of work for longer than six months is at its lowest since 2008 (Chart IV-18).

Executives expect stronger staff recruitment than at any time since 2007

The outlook is for labour demand to remain robust. For example, Gallup's spring survey indicated that firms interested in recruiting staff in the next six months outnumbered those planning redundancies by nearly a third (Chart IV-19). This is considerably more than in the winter survey and in the Gallup survey from a year ago. The percentage is at its highest since 2007, as is the number of firms planning to hire workers in coming months. The change since the last survey is due both to an increase in the number of firms planning to recruit and to a decline in the number planning to lay workers off. According to the most recent survey, more executives in all sectors except fishing were planning

1. In recent years, the Central Bank has published estimates of the underlying current account balance, which attempt to look through the effects that the calculated accrued obligations of the failed banks' estates will have on the current account balance. The recent settlement of the estates has obviated the need for this distinction, however, and as of this year, there is no longer any difference between the headline and underlying current account numbers.
2. Unemployment as registered by the Directorate of Labour (DoL) was less, or 2.3%, in Q1, after adjusting for seasonality. It had declined by 0.3 percentage points between quarters and by 0.8 percentage points between years.

to recruit staff, and the share of firms intending to increase staffing levels was larger among those that sell their products abroad than among firms that sell domestically. Demand for labour is strongest, however, in construction, where the share of firms planning to add on staff in the next six months exceeded the share planning to downsize by about 70 percentage points. This is the largest percentage of construction firms planning to recruit since the survey was introduced in 2002.

Increased labour use rather than productivity growth

Labour productivity grew by 0.6% in 2015 and is expected to remain sluggish. In 2016 and 2017, it is forecast to grow by an average of roughly 1% per year, which is broadly in line with the last forecast, although the distribution between the two years is slightly changed. As has been discussed previously in *Monetary Bulletin*, the current recovery is considerably different from previous recoveries as regards the weak recovery of productivity; however, this is in line with developments in many developed economies in the recent past.

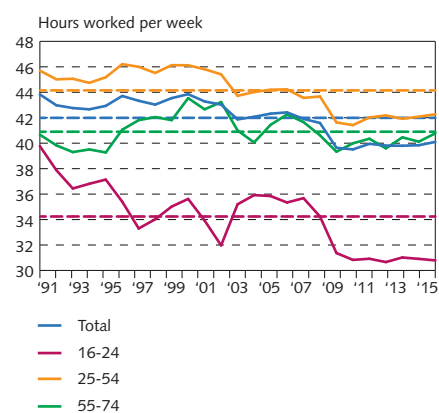
Shorter work week a cyclical development but also part of a long-term trend

As has been discussed previously in *Monetary Bulletin*, average hours worked have increased slowly since the labour market recovery began in 2010, after having declined sharply in the wake of the financial crisis.³ The shortening of the work week appears to be only partly connected to the business cycle position, however, as working hours among all age groups except the oldest workers had already begun to fall somewhat before the 2008 recession began (Chart IV-20). The employment rate in the youngest age group has risen somewhat, however, while the employment rate among workers over age 54 has declined (Chart IV-21). Because of these changes, the youngest age group's share in total hours worked has fallen from an average of more than 13% in the 1990s to just over 12% in 2015, while the oldest age group's share rose from 16% to more than 23% over the same period. The share of the core group (aged 25-54) in total hours worked has also declined, from just under 71% to slightly more than 64%, owing to shorter hours worked, and the employment rate for this group reached its long-term average in 2015. If average hours worked in each age group had been the same in 2015 as in 2003, when the economy was relatively well balanced, total hours worked would have been 4.4% more than they actually were.

Uncertain how readily those marginally attached to the labour market can find work

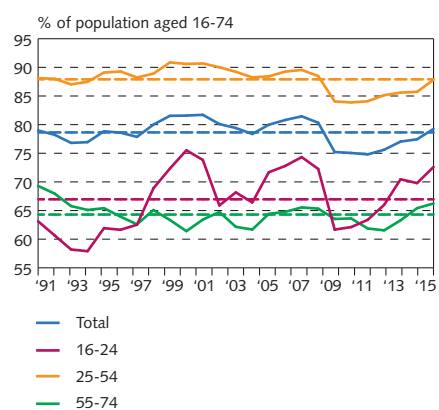
People who are considered unemployed according to the LFS definition are part of the labour supply. In addition to this group are three others that can be considered a potential addition to the labour market (see Box 3 in *Monetary Bulletin* 2015/2): those who are employed part-time but would like to work more (often referred to as under-

Chart IV-20
Hours worked, by age group 1991-2015¹



1. Broken lines show 1991-2015 average.
Sources: Statistics Iceland, Central Bank of Iceland.

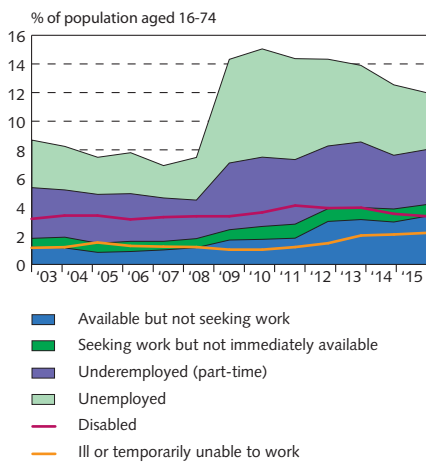
Chart IV-21
Employment rate, by age group 1991-2015¹



1. Broken lines show 1991-2015 average.
Sources: Statistics Iceland, Central Bank of Iceland.

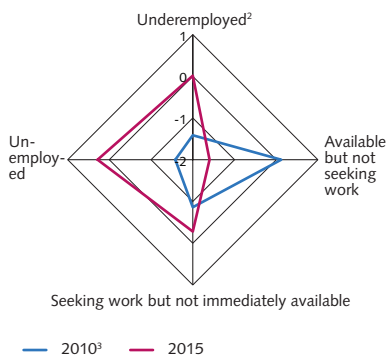
3. Based on the working hours of persons who worked at least one hour during the reference week.

Chart IV-22
Labour market status 2003-2015



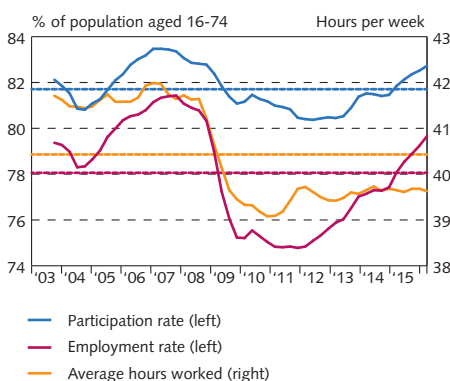
Source: Statistics Iceland.

Chart IV-23
Indicators of labour market tension¹
Deviation from 2003-2015 average (number of standard deviations)



1. As a percentage of population. Multiplied by -1 so that a negative deviation from the average indicates tension. 2. Number of underemployed part-time workers. 3. The year when labour market recovery began.
Sources: Statistics Iceland, Central Bank of Iceland.

Chart IV-24
Labour participation, employment, and hours¹
Q1/2003 - Q1/2016



1. Four-quarter moving average. Broken lines show Q1/2003 - Q1/2016 average.
Sources: Statistics Iceland, Central Bank of Iceland.

employed) and can therefore be viewed as part-time unemployed,⁴ those who are seeking work but cannot begin within two weeks, and those who could begin work within two weeks but are not looking for a job. The last two of these groups are classified as outside the labour market, but the former includes, for instance, those who cannot work because they cannot find childcare within two weeks, and the latter includes people who have given up looking for work, among others.

These three groups grew significantly when labour demand contracted in 2008. After the labour market recovery began in 2010, there was a decline in the number of underemployed persons and those looking for work but unable to begin immediately. The group who are available to work but not looking for a job continued to grow and is still doing so, probably because these workers' attachment to the labour market has weakened (Chart IV-22).⁵

Given the deviation in these three groups and the unemployed from their averages, it seems that the scope for increased labour market participation is greatest among those who are available but not seeking work (Chart IV-23). On the other hand, it is uncertain how easy it will be for them to find jobs, as people who have been unemployed or outside the labour market for a long time often have greater difficulty finding work, as employers tend to consider the long-term unemployed to constitute limited human capital.

Indicators of factor utilisation

Increasing shortage of labour ...

According to the spring survey conducted by Gallup, just under a third of firms considered themselves short-staffed, the largest share since year-end 2007 and an increase of nearly 14 percentage points year-on-year. Almost 60% of construction firms and 40% of transport and tourism companies considered themselves understaffed, and the share of companies in these sectors that plan to increase their staffing levels is at an all-time high. Only about half of firms considered themselves able to respond to an unexpected increase in demand, about the same as in Q3/2008. This proportion has declined by 10 percentage points year-on-year and by over 25 percentage points from its 2011 peak. The shortage of labour has to some extent been addressed through importation of labour, but net immigration of foreign nationals has measured just under 3 percentage points since Q3/2012, when it turned positive.

... and most indicators imply that the slack in the labour market has disappeared

There is increased tension in the labour market, owing to strong labour demand. The participation rate is back to its 2007 peak and, as did the

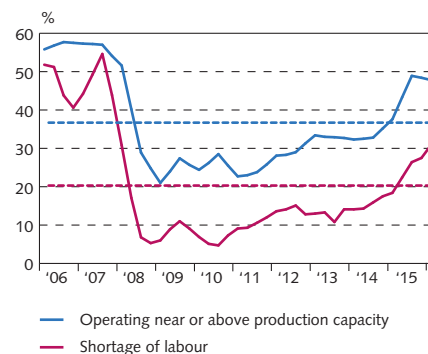
4. A distinction is made according to whether those wishing to work more hours are employed part-time or full-time. Those who are employed full-time and want to work more want more income, not necessarily longer working hours, whereas those who are employed part-time and want to work more are classified as underutilised labour force.
5. The findings of Bjarni G. Einarsson (2015), "The ins and outs of Icelandic unemployment", Central Bank of Iceland *Working Paper* no. 69, indicate, for instance, that a third of changes in unemployment occur because workers exit the labour market.

employment rate, reached its 2003-2015 average in the first half of last year (Chart IV-24). Average hours worked is still below its historical average, however, and the measure of a potential addition to the labour market is above it. Therefore, there could still be some room to respond to increased labour demand by lengthening the work week, importing labour, or increasing the participation of groups classifiable as a potential addition to the labour market, as these factors have generally developed in line with the business cycle to some degree.

Output gap to widen in 2016

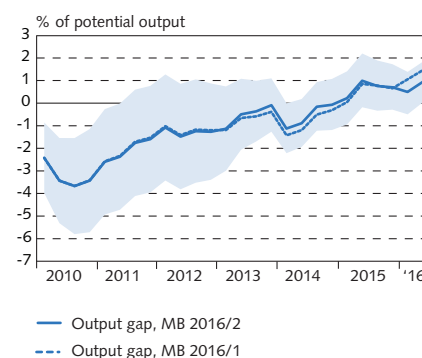
Surveys among executives indicate that a growing number of firms are having difficulty filling available positions and responding to increased demand (Chart IV-25). This supports the assessment that a positive output gap opened up in 2015 after several years of factor underutilisation, and that it will widen somewhat this year. GDP growth averaged about 3½% over the past three years, somewhat in excess of potential output. As in February, the slack in output is considered to have disappeared early in 2015, and the positive output gap is projected to grow markedly as 2016 progresses, as the outlook is for robust GDP growth this year (Chart IV-26). As always, though, this assessment is subject to considerable uncertainty.

Chart IV-25
Indicators of factor utilisation¹
Q1/2006 - Q1/2016



1. According to Gallup Sentiment Survey among Iceland's 400 largest firms. Seasonally adjusted data. Data on the operation level relative to production capacity are reported semiannually. Quarterly data are generated via interpolation. Broken lines show period averages.
Sources: Gallup, Central Bank of Iceland.

Chart IV-26
Output gap¹
Q1/2010 - Q2/2016



1. Shaded area shows ± 1 five-year standard deviation. Central Bank baseline forecast 2016.
Sources: Statistics Iceland, Central Bank of Iceland.