NORGES BANK

2|14 JUNE

MONETARY POLICY REPORT

WITH FINANCIAL STABILITY ASSESSMENT

Norges Bank
Oslo 2014

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Monetary Policy Report
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The *Report* is published four times a year, in March, June, September and December. The *Report* assesses the interest rate outlook and forms the basis for Norges Bank's advice on the level of the countercyclical capital buffer. The *Report* includes projections of developments in the Norwegian economy.

At its meeting on 7 May 2014, the Executive Board discussed relevant themes for the *Report*. At the Executive Board meeting on 4 June 2014, the economic outlook, the monetary policy stance and the need for a countercyclical capital buffer for banks were discussed. On the basis of this discussion and a recommendation from Norges Bank's management, the Executive Board adopted at its meeting on 18 June 2014 a monetary policy strategy for the period to the publication of the next *Report* on 18 September 2014. The Executive Board also approved Norges Bank's advice to the Ministry of Finance on the level of the countercyclical capital buffer. The Executive Board's assessment of the economic outlook and monetary policy strategy is provided in "The Executive Board's assessment". The advice on the level of the countercyclical capital buffer is submitted to the Ministry of Finance in connection with the publication of the *Report*. The advice is made public when the Ministry of Finance has made its decision.

The *Report* is available on www.norges-bank.no.

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This *Monetary Policy Report* is based on information in the period to 12 June 2014.
The monetary policy strategy was approved by the Executive Board on 18 June 2014.

Monetary policy in Norway

OBJECTIVE
Norges Bank's operational implementation of monetary policy shall be oriented towards low and stable inflation. The operational target of monetary policy is low and stable inflation, with annual consumer price inflation of close to 2.5% over time.

IMPLEMENTATION
Norges Bank operates a flexible inflation targeting regime, so that weight is given to both variability in inflation and variability in output and employment. In general, the direct effects on consumer prices resulting from changes in interest rates, taxes, excise duties and extraordinary temporary disturbances are not taken into account.

Monetary policy influences the economy with a lag. Norges Bank sets the interest rate with a view to stabilising inflation close to the target in the medium term. The horizon will depend on disturbances to which the economy is exposed and the effects on prospects for the path for inflation and the real economy.

THE DECISION-MAKING PROCESS
The monetary policy stance is presented to the Executive Board for discussion at a meeting about two weeks before the *Monetary Policy Report* is published. Themes of relevance to the *Report* have been discussed at a previous meeting. On the basis of the analysis and discussion, the Executive Board assesses the consequences for future interest rate developments. The final decision to adopt a monetary policy strategy is made on the day before the *Report* is published. The strategy applies for the period up to the next *Report* and is presented at the beginning of the *Report*.

The key policy rate is set by Norges Bank's Executive Board. Decisions concerning the interest rate are normally taken at the Executive Board's monetary policy meeting. The Executive Board has six monetary policy meetings per year.

REPORTING
Norges Bank reports on the conduct of monetary policy in the *Monetary Policy Report* and the *Annual Report*. The Bank's reporting obligation is set out in Article 75c of the Constitution, which stipulates that the Storting shall supervise Norway's monetary system, and in Section 3 of the Norges Bank Act. The *Annual Report* is submitted to the Ministry of Finance and communicated to the King in Council and to the Storting in the Government's Financial Markets Report. The Governor of Norges Bank provides an assessment of monetary policy in an open hearing before the Standing Committee on Finance and Economic Affairs in connection with the Storting deliberations on the Financial Markets Report.

Countercyclical capital buffer

The objective of the countercyclical capital buffer is to bolster banks' resilience to an impending downturn and counter possible procyclical effects of banks' lending practice.

The Regulation on the Countercyclical Capital Buffer was issued by the Government on 4 October 2013. The Ministry of Finance sets the level of the buffer four times a year. Norges Bank draws up a decision basis and provides advice to the Ministry regarding the level of the buffer. In drawing up the basis, Norges Bank and Finanstilsynet (Financial Supervisory Authority of Norway) exchange relevant information and assessments. The advice and a summary of the background for the advice are submitted to the Ministry of Finance in connection with the publication of Norges Bank's *Monetary Policy Report*. The advice is published when the Ministry of Finance has made its decision.

The buffer rate shall ordinarily be between 0% and 2.5% of banks' risk-weighted assets. The buffer requirement will apply to all banks with activities in Norway, eventually including branches of foreign banks.

Norges Bank will recommend that the buffer rate should be increased when financial imbalances are building up or have built up. The buffer rate will be assessed in the light of other requirements applying to banks. The buffer rate may be reduced in the event of an economic downturn and large bank losses, with a view to mitigating the procyclical effects of tighter bank lending.

EXECUTIVE BOARD'S ASSESSMENT

At its meetings on 4 June and 18 June 2014, the Executive Board discussed the monetary policy strategy. The starting point for the discussion was the strategy that the Executive Board adopted at its meeting on 26 March 2014 and the analysis in the March 2014 *Monetary Policy Report*. The strategy suggested that the key policy rate should be in the interval 1%–2% in the period to 19 June 2014, unless the Norwegian economy was exposed to new major shocks. The analysis in the March 2014 *Monetary Policy Report* implied a key policy rate of 1.5% in the period to summer 2015, followed by a gradual rise. With this path for the key policy rate, there were prospects that inflation would lie somewhat below, but close to, 2.5% throughout the projection period. Capacity utilisation was projected to edge down in the coming year, but to edge up again towards the end of the projection period to close to a normal level.

In its discussion at the meeting on 7 May 2014, the Executive Board placed emphasis on the fact that growth among trading partners had been broadly in line with expectations, but that the expected increase in interest rates had again been pushed further out. In Norway, new information indicated that economic developments were broadly in line with projections. House prices had moved up again after falling in autumn 2013. At the same time, bank loan and deposit rates for households and enterprises had been reduced a little. Consumer price inflation was approximately as projected. The Executive Board decided to keep the key policy rate unchanged at 1.5%.

In its discussion on 4 June and 18 June, the Executive Board placed emphasis on the following developments:

- Growth among Norway's trading partners remains moderate. Growth has slackened in emerging economies, while there are signs of a gradual improvement in many advanced economies. Growth for trading partners as a whole is projected to move up from 1¼% in 2013 to 2¼% in 2014, rising further to 2½% in the coming years. The prospects for growth abroad remain broadly unchanged on the March *Report*.

- Policy rates are close to zero in many countries. Market expectations concerning policy rates are lower than expected in March, primarily reflecting lower interest rate expectations for the euro area and Sweden.

- The krone, as measured by the import-weighted (I-44) exchange rate, has been slightly stronger than projected in the March *Report*.

- Banks have lowered lending and deposit rates for households and enterprises, giving rise to the prospect of a lower average lending rate in the next quarters than expected in the March *Report*. Interest rates on loans to households and enterprises are still considerably higher than the key policy rate.

- Growth in the Norwegian economy has been broadly in line with that projected. In May, Norges Bank's regional network reported that output growth remained moderate, but that growth had edged up since February. Household confidence indicators have improved, and growth in private consumption is expected to be higher than projected earlier. On the other hand, there are prospects that growth in business investment and petroleum investment may be lower than expected. Registered unemployment has risen a little. Capacity utilisation in the mainland economy has likely edged down, but is still assessed to be close to a normal level.

- After falling through autumn 2013, house prices have picked up again in recent months and to a somewhat further extent than projected earlier. Household debt has continued to expand.

- Inflation has been slightly higher than projected. Consumer price inflation adjusted for tax changes and excluding energy products (CPI-ATE) was 2.3% in May. Underlying inflation is projected to continue to run between 2% and 2½%. The wage increases negotiated in this year's wage settlements are in line with the projection for annual wage growth of 3½% in the March *Report*.

The point of departure for the Executive Board's assessment of monetary policy is that the key policy rate is set with a view to keeping inflation close to 2.5% over time. The objective of low and stable inflation is weighed against the objective of stable developments in output and employment. Monetary policy should also be robust. There is uncertainty surrounding economic driving forces and the functioning of the economy. This normally suggests a gradual approach in interest rate setting. Monetary policy also takes into account the risk of a build-up of financial imbalances.

Higher capital requirements will strengthen the resilience of banks and can mitigate the risk that imbalances trigger or amplify an economic downturn. If financial imbalances build up, it will be appropriate to assess the level of the countercyclical capital buffer for banks.

The Executive Board noted that the analyses in this *Report* imply a key policy rate at about today's level in the period to end-2015, followed by a gradual rise. The key policy rate forecast is lower than in the March 2014 *Report*. With this path for the key policy rate, the analysis in this *Report* implies that inflation will be somewhat below, but close to, 2.5% throughout the projection period. Capacity utilisation may edge down in the coming year, but is expected to increase somewhat again to close to a normal level towards the end of the projection period.

The Executive Board pointed out that the expected increase in interest rates abroad has been pushed further out and that the krone has appreciated since March. The European Central Bank has lowered its policy rate and market expectations point to further rate cuts by Sveriges Riksbank. Changes in monetary policy expectations abroad may influence the krone and hence the prospects for inflation and activity in Norway.

The Executive Board discussed recent developments in the housing market, noting that it is uncertain whether the rise in house prices through spring represented a catch-up after the decline in autumn 2013 or whether increased household optimism could lead to higher growth in consumption and a continued rise in house prices.

The Executive Board also noted that the latest investment intentions survey for the petroleum industry now indicates a decline in 2015. Experience shows that the projections are shrouded in uncertainty. A sharp fall in petroleum investment may weaken growth prospects for the Norwegian economy. The krone may then also depreciate.

In its assessment of monetary policy in the coming period, the Executive Board gave weight to the fact that global and domestic economic developments have largely been in line with expectations, but growth prospects for the Norwegian economy may be somewhat weaker than previously projected. Both the objective of keeping inflation close to 2.5% and the objective of sustaining capacity utilisation in the years ahead could in isolation imply a somewhat lower key policy rate. A lower key policy rate today may, on the other hand, increase the risk that financial imbalances build up again. Moreover, the Executive Board gave weight to the uncertainty surrounding the current situation and the functioning of the economy. Robustness considerations imply proceeding with caution in interest rate setting. The Executive Board's overall assessment is that the key policy rate should remain at today's level in the coming period. A further weakening of the outlook for the Norwegian economy may warrant a reduction in the key policy rate.

At its meeting on 18 June, the Executive Board decided to keep the key policy rate unchanged at 1.5%. At the same meeting, the Executive Board decided that the key policy rate should be in the interval 1%-2% in the period to the publication of the next *Report* on 18 September 2014, unless the Norwegian economy is exposed to new major shocks.

Øystein Olsen
Oslo 19 June 2014

1 ECONOMIC SITUATION

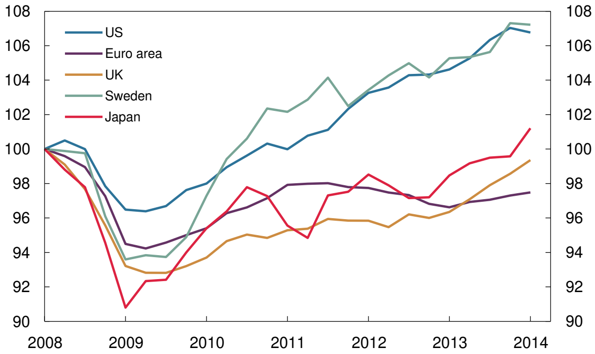
The moderate economic upturn is continuing in advanced countries (see Chart 1.1). Activity is gaining traction in almost all euro area countries, but high unemployment and the need for continued deleveraging in the private and public sector may act as a restraint on activity for a long time ahead. In the US, macroeconomic indicators point to a rapid pick-up in growth in the wake of an unusually cold winter. The labour market is improving and private demand is growing solidly. The upturn is continuing in the UK and Sweden. In Japan, uncertainty surrounding underlying economic developments has increased, partly owing to an increase in VAT in April. In the coming years, improved credit conditions, reduced fiscal policy tightness and continued expansionary monetary policy are expected to contribute to higher growth in most advanced economies.

In China, growth softened in the first quarter, primarily reflecting weaker growth in property investment. Infrastructure investment is expected to increase ahead and continued solid growth in private consumption will contribute to sustaining growth, while developments may be somewhat weaker than previously anticipated. Growth prospects for most Asian emerging economies have shown little change, but growth in Russia and Brazil is likely to be lower than projected earlier. Looking ahead, higher inflation and monetary policy tightening may curb growth in a number of emerging economies. On the other hand, higher demand from traditional advanced economies may fuel export growth.

Global growth prospects have shown little change since the March *Report* (see Chart 1.2 and Table 3 in Annex). Growth among Norway's trading partners is projected to pick up from 1¼% in 2013 to 2¼% in 2014. Further ahead in the projection period, annual growth is projected at around 2½%. Global growth is projected at 3% in 2014, on a par with the average for the past 30 years (see box on page 36 for a further discussion of developments in different regions).

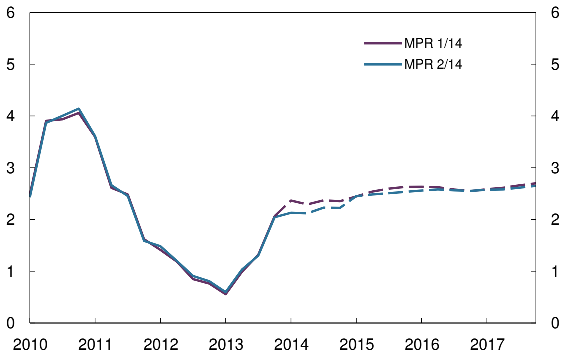
Consumer price inflation has edged down further in many advanced countries (see Chart 1.3). For many of Norway's trading partners, there are prospects that inflation will be slightly lower in 2014 than projected in the March *Report* (see Table 4 in Annex). Euro area inflation has declined to about ½%.

Chart 1.1 GDP. Seasonally adjusted volume index. 2008 Q1=100. 2008 Q1 – 2014 Q1



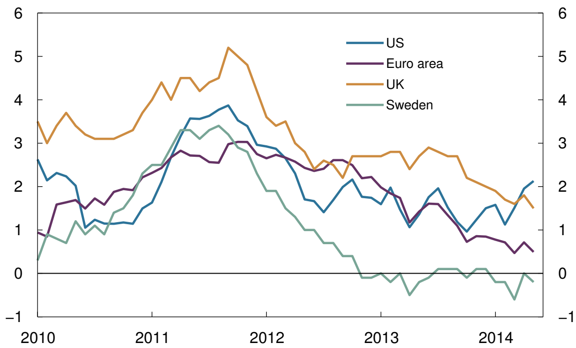
Sources: Thomson Reuters and Norges Bank

Chart 1.2 GDP for trading partners in MPR 1/14 and MPR 2/14. Volume. Four–quarter change. Percent. 2010 Q1 – 2017 Q4[1)]



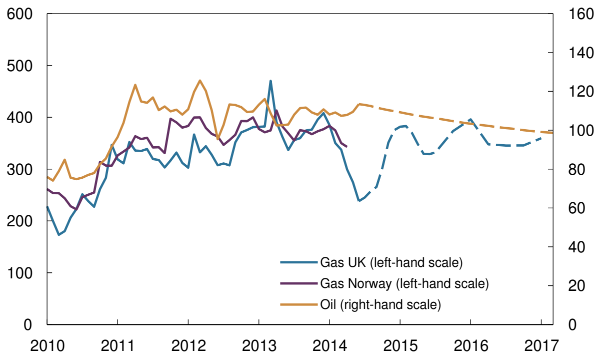
1) Projections from 2014 Q2 (broken lines).
Sources: Thomson Reuters and Norges Bank

Chart 1.3 Consumer prices. Twelve–month change. Percent. January 2010 – May 2014



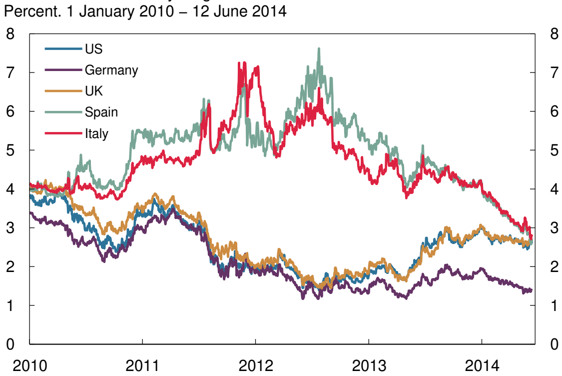
Sources: Eurostat and Bureau of Labour Statistics

Chart 1.4 Oil and gas prices.[1)] January 2010 – March 2017 [2) 3)]



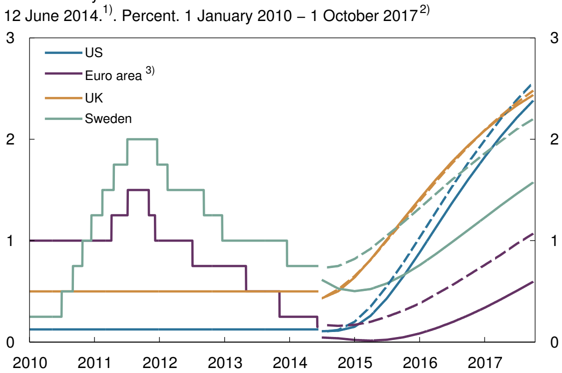
1) USD per barrel for oil and USD per thousand standard cubic metres (Sm^3) for gas.
2) The most recent daily observation (12 June 2014) is used for oil and UK gas prices in June 2014.
3) Forward prices from June 2014.
Sources: IMF, Thomson Reuters, Statistics Norway and Norges Bank

Chart 1.5 Yields on 10–year government bonds. Percent. 1 January 2010 – 12 June 2014



Source: Bloomberg

Chart 1.6 Key rates and estimated forward rates at 20 March 2014 and 12 June 2014.[1)]. Percent. 1 January 2010 – 1 October 2017[2)]



1) Broken lines show estimated forward rates at 20 March 2014. Thin lines show forward rates at 12 June 2014. Forward rates are based on Overnight Index Swap (OIS) rates.
2) Daily data from 1 January 2010 and quarterly data from 2014 Q3.
3) EONIA for the euro area from 2014 Q2.
Sources: Bloomberg and Norges Bank

In Sweden, consumer price inflation is close to zero, but is expected to move up relatively quickly in 2015. Long-term inflation expectations seem to be firmly anchored in most advanced economies. Consumer price inflation among Norway's trading partners as a whole is projected to increase from 1½% in 2014 to 2¼% further out in the projection period.

The price of oil is now around USD 110 per barrel, about USD 5 higher than in March. The projections in this *Report* are based on the assumption that oil prices move in line with futures prices, which now indicate some fall in oil prices ahead (see Chart 1.4). Export prices for Norwegian gas have fallen since the March *Report*. Metal prices have edged up, while food prices have shown a small decline.

Government bond yields in the US and Germany have moved down since March, while UK government bond yields have remained broadly unchanged (see Chart 1.5). In the heavily indebted euro area countries, long-term interest rates have continued to drift down and are now lower than pre-crisis levels. The main stock indices in the US and Europe have edged up since the March *Report*.

Policy rates are still close to zero in many countries (see Chart 1.6). The European Central Bank lowered its policy rate by 0.10 percentage point to 0.15% on 5 June. Market pricing indicates that the policy rate will remain at this level in the period to autumn 2016. In Sweden, the policy rate is expected to be cut in July this year and the first rate increase is expected in summer 2015. In the US, market pricing indicates that an interest rate hike may occur in the course of autumn 2015, but the first rate hike in the UK is expected in spring 2015. For trading partners as a whole, market expectations concerning policy rates are lower than at the time of the March *Report* (see Chart 1.7).

The krone exchange rate has appreciated somewhat since March. Measured by the import-weighted krone exchange rate index (I-44), the krone has been about 0.5% stronger so far in Q2 than projected in the March *Report* (see Chart 1.8).

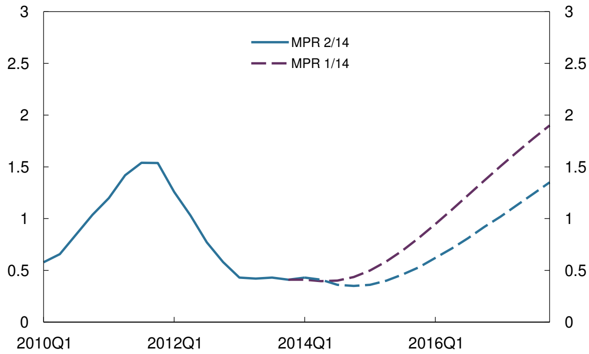
Norwegian banks have ample access to market funding. The risk premium in three-month money market rates is expected to remain around ¼ percentage point in the period ahead. The risk premiums banks pay for new long-term market funding have fallen somewhat since the March *Report* (see Chart 1.9), while the average risk premium for outstanding bank bonds is broadly unchanged. Banks have lowered lending and deposit rates for households and enterprises, giving rise to the prospect of a lower average lending rate in the coming quarters than expected in the March *Report*. In April, the banks included in Norges Bank's lending survey reported a small increase in household credit demand.

Growth in the Norwegian economy is moderate and broadly in line with that projected in the March *Report*. According to the quarterly national accounts, mainland GDP increased by 0.5% in 2014 Q1. In May, Norges Bank's regional network reported continued moderate growth in output. Growth has increased somewhat since February, particularly in the export industry, domestically oriented manufacturing and retail trade (see Chart 1.10). Growth has slackened in oil-related industries supplying the Norwegian petroleum sector.

Labour immigration is continuing at a sustained pace. Employment growth has edged down in line with that projected, and growth is expected to remain weak ahead. Unemployment has risen somewhat, in line with the projections in the March *Report*. In May, registered unemployment was 2.9% of the labour force (see Chart 1.11). Unemployment is projected to increase somewhat in the coming quarters.

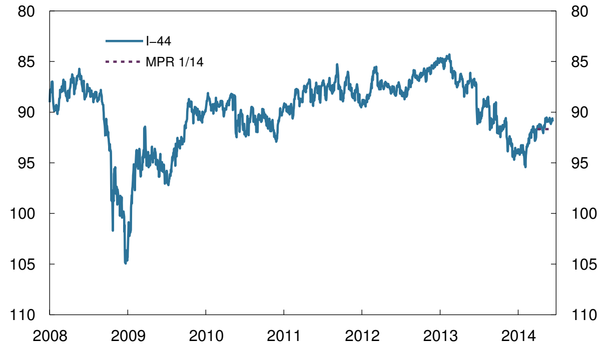
Growth in household consumption has been moderate in recent years and household saving has reached a high level. The pension reform, high labour immigration, tighter credit standard and uncertainty surrounding economic developments have probably induced households to increase saving (see box on page 42). Since the March *Report*, private consumption has increased to a further extent than projected. Household confidence indicators have improved and the enterprises in Norges Bank's regional network report increased growth in the household-oriented sectors. At the same time, bank lending rates are slightly lower. On balance, this suggests that growth in private consumption may prove to be a little higher than projected earlier, and that the rise in the saving ratio may turn out to be somewhat smaller than projected in the March *Report*.

Chart 1.7 Money market rates for trading partners in MPR 1/14 and MPR 2/14.[1)]
Percent. 2010 Q1 – 2017 Q4



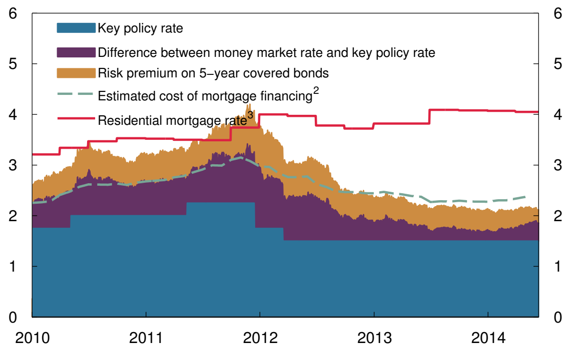
1) Broken blue and purple lines show estimated forward rates at 12 June 2014 and 20 March 2014, respectively.
Sources: Bloomberg and Norges Bank

Chart 1.8 Import-weighted exchange rate index (I-44).[1)]
1 January 2008 – 12 June 2014



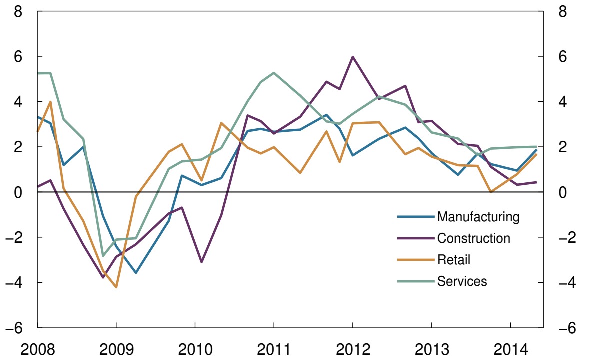
1) A positive slope denotes a stronger krone exchange rate.
Source: Norges Bank

Chart 1.9 Mortgage lending rates[1)] and funding costs.
Percent. 1 January 2010 – 12 June 2014



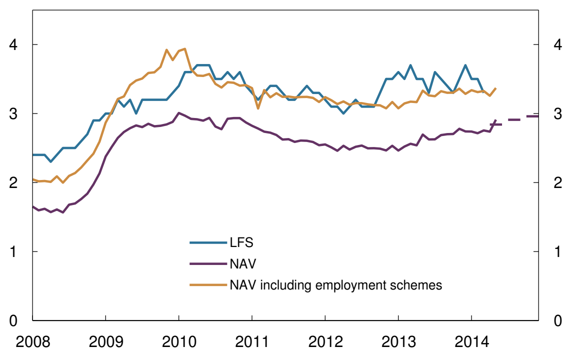
1) The interest rate on lines of credit secured on dwellings provided by all banks and mortgage companies in Norway.
2) Estimated using weighted interest rates on covered bonds outstanding and weighted deposit rates.
3) Credit lines.
Sources: DNB Markets, Statistics Norway and Norges Bank

Chart 1.10 Norges Bank's regional network indicator for output growth past three months. Annualised. Percent. January 2008 – May 2014



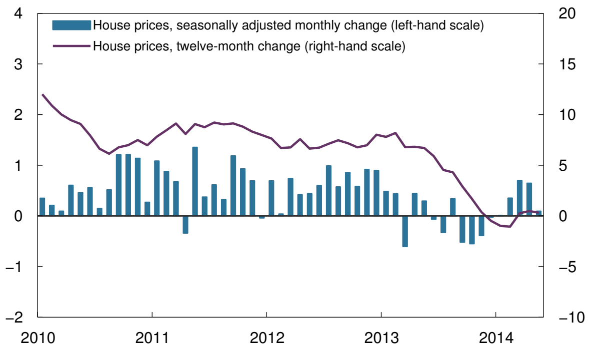
Source: Norges Bank

Chart 1.11 Unemployment rate. LFS[1)] and NAV[2)]
Seasonally adjusted. Percent. January 2008 – December 2014[3)]



1) Labour Force Survey.
2) Norwegian Labour and Welfare Administraion.
3) Projections for June 2014 – December 2014 (broken line).
Sources: Statistics Norway, NAV and Norges Bank

Chart 1.12 House prices. Twelve-month change and seasonally adjusted monthly change. Percent. January 2010 – May 2014



Sources: Eiendom Norge, Eiendomsverdi and Finn.no

House prices fell through autumn 2013, but have picked up and been somewhat higher than expected in recent months. House prices were 0.3% higher in May than in the same month one year earlier (see Chart 1.12). In the period ahead, the rise in house prices is expected to be a little higher than envisaged in the March *Report*. Growth in household debt has remained fairly stable at slightly below 7%, as projected. Household debt is still rising faster than household income, with debt ratios continuing to move up from an already high level.

Housing investment has declined in recent quarters and has been lower than previously projected. New home sales remain moderate and housing starts have been lower so far this year than during the same period in recent years. The number of housing starts is now estimated to fall from about 30 000 in 2013 to just above 26 000 in 2014. In May, the enterprises in Norges Bank's regional network reported weak and unchanged growth in the construction sector, but production expectations have been revised up somewhat. Growth in housing investment is projected to pick up somewhat ahead.

Petroleum investment has expanded sharply over several years and has been a key driving force behind growth in the mainland economy. As expected, petroleum investment growth has lost considerable momentum in recent quarters and is likely to be lower moving forward than projected in the March *Report* (see box on page 13). Mainland business investment has fallen in recent quarters and has been lower than projected earlier. The enterprises in Norges Bank's regional network have revised down their investment plans. Moderate global and domestic growth prospects, combined with a high domestic cost level, will likely entail continued weak growth in business investment.

Exports of traditional goods and services have been slightly higher than projected. The marked depreciation of the krone through 2013 and stronger growth abroad are still expected to lead to a further pick-up in export growth ahead. The projections for export growth imply continued loss of market share (see box on page 45 for a further discussion of the relationship between import growth among trading partners and export growth in Norway).

The Norwegian mainland economy is projected to grow by around ½% per quarter in the coming quarters, approximately in line with that projected in the March *Report*. Private consumption is likely to show slightly stronger growth than projected earlier. Lower growth in mainland business investment pushes in the opposite direction. The projections for mainland GDP are slightly lower than the projections from Norges Bank's System for Averaging short-term Models (SAM) (see Chart 1.13). Weight has been given to reports from Norges Bank's regional network in May indicating continued moderate growth ahead (see Chart 1.14).

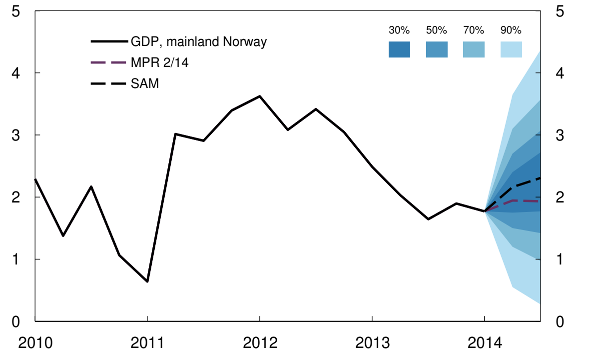
Capacity utilisation in the mainland economy is assessed to have declined slightly over the past year, but is likely still close to a normal level. According to Norges Bank's regional network, the share of enterprises reporting capacity constraints has continued to fall (see Chart 1.15). The enterprises also report that there is ample availability of labour. Registered unemployment has edged up over the past six months, but is still near an average for the past 15 years. Overall capacity utilisation seems to have declined in line with the projections in the March *Report* and the projections for the coming quarters remain broadly unchanged.

Wage growth is projected at 3½% in 2014, unchanged on the March *Report*. The projection is consistent with the expectations of the enterprises in Norges Bank's regional network. The wage negotiations between Fellesforbundet and the Federation of Norwegian Industries resulted in agreement on annual wage growth of 3.3%. Negotiations in other sectors, both private and public, also resulted in pay increases in line with this limit.

Inflation has been marginally higher than projected. In May, the annual rise in consumer prices (CPI) was 1.8% (see Chart 1.16). Adjusted for tax changes and excluding energy products (CPI-ATE), inflation was 2.3%. Underlying inflation is estimated to be between 2% and 2½%.

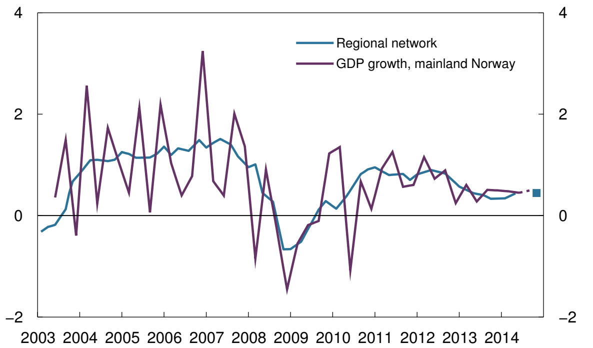
The rise in prices for domestically produced goods and services in the CPI-ATE picked up in 2013 and has been around 3% in recent months, which is somewhat higher than projected in the March *Report* (see Chart 1.17). The rapid rise in house rents and food prices

Chart 1.13 GDP for mainland Norway. Actual figures, baseline scenario and projections from SAM[1] with fan chart.
Four-quarter change. Volume. Seasonally adjusted. Percent. 2010 Q1 – 2014 Q3[2]



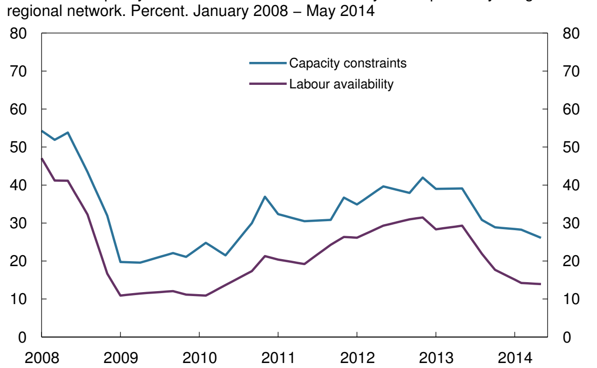
1) System for averaging short-term models.
2) Projections for 2014 Q2 – 2014 Q3 (broken lines).
Sources: Statistics Norway and Norges Bank

Chart 1.14 GDP for mainland Norway[1] and Norges Bank's regional network's indicator of output growth past three months and expected output growth next six months. Percent. January 2003 – November 2014[2]



1) Seasonally adjusted quarterly change. Volume.
2) Latest observation in the regional network is May 2014. Latest GDP observation is 2014 Q1. Projections for 2014 Q2 – 2014 Q3 (broken line).
Sources: Statistics Norway and Norges Bank

Chart 1.15 Capacity constraints and labour availability[1] as reported by Norges Bank's regional network. Percent. January 2008 – May 2014



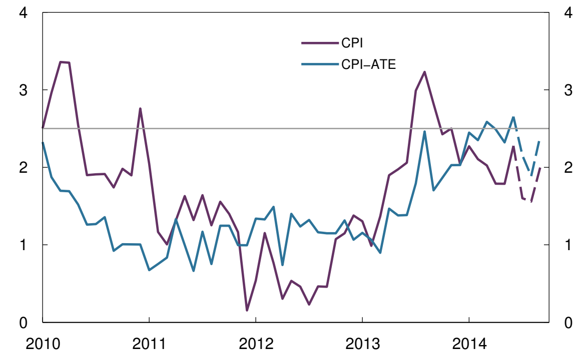
1) Share of contacts that will have some or considerable problems accommodating an increase in demand and the share of contacts where production is constrained by labour supply.
Source: Norges Bank

over the past year partly reflects revised methods for measuring price developments for these groups in the CPI. Over time, prices for domestically produced goods and services have increased in line with the costs of firms supplying goods and services to the household sector. The rise in unit labour costs for these firms has been fairly stable at around 2½% in recent years. The rise in prices for domestically produced goods and services is projected to slow somewhat over the next months.

Prices for imported consumer goods rose at a fast pace in autumn 2013, partly reflecting the depreciation of the krone through 2013. In recent months, prices for imported consumer goods have been slightly lower than projected in the March *Report* (see Chart 1.17). External price impulses to Norwegian consumer prices are projected to be slightly stronger this year than in 2013 (see Chart 1.18), but the projection is little changed on the March *Report*. The rise in prices for imported consumer goods is projected to remain between 1½% and 1¾% in the coming months.

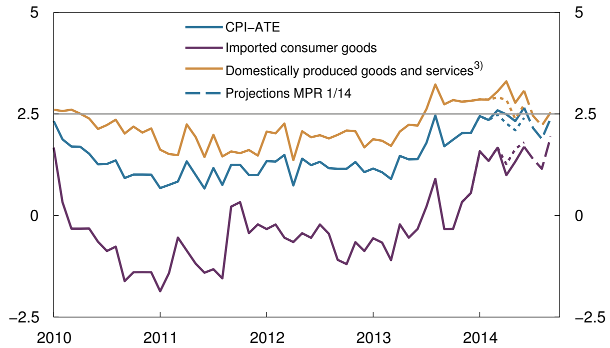
The year-on-year rise in the CPI-ATE is projected to drift down to around 2% in the course of autumn. This is broadly in line with that projected in the March *Report*. The projections for CPI-ATE inflation are in line with the SAM-based projections (see Chart 1.19).

Chart 1.16 CPI and CPI–ATE.[1)] 12–month change. Percent. January 2010 – September 2014[2)]



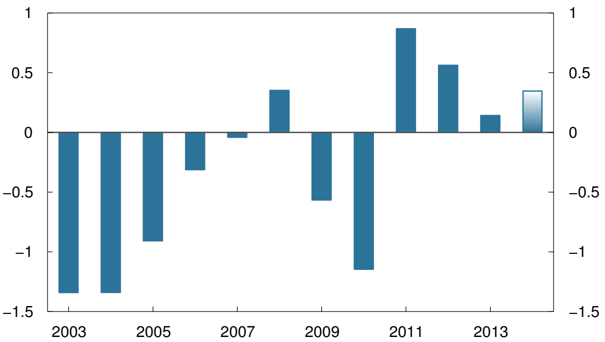
1) CPI adjusted for tax changes and excluding energy products.
2) Projections for June 2014 – September 2014 (broken lines).
Sources: Statistics Norway and Norges Bank

Chart 1.17 CPI–ATE.[1)] Total and by supplier sector. 12–month change. Percent. January 2010 – September 2014[2)]



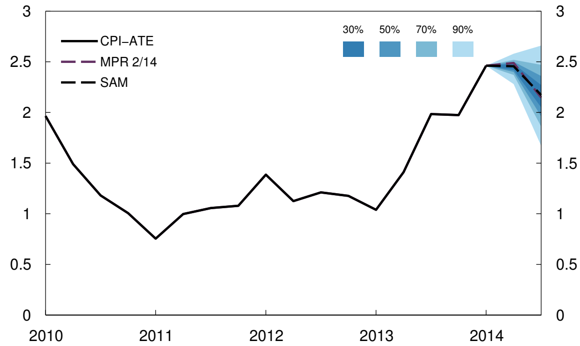
1) CPI adjusted for tax changes and excluding energy products.
2) Projections for June 2014 – September 2014 (broken lines).
3) Norges Bank estimates.
Sources: Statistics Norway and Norges Bank

Chart 1.18 Indicator of external price impulses to imported consumer goods measured in foreign currency. Annual change. Percent. 2003 – 2014[1)]



1) Projections for 2014.
Source: Norges Bank

Chart 1.19 CPI–ATE[1)]. Actual figures, baseline scenario and projections from SAM[2)] with fan chart. Four–quarter change. Percent. 2010 Q1 – 2014 Q3 [3)]



1) CPI adjusted for tax changes and excluding energy prices.
2) System for averaging short–term models.
3) Projections for 2014 Q2 – 2014 Q3 (broken lines).
Sources: Statistics Norway and Norges Bank

ASSUMPTIONS CONCERNING PETROLEUM INVESTMENT AND FISCAL POLICY

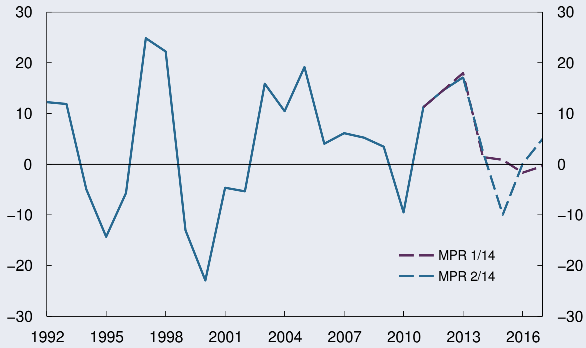
Petroleum investment has reached a high level, driven by high oil and gas prices. Growth in petroleum investment is expected to decline markedly from 2014 (see Chart 1.20). The decline reflects postponement of a number of investment projects in recent months, owing to high cost levels in the Norwegian petroleum sector and prospects for somewhat lower oil and gas prices. In addition, a number of large investment projects will be completed in 2014 and subsequent years.

The projections in this *Report* are based on 2½% volume growth in petroleum investment in 2014, followed by a 10% decline in 2015. Statistics Norway's investment intentions survey for the petroleum industry indicates a somewhat more pronounced decline, but the projections are shrouded in uncertainty. The survey does not include projects for which a plan for development and operation has not been submitted. The development of the Johan Sverdrup field, which is expected to make a positive contribution to petroleum investment in 2015, is not yet included in the figures. In this *Report,* the level of petroleum investment is projected to flatten in 2016, followed by a moderate increase in 2017.

The fiscal policy assumptions are based on the Revised National Budget for 2014, where petroleum revenue spending, as measured by the structural non-oil deficit, is estimated at NOK 141bn in 2014. This corresponds to 2.8% of the value of the Government Pension Fund Global (GPFG) at end-2013.

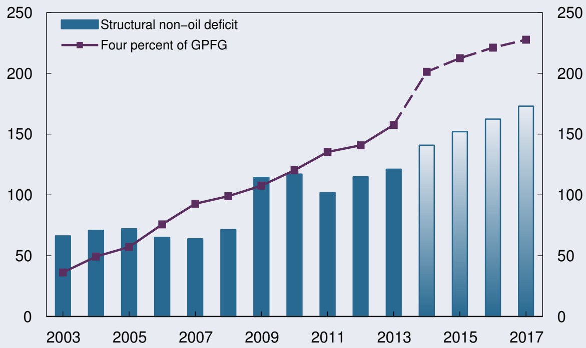
The structural non-oil deficit is estimated at 5.8% of mainland trend GDP in 2014, an increase of 0.7 percentage point on 2013. Since the introduction of the fiscal rule in 2001, the deficit has by this measure increased by an average 0.3 percentage point annually. In the coming years, petroleum revenue spending is assumed to increase at about the same pace as that recorded since 2001, measured as a share of mainland GDP. Based on the current projection of the value of the GPFG, this implies petroleum revenue spending of about 3% of the GPFG in 2017 (see Chart 1.21).

Chart 1.20 Petroleum investment. Constant 2011 prices. Annual change. Percent. 1992 – 2017[1)]



1) Projections for 2014 – 2017 (broken lines).
Sources: Statistics Norway and Norges Bank

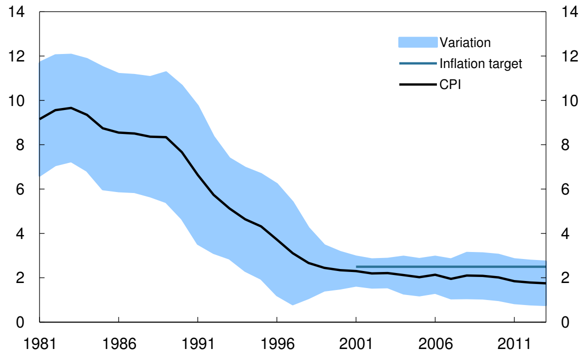
Chart 1.21 Structural non−oil deficit and four percent of the Government Pension Fund Global. Constant 2014 prices. In billions of NOK. 2003 – 2017[1)]



1) Projections for 2014 – 2017.
Sources: Ministry of Finance and Norges Bank

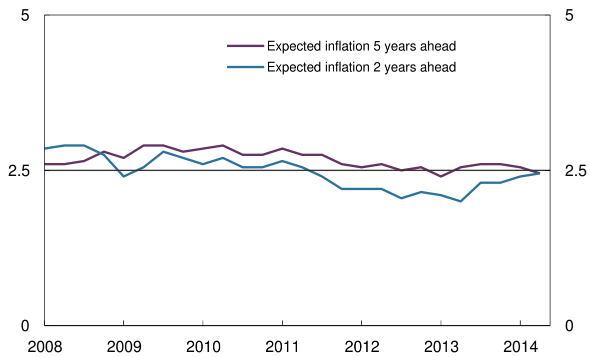
2 MONETARY POLICY OUTLOOK

Chart 2.1 10-year moving average[1)] and variation[2)] in CPI.
Annual change. Percent. 1981 – 2013



1) The moving average is calculated 10 years back.
2) The band around the CPI is the variation in the CPI in the average period, measured by +/– one standard deviation.
Sources: Statistics Norway and Norges Bank

Chart 2.2 Expected consumer price inflation 2 and 5 years ahead.[1)]
Percent. 2008 Q1 – 2014 Q2



1) Average of expectations of employer/employee organisations and economists in the financial industry and academia.
Sources: TNS Gallup and Opinion

The operational target of monetary policy is low and stable inflation, with annual consumer price inflation of close to 2.5% over time. Over the past 10 years, average inflation has been somewhat below, but close to, 2.5% (see Chart 2.1). Inflation expectations, according to expectations surveys, remain close to the inflation target (see Chart 2.2).

The key policy rate is set with a view to maintaining inflation close to 2.5% over time without causing excessive fluctuations in output and employment. Monetary policy also seeks to be robust by taking into account factors such as the uncertainty concerning the current situation, economic driving forces and the functioning of the economy. A robust monetary policy also seeks to take into account the risk of a build-up of financial imbalances (see box on the criteria for an appropriate interest rate path on page 20).

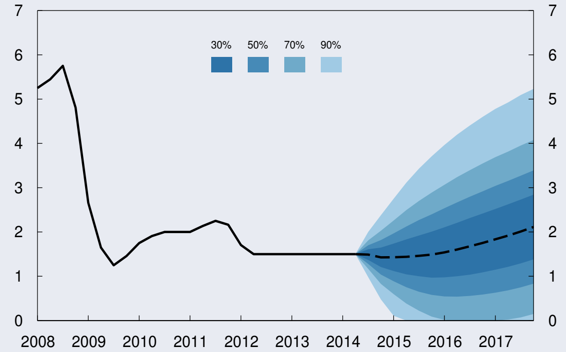
A key policy rate of 1.5% is lower than what may be regarded as a normal level. One reason the key policy rate is low is that interest rates abroad are very low. At the same time, there is a wider-than-normal spread between the key policy rate and the interest rates facing households and enterprises.[1] The interest rate on residential mortgages is around 4% for most households, while the interest rate on bank loans to many enterprises is around 4½%.

In the March 2014 *Monetary Policy Report*, the key policy rate was projected to remain at the current level in the period to summer 2015, rising gradually thereafter. With this interest rate forecast, there were prospects that inflation would remain somewhat below, but close to, 2½% throughout the projection period. Capacity utilisation was projected to decline somewhat in the year ahead, but edge up again to close to a normal level towards the end of the projection period.

Consumer price inflation has been slightly higher than projected, but underlying inflation is still estimated to be between 2% and 2½%. The forces driving inflation further out remain moderate. Growth in the Norwegian economy has been broadly as projected in the March *Report*, but growth prospects have weakened. Investment growth in particular appears to be weaker than

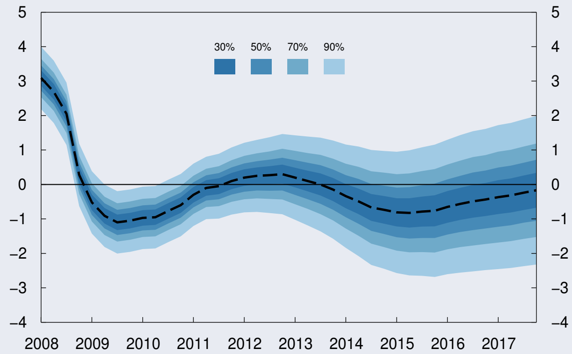
1 For a further discussion of banks' lending margins, see Erard, "Banks' margins", *Economic Commentaries* 4/2014, Norges Bank.

Chart 2.3a Projected key policy rate in the baseline scenario with fan chart. Percent. 2008 Q1 – 2017 Q4 [1)]



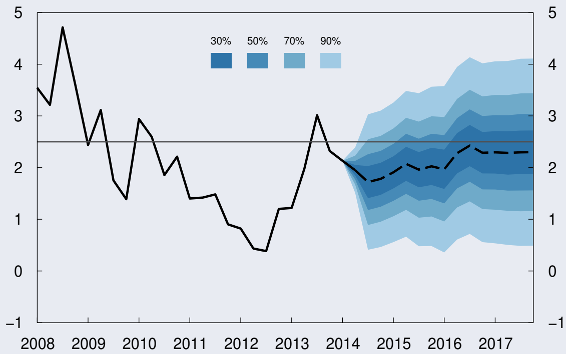
1) Projections for 2014 Q2 – 2017 Q4 (broken line).
Source: Norges Bank

Chart 2.3b Projected output gap[1)] in the baseline scenario with fan chart. Percent. 2008 Q1 – 2017 Q4



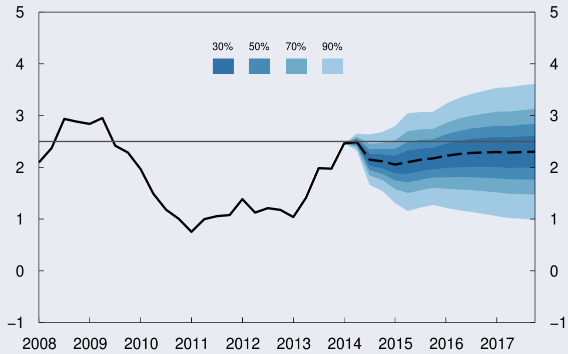
1) The output gap measures the percentage deviation between mainland GDP and projected potential mainland GDP.
Source: Norges Bank

Chart 2.3c Projected CPI in the baseline scenario with fan chart. Four–quarter change. Percent. 2008 Q1 – 2017 Q4 [1)]



1) Projections for 2014 Q2 – 2017 Q4 (broken line).
Sources: Statistics Norway and Norges Bank

Chart 2.3d Projected CPI–ATE[1)] in the baseline scenario with fan chart. Four–quarter change. Percent. 2008 Q1 – 2017 Q4 [2)]



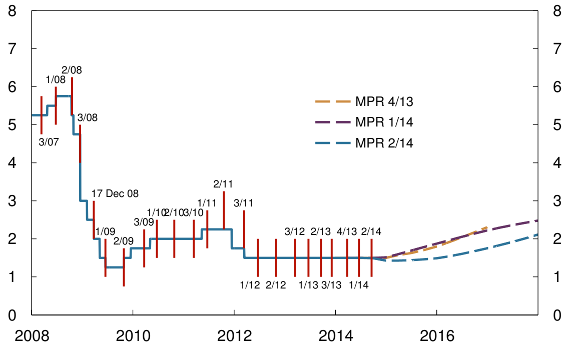
1) CPI adjusted for tax changes and excluding energy products.
2) Projections for 2014 Q2 – 2017 Q4 (broken line).
Sources: Statistics Norway and Norges Bank

projected earlier. Petroleum investment is now expected to decline markedly in 2015. On the other hand, banks have reduced lending rates somewhat and growth in private consumption has been higher than expected. Wage growth is still projected at 3½% in 2014. The krone has as expected appreciated somewhat since March and has been slightly stronger than projected in the March *Report*. This probably reflects the fact that the expected upward shift in interest rates abroad has been pushed further out.

House prices have picked up again in recent months and have risen somewhat more than anticipated earlier. As expected, household debt growth remains high. Recent developments do not, however, indicate that financial imbalances are building up further (see Section 3 for a more detailed review).

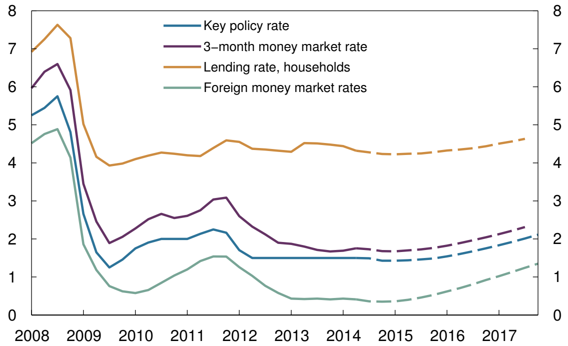
The projections in this *Report* suggest that the key policy rate should be held at around today's level to the end of 2015 and raised gradually through 2016 and 2017 (see Charts 2.3 a-d). The key policy rate forecast is lower than in the March *Report* (see Chart 2.4). A more detailed description of the factors behind the changes in the forecast is provided in a box on page 22. Bank lending rates are projected to track the path of the key policy rate in the period ahead, but may rise to a somewhat lesser extent further out in the

Chart 2.4 Interval for the key policy rate at the end of each strategy period, actual developments and projected key policy rate in the baseline scenario. Percent. 1 January 2008 – 31 December 2017



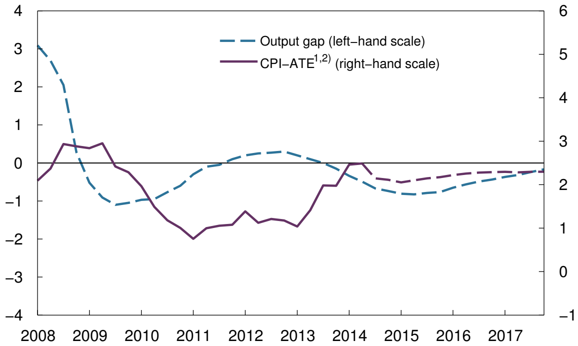
Source: Norges Bank

Chart 2.5 Key policy rate, 3-month money market rate[1)], interest rate on loans to households[2)] and foreign money market rates in the baseline scenario. Percent. 2008 Q1 – 2017 Q4 [3)]



1) Key policy rate in the baseline scenario plus premiums in the Norwegian money market. The calculations are based on the assumption that announced interest rate changes are priced into the money market.
2) Average interest rate on all loans to households from banks and mortgage companies.
3) Projections for 2014 Q2 – 2017 Q4 (broken lines).
Sources: Statistics Norway and Norges Bank

Chart 2.6 Inflation and output gap in the baseline scenario. Percent. 2008 Q1 – 2017 Q4



1) CPI adjusted for tax changes and excluding energy products.
2) Projections for 2014 Q2 – 2017 Q4 (broken line).
Sources: Statistics Norway and Norges Bank

projection period (see Chart 2.5). It is assumed that banks' interest margins may edge down as banks reach their capital ratio targets under the new regulatory requirements.

With this path for the key policy rate, there are prospects that inflation will be somewhat below, but close to, 2.5% throughout the projection period. Capacity utilisation may decrease somewhat in the year ahead, but is projected to increase somewhat again to close to a normal level towards the end of the projection period (see Chart 2.6).

Both the objective of keeping consumer price inflation close to 2.5% and the objective of sustaining capacity utilisation in the years ahead could in isolation imply a somewhat lower forecast for the key policy rate (see box on page 20). A lower key policy rate now could stimulate borrowing and increase the risk of a further build-up of financial imbalances. At the same time, uncertainty surrounding the current situation in the Norwegian economy and the functioning of the economy implies proceeding with caution in interest rate setting. By taking such robustness considerations into account, monetary policy may result in an improved path for inflation, output and employment over time.

Growth in the Norwegian economy is expected to remain at around 2% in 2014 and 2015 and strengthen to close to 3% towards the end of the projection period. Unemployment is projected to edge up in the year ahead, but edge down again as activity picks up. Growth among Norway's trading partners is expected to pick up gradually, and the projections are little changed from the March *Report*. Growth in mainland exports is expected to increase as demand from export markets strengthens (see Chart 2.7). At the same time, household saving is assumed to remain fairly stable (see Chart 2.8). Growth in private consumption, which has been moderate for a long period, is thus expected to keep pace with income growth ahead (see Chart 2.9). Private consumption growth is projected to pick up from just above 2% in 2014 to around 3% annually for the rest of the projection period. After a moderate increase in 2014, petroleum investment is projected to decline by 10% in 2015. Housing investment is expected to fall in 2014, but edge up again in the years ahead.

House prices are projected to rise by about 3% annually in the years ahead, implying lower house price inflation than growth in household income in the years ahead. These developments must be viewed in the context of the high level of house prices. Debt is expected to grow at a somewhat slower pace ahead (see Chart 2.10). At the same time, there are prospects that household debt ratios and interest burdens will continue to drift up over the coming years (see Chart 2.11).

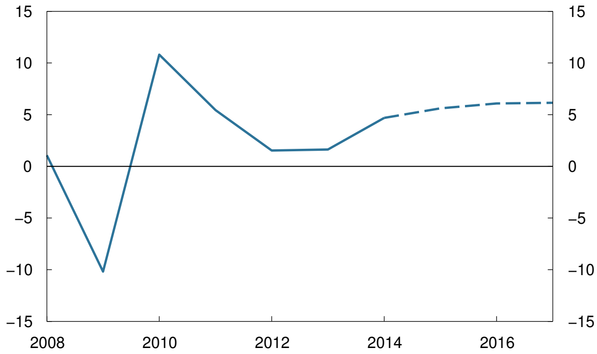
Growth in potential mainland output is projected to pick up somewhat through the period. Productivity growth is projected to move up from about 1% in 2014 to about 1¾% towards the end of the projection period. Labour immigration is projected to remain relatively high so that population growth will continue to make a substantial contribution to potential output in the period ahead.

The interest rate differential against other countries is expected to be fairly stable. The projections are based on the assumption that the krone will remain fairly stable in the near term, but that it may appreciate somewhat further out (see Chart 2.12).

Inflation is projected at 2¼% in 2014 and 2% in 2015. Thereafter, inflation is expected to pick up gradually towards 2½% further ahead in the projection period. Wage growth may increase somewhat as growth in the Norwegian economy gains momentum. This may push up the rise in prices for domestically produced goods and services to some extent. On the other hand, continued low inflation abroad and a moderate appreciation of the krone will likely dampen the rise in prices for imported consumer goods from the end of 2014.

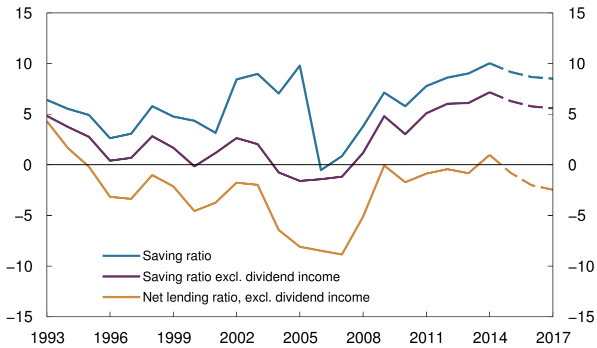
The projections for the key policy rate, inflation, capacity utilisation and other variables are based on Norges Bank's assessment of the economic situation and of the functioning of the economy and monetary policy. There is uncertainty surrounding the projections. Monetary policy can respond to changes in the economic outlook and if relationships between the interest rate, inflation and the real economy differ from those assumed. Hence, there is uncertainty about future interest rate developments. The uncertainty surrounding Norges Bank's projections is illustrated using fan charts (see Charts 2.3 a-d). The width of the fans reflects historical uncertainty.

Chart 2.7 Export market growth.
Import growth. 25 trading partners. Percent. 2008 – 2017[1)]



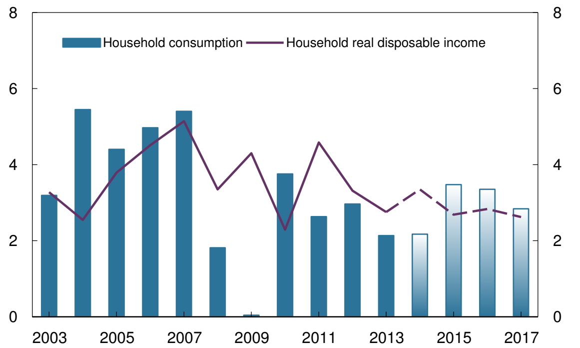
1) Projections for 2014 – 2017 (broken line).
Sources: Thomson Reuters and Norges Bank

Chart 2.8 Household saving and net lending as a share of disposable income.
Percent. 1993 – 2017[1)]



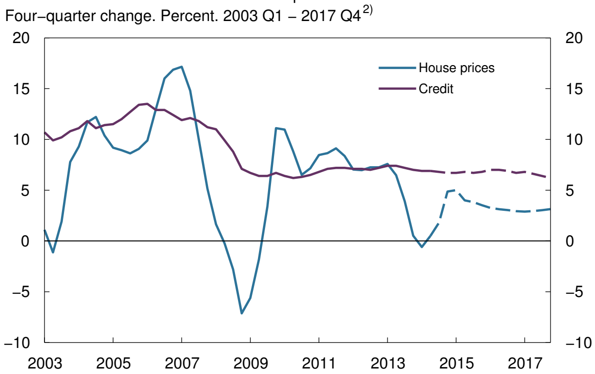
1) Projections for 2014 – 2017 (broken lines).
Sources: Statistics Norway and Norges Bank

Chart 2.9 Household consumption[1)] and real disposable income[2)]
Annual change. Percent. 2003 – 2017[3)]



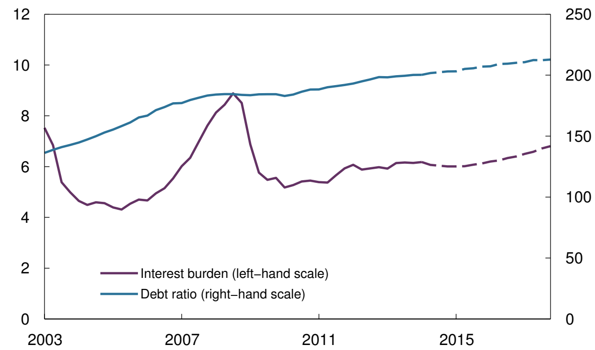
1) Includes consumption for non-profit organisations. Volume.
2) Excluding dividend income. Including income for non-profit organisations.
3) Projections for 2014 – 2017.
Sources: Statistics Norway and Norges Bank

Chart 2.10 Household credit[1] and house prices. Four-quarter change. Percent. 2003 Q1 – 2017 Q4[2]



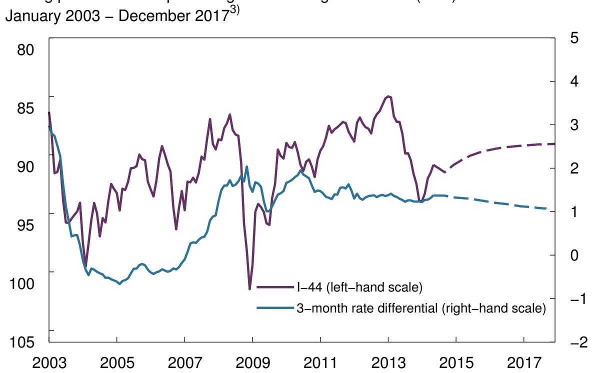
1) Inland credit to households.
2) Projections for 2014 Q2 – 2017 Q4 (broken lines).
Sources: Statistics Norway, Eiendom Norge, Eiendomsverdi, Finn.no and Norges Bank

Chart 2.11 Household debt ratio[1] and interest burden.[2] Percent. 2003 Q1 – 2017 Q4[3]



1) Loan debt as a percentage of disposable income adjusted for estimated reinvested dividend income for 2003 – 2005 and redemption/reduction of equity capital for 2006 – 2012 Q3.
2) Interest expenses as a percentage of disposable income adjusted for estimated reinvested dividend income for 2003 – 2005 and redemption/reduction of equity capital for 2006 – 2012 Q3 plus interest expenses.
3) Projections for 2014 Q1 – 2017 Q4 (broken lines).
Sources: Statistics Norway and Norges Bank

Chart 2.12 Three-month money market rate differential between Norway[1] and trading partners and import-weighted exchange rate index (I-44).[2] January 2003 – December 2017[3]



1) Key policy rate in the baseline scenario plus premiums in the Norwegian money market. The calculations are based on the assumption that announced interest rate changes are priced into the money market.
2) A positive slope denotes a stronger krone exchange rate.
3) Projections June 2014 – December 2017 (broken lines).
Sources: Thomson Reuters and Norges Bank

The household saving ratio is projected to remain fairly stable over the coming years. There is substantial uncertainty linked to household saving (see box on page 42). A larger fall in the saving ratio ahead than projected cannot be ruled out. House prices have increased more than expected in recent months and household confidence indicators have edged up. Should house prices continue to rise at the same pace, combined with increased household optimism, growth in the Norwegian economy may be higher than currently projected.

Growth in the Norwegian economy may also prove to be weaker than currently projected. Petroleum investment has in recent years generated strong growth impulses to the Norwegian economy. As some projects have been postponed and other large investment projects have been completed, the level of petroleum investment is expected to be lower ahead. There is considerable uncertainty about developments in petroleum investment ahead, and in the event of a fall in investment that is considerably deeper than currently projected, growth prospects for the Norwegian economy could weaken considerably and lead to a rise in unemployment. If uncertainty among households rises at the same time, the impact on house prices and overall demand may be considerable.

There is also uncertainty surrounding developments in the krone exchange rate. The expected upward shift in interest rates abroad has again been pushed further out and the krone has appreciated slightly after depreciating through 2013. Lower key rates abroad may lead to higher demand for NOK. On the other hand, if growth prospects at home deteriorate, partly owing to lower petroleum investment, the krone may prove to be weaker than currently projected.

CROSS-CHECKS OF THE INTEREST RATE FORECAST

Simple monetary policy rules can describe an interest rate setting that is robust to different assumptions about the functioning of the economy. The Taylor rule is based on projections for inflation, the output gap, money market premiums and the normal interest rate level. In the growth rule, the output gap is replaced by a growth gap. Both these rules imply a key policy rate of around 3% (see blue and orange lines in Chart 2.13). The model-robust rule[2] is based on calculations using different models for the Norwegian economy. This rule gives greater weight to the output gap and inflation than the Taylor rule. In addition, it gives weight to the interest rate in the preceding period. This rule implies a key policy rate ahead at approximately the same level as the forecast in this *Report* (see purple line in chart). A simple rule giving considerable weight to changes in the interest rate differential against other countries implies a key policy rate of around 2%. This rule also implies a key policy rate ahead on a level with the interest rate in the baseline scenario (see green line).

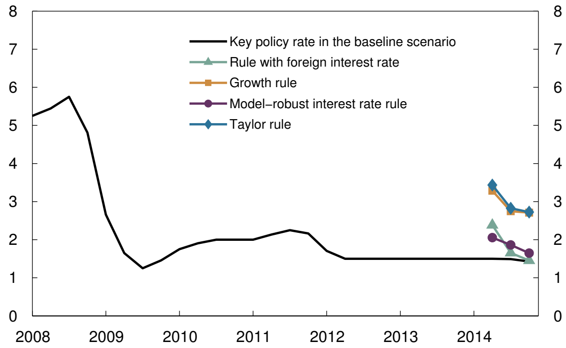
Such simple rules can be used as a cross-check of actual interest rate setting, but do not necessarily capture all the factors that are relevant for monetary policy. The Taylor rule, the growth rule and the model-robust rule do not, for example, take into account that key rates among many of Norway's trading partners are close to zero. Nor do any of the simple rules capture the wider-than-normal spread between bank lending rates and money market rates (see Chart 2.5).

Forward money and bond market rates are another cross-check for the interest rate forecast. Estimated forward rates are in line with the forecast for the money market rate in this *Report* throughout the projection period (see Chart 2.14).

A simple rule based on Norges Bank's previous interest rate setting can also serve as a cross-check for the interest rate in the baseline scenario. Chart 2.15 shows such a rule, where the key policy rate is determined by developments in inflation, wage growth, mainland GDP and external interest rates. The interest rate in the previous period is also taken into account. The parameters in this model are estimated on historical relationships. The projections are based on the estimates for the underlying variables in this *Report*. The uncertainty in this model is expressed by the blue band. The chart shows that the interest rate in the baseline scenario is close to the middle of this band.

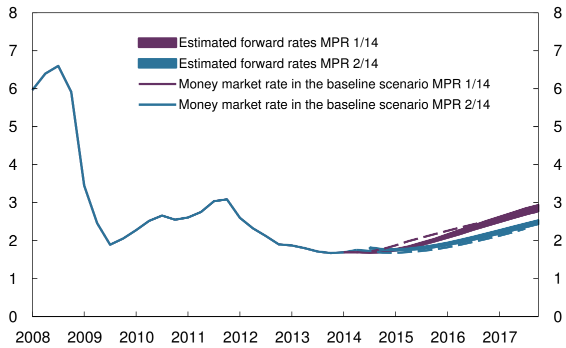
2 For a further analysis of this rule and other simple monetary policy rules, see Hoen, "The golden interest rule", *Norges Bank Staff Memo* 16/2012 and Mæhlum, "Robustifying optimal monetary policy in Norway", *Norges Bank Staff Memo* 17/2012.

Chart 2.13 Key policy rate and calculations based on simple monetary policy rules.[1] Percent. 2008 Q1 – 2014 Q4



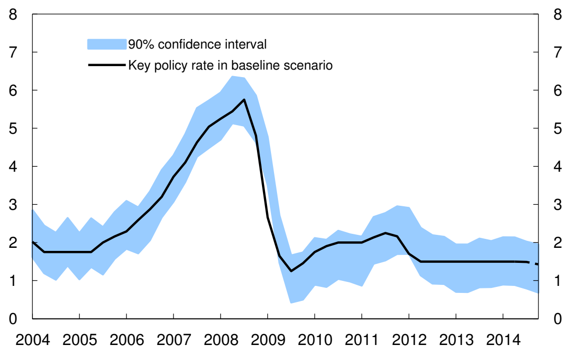
1) The calculations are based on Norges Bank's projections for the output gap, growth gap, consumer prices (CPI-ATE) and 3-month money market rates for trading partners. To ensure comparability with the key policy rate, the simple rules are adjusted for risk premiums in 3-month money market rates.
Source: Norges Bank

Chart 2.14 Three-month money market rate in the baseline scenario[1] and estimated forward rates.[2] Percent. 2008 Q1 – 2017 Q4



1) Key policy rate in the baseline scenario plus premiums in the Norwegian money market. The calculations are based on the assumption that announced interest rate changes are priced into the money market.
2) Forward rates are based on money market rates and interest rate swaps. The purple and blue bands show the highest and lowest rates in the period 7 March – 20 March 2014 and 30 May – 12 June 2014.
Sources: Thomson Reuters and Norges Bank

Chart 2.15 Key policy rate and interest rate developments that follow from Norges Bank's average pattern for interest rate setting.[1]
Percent. 2004 Q1 – 2014 Q4



1) Interest rate movements are explained by developments in inflation, mainland GDP growth, wage growth and 3-month money market rates among trading partners, as well as the interest rate in the previous period. The equation is estimated over the period 1999 Q1 – 2014 Q1. See Norges Bank *Staff Memo* 3/2008 for further discussion.
Source: Norges Bank

CRITERIA FOR AN APPROPRIATE INTEREST RATE PATH

Over time, Norges Bank seeks to maintain inflation close to 2.5%. In its conduct of monetary policy, Norges Bank operates a flexible inflation targeting regime so that weight is given to both variability in inflation and variability in output and employment when setting the key policy rate. This flexible inflation targeting regime builds a bridge between the long-term objective of monetary policy, which is to anchor expectations of low and stable inflation, and the more short-term consideration of stabilising the economy.

Norges Bank emphasises the importance of a robust monetary policy. The functioning of the economy is not fully known, and there may be uncertainty regarding the economic situation. In addition, events will often occur that are difficult to foresee. Monetary policy also seeks to mitigate the risk of a build-up of financial imbalances. A prolonged rise in credit and asset prices increases the risk that financial imbalances may trigger or amplify an economic downturn.

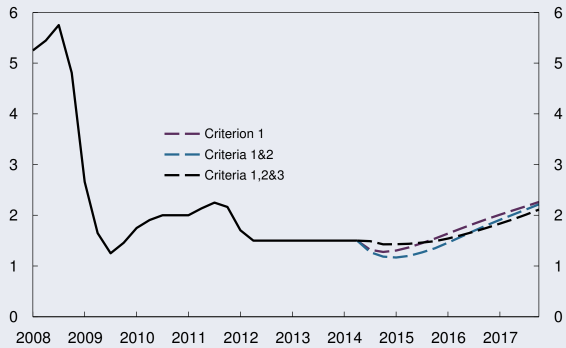
The following set of criteria can serve as a guideline for an appropriate interest rate path:

1. *The inflation target is achieved:*
   The interest rate should be set with a view to stabilizing inflation at target or bringing it back to target after a deviation has occurred.

2. *The inflation targeting regime is flexible:*
   The interest rate path should provide a reasonable balance between the path for inflation and the path for overall capacity utilisation in the economy.

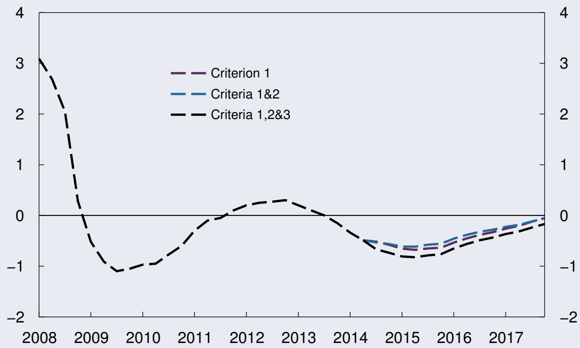
3. *Monetary policy is robust:*
   The interest rate should be set so that monetary policy mitigates the risk of a build-up of financial imbalances, and so that acceptable developments in inflation and output are also likely under alternative assumptions about the functioning of the economy.

Chart 2.16a Key policy rate. Percent. 2008 Q1 – 2017 Q4



Source: Norges Bank

Chart 2.16b Output gap. Percent. 2008 Q1 – 2017 Q4



Source: Norges Bank

The various considerations expressed in the criteria are weighed against each other. The first two criteria reflect the flexible inflation targeting regime. The consideration of robustness is not an objective in itself, but is included because in an uncertain world taking robustness into consideration may yield improved performance in terms of inflation, output and employment over time.

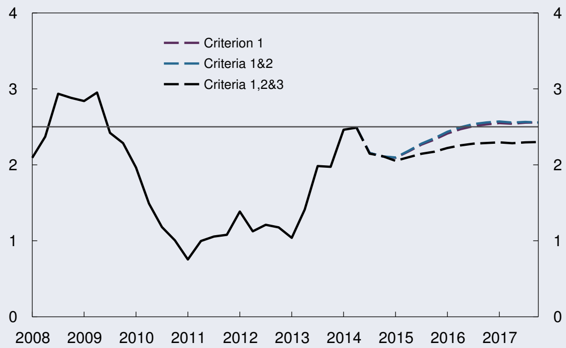
Charts 2.16 a-c illustrate the forecasts for the key policy rate, output gap and inflation when the various criteria are taken into account.

If the sole objective of monetary policy were to maintain inflation at target, the key policy rate would, according to a model-based analysis, quickly be lowered by a quarter percentage point before rising gradually in subsequent years (see purple line in the charts).[1] According to the model-based analysis, the key policy rate will be kept low somewhat longer when account is taken of the consideration that monetary policy should not lead to excessive fluctuations in output and employment (see blue line). This reflects that these considerations are now pulling in the same direction.

The robustness consideration pushes up the interest rate path. A reduction in the key policy rate at present may increase the risk of a surge in debt and house prices and a renewed build-up of financial imbalances. A robust monetary policy also seeks to take into account that the functioning of the economy is not fully known. This normally suggests a gradualist approach in interest rate setting. In the baseline scenario (see black line), the key policy rate is therefore higher in the near term than implied by a model-based analysis that does not take robustness into consideration.

1 Norges Bank's macroeconomic model NEMO is used in this model analysis.

Chart 2.16c CPI–ATE.[1)] Four–quarter change. Percent. 2008 Q1 – 2017 Q4



1) CPI adjusted for tax changes and excluding energy products.
Sources: Statistics Norway and Norges Bank

CHANGES IN THE PROJECTIONS SINCE *MONETARY POLICY REPORT* 1/14

The interest rate forecast in this *Monetary Policy Report* is slightly lower than the forecast in the March 2014 *Report* (see Chart 2.17). The projections are based on the criteria for an appropriate interest rate path (see box on page 20), an overall assessment of the situation in the Norwegian and global economy and Norges Bank's perception of the functioning of the economy.

Chart 2.18 illustrates how news and new assessments have affected the interest rate forecast through their impact on the outlook for inflation, output and employment.[1] The isolated contributions of the different factors are shown by the bars in the chart. The overall change in the interest rate forecast compared with the March *Report* is shown by the black line.

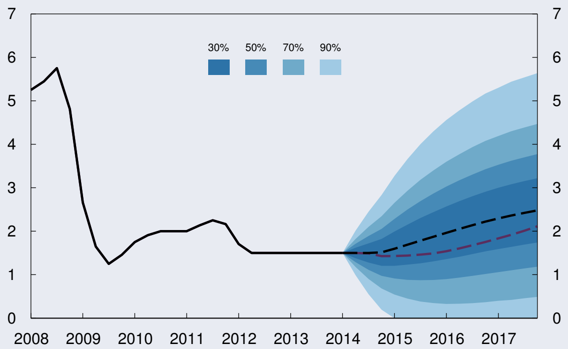
Policy rates are close to zero among many of Norway's trading partners, and market expectations concerning policy rates ahead are lower than projected in the March *Report*, primarily driven by lower interest rate expectations in the euro area and in Sweden. Lower interest rates abroad suggest that the key policy rate will also be kept on hold in Norway for longer to prevent an appreciation of the krone (see orange bars).

Banks have reduced interest rates on lending to households and enterprises. There are prospects that banks' lending margins, the difference between money market rates and lending rates, will remain slightly lower ahead than assumed in the previous *Report*. This points towards a higher key policy rate (see purple bars).

Consumer price inflation has been slightly higher than projected since the March *Report*. The driving forces behind inflation further out are still moderate. Slightly higher inflation suggests a higher interest rate in the quarters ahead (see blue bars).

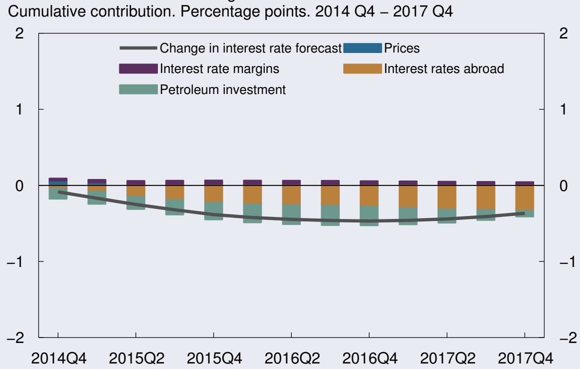
1 Illustrated using the macroeconomic model NEMO and based on the criteria for an appropriate interest rate path.

Chart 2.17 Key policy rate in the baseline scenario in MPR 1/14 with fan chart and key policy rate in the baseline scenario in MPR 2/14 (purple line). Percent. 2008 Q1 – 2017 Q4



Source: Norges Bank

Chart 2.18 Factors behind changes in the interest rate forecast since MPR 1/14. Cumulative contribution. Percentage points. 2014 Q4 – 2017 Q4



Source: Norges Bank

Growth in the Norwegian economy has been broadly in line with the projections in the March *Report*. The driving forces ahead are nonetheless assessed to be slightly weaker than projected in the March *Report*. It appears that petroleum investment ahead may be weaker than assumed in the March *Report* and is now expected to fall by 10% in 2015. This will contribute to lower demand in the Norwegian economy and points towards a lower key policy rate (see green bars).

A summary of changes in the projections of other key variables is provided in Table 1.

TABLE 1 Projections for macroeconomic aggregates in Monetary Policy Report 2/14. Percentage change from previous year (unless otherwise stated). Change from projections in Monetary Policy Report 1/14 in brackets

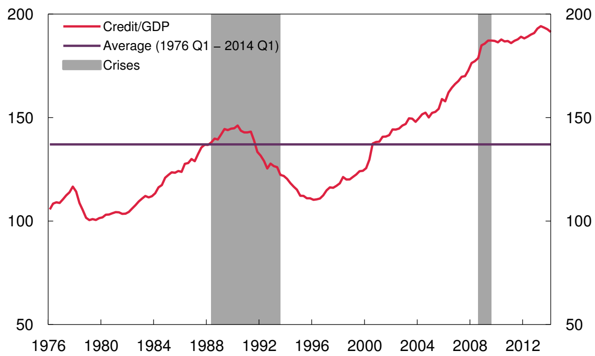
	2014	2015	2016	2017
CPI	2 (0)	2 (0)	2¼ (0)	2¼ (0)
CPI-ATE[1]	2¼ (0)	2 (0)	2¼ (0)	2¼ (0)
Annual wages[2]	3½ (0)	3½ (-¼)	4 (0)	4 (0)
Mainland demand[3]	1¾ (0)	3¼ (0)	3¼ (¼)	2¾ (0)
GDP, mainland Norway	2 (¼)	2¼ (-¼)	2¾ (-¼)	3 (¼)
Output gap, mainland Norway (level)[4]	-½ (0)	-¾ (0)	-½ (0)	-¼ (0)
Employment, persons, QNA	1 (0)	¾ (0)	1 (0)	1¼ (¼)
Registered unemployment (rate, level)	2¾ (-¼)	3 (0)	3 (0)	2¾ (-¼)
Level				
Key policy rate[5]	1½ (0)	1½ (-¼)	1¾ (-¼)	2 (-½)
Import-weighted exchange rate (I-44)[6]	91½ (0)	90 (0)	89¼ (-½)	89 (-¾)
Money market rates, trading partners[7]	½ (0)	½ (-¼)	¾ (-½)	1¼ (-½)

1 CPI-ATE: CPI adjusted for tax changes and excluding energy products.
2 Annual wage growth is based on the Technical Reporting Committee on Income Settlements' definitions and calculations.
3 Private and public consumption and mainland gross fixed investment.
4 The output gap measures the percentage deviation between mainland GDP and projected potential mainland GDP.
5 The key policy rate is the interest rate on banks' deposits in Norges Bank.
6 The weights are estimated on the basis of imports from 44 countries, which comprise 97% of total imports.
7 Market rates are based on money market rates and interest rate swaps.

Source: Norges Bank

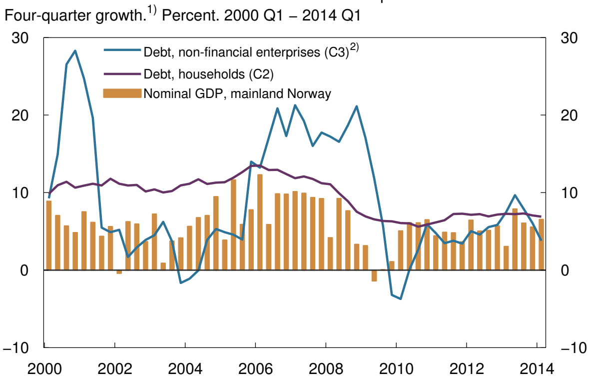
3 DECISION BASIS FOR THE COUNTERCYCLICAL CAPITAL BUFFER

Chart 3.1 Total credit[1] mainland Norway as a percentage of mainland GDP. Percent. 1976 Q1 – 2014 Q1



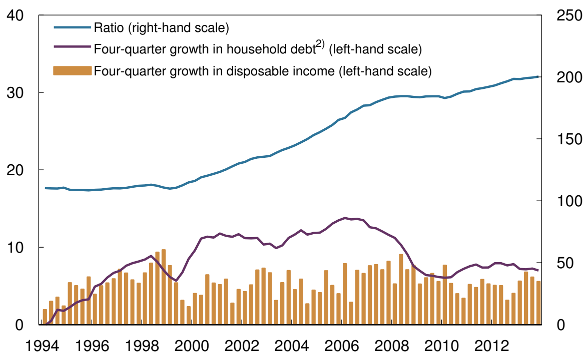
1) The sum of C2 households and C3 non-financial enterprises in mainland Norway (all non-financial enterprises pre-1995). C3 includes C2 and foreign debt.
Sources: Statistics Norway, IMF and Norges Bank

Chart 3.2 Credit to households and non-financial enterprises and mainland GDP. Four-quarter growth.[1] Percent. 2000 Q1 – 2014 Q1



1) Change in stocks at the end of the quarter.
2) Sum of C2 non-financial enterprises and foreign debt in mainland Norway.
Sources: Statistics Norway and Norges Bank

Chart 3.3 Household debt-to-disposable income ratio.[1] Percent. 1994 Q1 – 2013 Q4



1) Loan debt as a percentage of disposable income, adjusted for estimated reinvested dividend income for 2000 – 2005 and redemption/reduction of equity capital for 2006 Q1 – 2012 Q3.
2) Change in stocks at the end of the quarter.
Sources: Statistics Norway and Norges Bank

The countercyclical capital buffer is one of several elements of the new capital adequacy regulation for banks. Norges Bank is responsible for preparing a decision basis and providing advice to the Ministry of Finance regarding the level of the buffer four times a year. The buffer rate is set at 1%, effective from 30 June 2015 (see box on page 30).

Norges Bank has formulated three criteria for an appropriate countercyclical capital buffer (see box on page 31). Banks should build and hold a countercyclical capital buffer when financial imbalances are building up or have built up over a period. The buffer rate should be considered in the light of other requirements applying to banks, particularly when new requirements are introduced. In the event of an economic downturn and large bank losses, the buffer rate can be reduced to mitigate the procyclical effects of tighter bank lending.

FINANCIAL IMBALANCES

From the mid-1990s to 2008, total household and corporate debt in the mainland economy grew markedly faster than GDP (see Chart 3.1). Since the financial crisis, growth in both household and corporate credit has slowed somewhat (see Chart 3.2). The credit indicator has remained fairly stable over the past years.

Household debt is now twice as high as household disposable income (see Chart 3.3). At the same time, households' housing wealth is about double that of household debt (see Chart 3.4). Moreover, total household bank deposits are substantial.

Household debt has risen faster than household disposable income since the end of the 1990s. At the same time, households' ordinary consumption expenditure, as measured by SIFO (National Institute for Consumer Research), has shown little growth. Post-tax income adjusted for ordinary consumption expenditure is available for debt servicing.[1] Debt-servicing income has increased considerably and almost in pace with indebtedness (see Chart 3.5 and box on page 40).

1 The calculation of debt-servicing income is based on household statistics from Statistics Norway.

Liabilities, income and assets are unevenly distributed. The proportion of households with debt of more than five times their disposable income increased in the years prior to the financial crisis and has since remained at around 12%.[2] These households hold about a third of total household debt (see Chart 3.6).

Banks' direct credit risk on loans to households is likely associated with heavily indebted households with low payment capacity and weak collateral.[3] The proportion of households that have less than one month's income adjusted for interest expenses and ordinary consumption expenditure has fallen since the 1990s. Households that have both high debt in relation to income and small margins hold about 5% of debt. A good 2% of debt is held by households which in addition have net debt that exceeds the dwelling's value.

Although most Norwegian households are relatively robust, a loss of income, higher residential mortgage rates or a fall in house prices may lead to a decline in demand for goods and services. High debt ratios may amplify the decline. This may in turn lead to weaker corporate profitability and hence bank losses. In the event of an economic downturn, the construction industry and property sector will be particularly vulnerable.

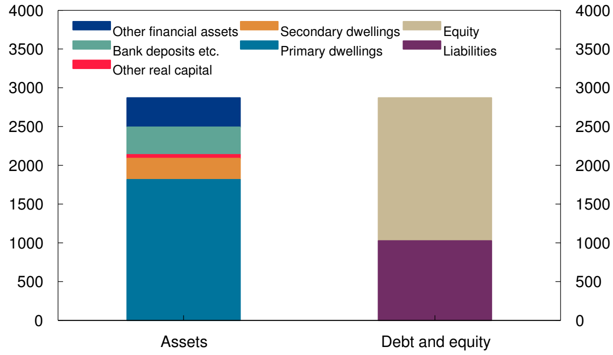
Household credit growth is closely linked to developments in the housing market. The banks included in Norges Bank's lending survey reported a small increase in demand for residential mortgages in Q1. For the first time since the survey was launched in 2007, banks also reported some easing in credit standards for the household sector in recent quarters (see Chart 3.7). Banks have lowered residential mortgage rates.

For a long time, house prices rose faster than household disposable income (see Chart 3.8). The rise in house prices abated through 2013. After falling last

2 If the bank applies debt-to-disposable income as a decision criterion for granting residential mortgages, the loan should normally not exceed three times gross income. This criterion implies debt of five times disposable income. See Circular no. 11/2010 "Guidelines for prudent residential mortgage lending practice", Finanstilsynet [in Norwegian].

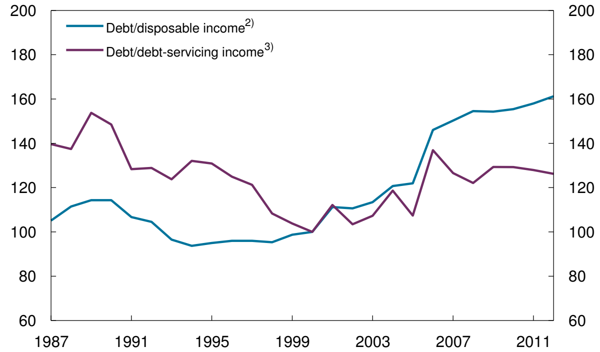
3 See box on page 31 in *Financial Stability Report* 2013 or Solheim and Vatne, "Measures of household credit risk", *Economic Commentaries* 8/2013. For an analysis of developments in credit risk by age and income, see Solheim and Vatne, "Evidence of a change in banks' lending practices after the financial crisis", *Economic Commentaries* 3/2014.

Chart 3.4 Households'[1] balance sheet based on assessed values. Mean. NOK 1000. 2012



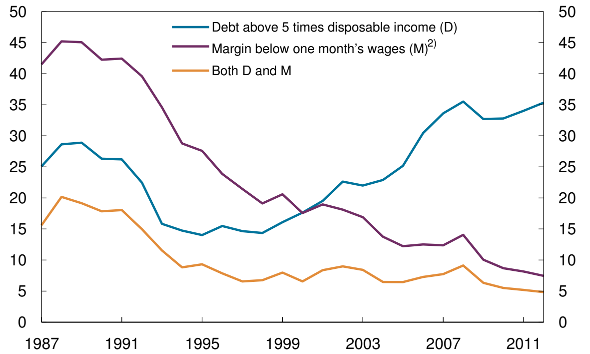
1) Wage earners and benefit recipients. Self-employed excluded.
Sources: Statistics Norway (Household Income and Wealth) and Norges Bank

Chart 3.5 Two measures of the household[1] debt-to-income ratio. Indexed. 2000 = 100. 1987 – 2012



1) Wage earners and benefit recipients. Self-employed excluded.
2) Disposable income is after-tax income less interest expenses.
3) Debt-servicing income is after-tax income less ordinary consumption expenditure.
Sources: Statistics Norway (Household Income and Wealth), National Institute for Consumer Research and Norges Bank

Chart 3.6 Share of debt held by vulnerable households[1]. Percent of total debt. 1987 – 2012



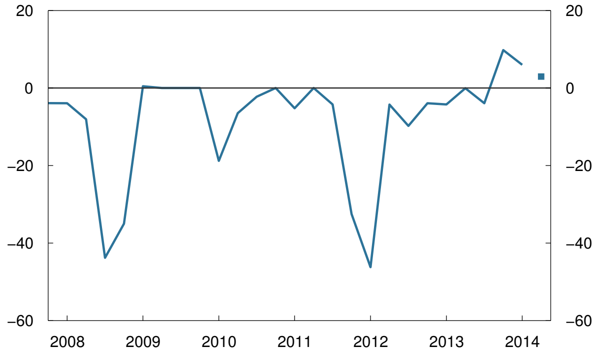
1) Wage earners and benefit recipients. Self-employed excluded.
2) Margin is after-tax income less interest expenses and ordinary consumption expenditure.
Sources: Statistics Norway (Household Income and Wealth), National Institute for Consumer Research and Norges Bank

autumn, house prices have shown a renewed rise in recent months. In May, house prices were 0.3% higher than one year earlier. Housing market turnover has picked up recently, but the stock of houses for sale is still higher than one year ago (see Chart 3.9). Norges Bank's System for Averaging short-term Models (SAM), which is based on a broad set of indicators and models for house prices, implies a rise in house price inflation in the coming quarters.

Mainland enterprises raised considerable debt in the years prior to the financial crisis, but debt growth eased to a more moderate level in the post-crisis period (see Chart 3.2). Growth in bank lending, which is the primary credit source for enterprises, has been low over the past year (see Chart 3.10). At the same time, domestic bond debt has increased sharply. The build-up of bank capital may have led to a larger share of enterprises' new funding being procured in the bond market. Enterprises' foreign debt grew sharply in 2013, but growth has abated recently.

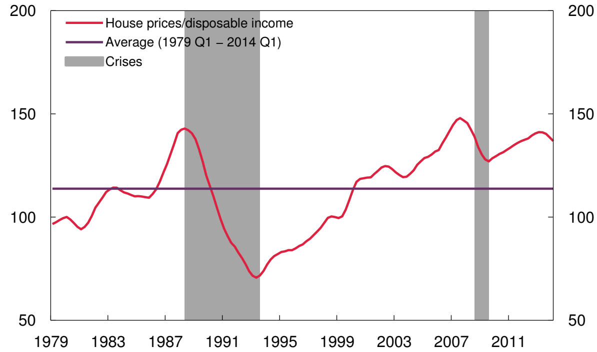
The debt-servicing capacity of Norwegian listed companies is at a lower level than prior to the financial

Chart 3.7 Changes in banks' credit standards for households, last quarter and expected change next quarter.[1] Percent. 2007 Q4 – 2014 Q2



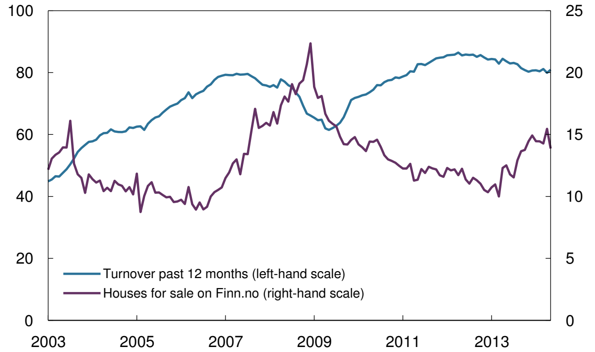
1) Negative figures denote tighter credit standards.
Source: Norges Bank

Chart 3.8 House prices[1] relative to disposable income[2]. Indexed. 1998 Q4 = 100. 1979 Q1 – 2014 Q1



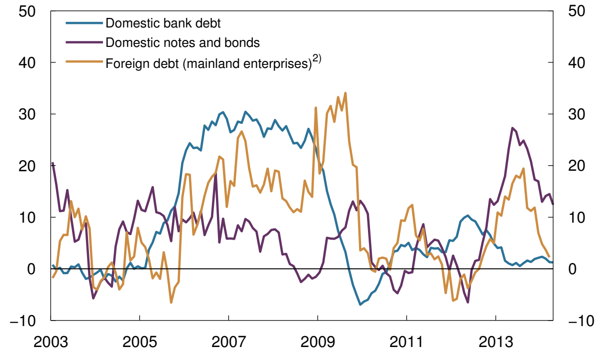
1) Quarterly figures pre-1990 are calculated by linear interpolation of annual figures.
2) Adjusted for estimated reinvested dividend income for 2000 – 2005 and redemption/reduction of equity capital for 2006 Q1 – 2012 Q3.
Sources: Statistics Norway, Eiendom Norge, Norwegian Association of Real Estate Agents (NEF), Finn.no, Eiendomsverdi and Norges Bank

Chart 3.9 Turnover and houses for sale. Seasonally adjusted. In 1000s of dwellings. January 2003 – May 2014



Sources: Eiendom Norge, Finn.no and Eiendomsverdi

Chart 3.10 Credit from selected funding sources to Norwegian non-financial enterprises. Twelve-month growth.[1] Percent. January 2003 – April 2014



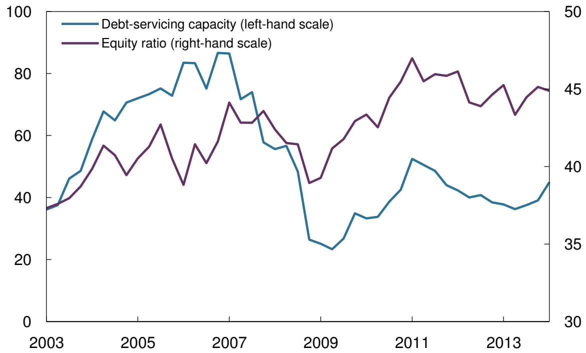
1) Change in stocks.
2) To March 2014.
Sources: Statistics Norway and Norges Bank

crisis (see Chart 3.11). A weakening of debt-servicing capacity has earlier been followed by an increase in the proportion of banks' non-performing loans and loan losses. At the same time, the equity ratio for the enterprise sector has risen over the past decade. After edging down over the past few years, the ratio has remained fairly stable in recent quarters.

Norwegian banks' largest credit exposure is to the commercial property sector. In recent years, this sector has contributed to sustaining growth in bank credit to the enterprise sector (see Chart 3.12). Banks have particularly large exposures to the office market in the Oslo region. The price indicator for commercial property, which is based on estimated market prices for high-standard office premises in Oslo, has edged down over the past year (see Chart 3.13). The indicator is still at a high level.

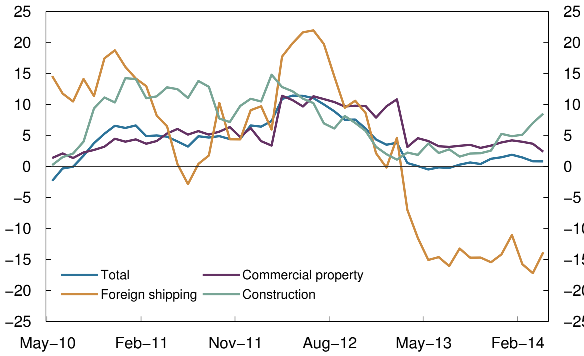
Norwegian banks were dependent on wholesale funding to finance the sharp growth in lending in the years leading up to the financial crisis (see Chart 3.14). In recent years, strong growth in deposits, combined with moderate lending growth, has contributed to

Chart 3.11 Debt-servicing capacity[1)] and equity ratio[2)] for listed companies. Percent. 2003 Q1 – 2014 Q1



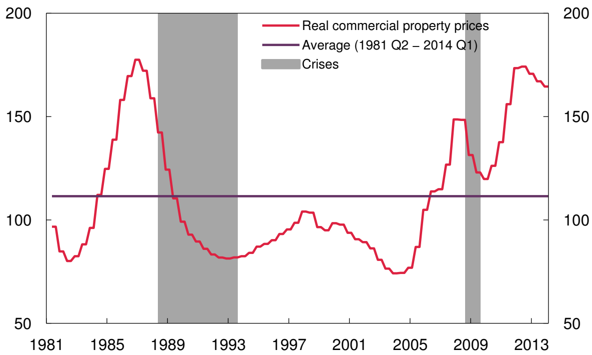
1) Pre-tax profit plus depreciation and amortisation for the previous four quarters as a percentage of interest-bearing debt for non-financial companies included in the OBX index (excluding Statoil).
2) Equity as a percentage of assets for non-financial companies on Oslo Børs.
Sources: Bloomberg, Statistics Norway and Norges Bank

Chart 3.12 Banks' lending to non-financial enterprises in selected industries in Norway.[1)] Twelve-month growth. Percent. May 2010 – April 2014



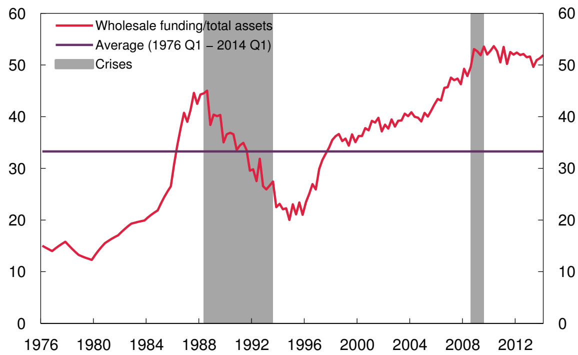
1) All banks and mortgage companies in Norway. The figures do not include lending from Eksportkreditt, which is not considered a mortgage company.
Sources: Statistics Norway and Norges Bank

Chart 3.13 Real commercial property prices.[1)] Indexed. 1998 = 100. 1981 Q2 – 2014 Q1



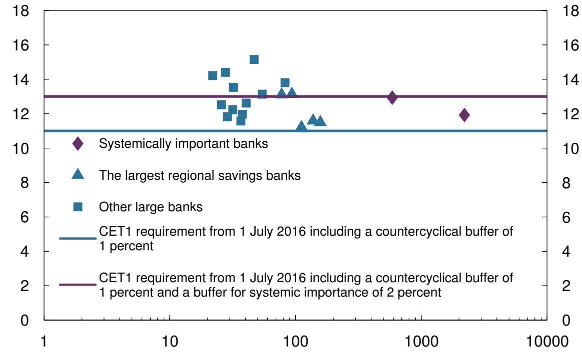
1) Estimated market prices for office premises in Oslo deflated by the GDP deflator for mainland Norway.
Sources: Dagens Næringsliv, OPAK, Statistics Norway and Norges Bank

Chart 3.14 Banks'[1)] wholesale funding as a percentage of total assets.[2)] Percent. 1976 Q1 – 2014 Q1



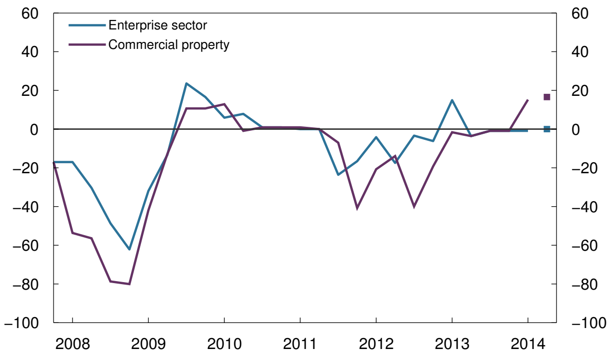
1) All banks and covered bond mortgage companies in Norway excluding branches and subsidiaries of foreign banks in Norway.
2) Quarterly figures pre-1989 are calculated by linear interpolation of annual figures.
Source: Norges Bank

Chart 3.15 Banking groups'[1)] Common Equity Tier 1 (CET1) capital ratios. Percent. Total assets[2)]. In billions of NOK. At 31 March 2014[3)]



1) Banking groups with total assets in excess of NOK 20bn, excluding branches of foreign banks in Norway.
2) Logarithmic scale.
3) Assuming that the entire profit for 2014 Q1 is added to the CET1 capital.
Sources: Banking groups' quarterly reports and Norges Bank

Chart 3.16 Changes in banks' credit standards for non-financial enterprises, last quarter and expected change next quarter.[1)] Percent. 2007 Q4 – 2014 Q2



1) Negative figures denote tighter credit standards.
Source: Norges Bank

stabilising banks' share of wholesale funding. The share has edged up in recent quarters.

The four indicators of financial imbalances are at historically high levels (see Charts 3.1, 3.8, 3.13 and 3.14). They are also higher than most of the estimated long-term trends (see box on page 32). This indicates that financial imbalances that may trigger or amplify an economic downturn have built up. Recently, the gaps have narrowed somewhat. Developments indicate that financial imbalances are not building up further. If house prices again rise at a faster pace than household income and debt growth increases, systemic risk may increase further out.

BANKS' ADJUSTMENT PROCESS

The buffer rate should be considered in the light of other requirements applying to banks, particularly when new requirements are introduced (see box on page 34).

At the end of Q1, all large Norwegian banking groups satisfied the required CET1 ratio of 10% as from 1 July 2014 by a considerable margin (see Chart 3.15). Banks posted sound earnings in Q1. The largest banks[4] combined have a CET1 ratio of 12.1%, if the entire Q1 result is added to CET1.

The decision of the Ministry of Finance to designate DNB Bank and Nordea Bank Norge as systemically important banks imply a further increase in the capital requirements for these two banks in the period to 2016. The large savings banks will, nonetheless, likely also have to adapt to the highest capital requirements.

Developments over the past two years indicate that banks can increase their CET1 ratios by around 1 percentage point per year by means of profit retention. Equity issues are a means for banks to rapidly meet increased capital requirements without having to restrict lending capacity. Banks can also choose to sell assets or curb new lending in order to increase their capital ratios more rapidly.

4 The seven largest Norwegian banking groups: DNB Bank, Nordea Bank Norge, SpareBank 1 SR-Bank, Sparebanken Vest, SpareBank 1 SMN, Sparebanken Sør and SpareBank 1 Nord-Norge.

Credit growth over the past year indicates that enterprises on the whole have ample access to credit. In the NHO (Confederation of Norwegian Enterprise) second-quarter survey 16% of the member companies report that investment projects are being reconsidered or postponed to a large extent owing to the situation in banks and financial markets. The corresponding figure for Q1 was 25%. Reduced access to credit and funding is still ranked lowest of a number of obstacles to investment. Banks in Norges Bank's lending survey expected no changes in credit standards to enterprises overall in Q2, but some easing of credit standards for firms in the commercial property sector (see Chart 3.16).

DECISION ON THE COUNTERCYCLICAL CAPITAL BUFFER

The level of the countercyclical capital buffer was laid down in the Regulation on the Level of the Countercyclical Capital Buffer of 12 December 2013:

"Section 1
Banks, financial undertakings and parent companies of a financial group that is not an insurance group shall as from 30 June 2015 hold a countercyclical capital buffer comprising Common Equity Tier 1 capital amounting to one (1) percentage point.

Section 2
The countercyclical capital buffer shall be calculated using the same risk-weighted assets as for the minimum regulatory capital requirement.

Section 3
This regulation enters into force immediately."

In a letter to the Ministry of Finance on 26 March 2014, Norges Bank assessed that the decision basis did not warrant a change in the buffer rate.[1] Finanstilsynet (Financial Supervisory Authority of Norway) concurred with Norges Bank's advice. On 4 April, the Ministry of Finance decided to keep the buffer rate unchanged.

1 See "Advice on the countercyclical capital buffer, 2014 Q1", Norges Bank 4 April 2014.

CRITERIA FOR AN APPROPRIATE COUNTERCYCLICAL CAPITAL BUFFER[1]

The countercyclical capital buffer should satisfy the following criteria:

1. ***Banks should become more resilient during an upturn***

2. ***The size of the buffer should be viewed in the light of other requirements applying to banks***

3. ***Stress in the financial system should be alleviated***

The countercyclical capital buffer should be increased when financial imbalances are building up or have built up. This will strengthen the resilience of the banking sector to an impending downturn and strengthen the financial system. Moreover, a countercyclical capital buffer may curb high credit growth and mitigate the risk that financial imbalances trigger or amplify an economic downturn.

Experience from previous financial crises in Norway and other countries shows that both banks and borrowers often take on considerable risk in periods of strong credit growth. In an upturn, credit that rises faster than GDP will signal a build-up of imbalances. Rising house and commercial property prices tend to go hand in hand with increasing debt growth. When banks grow rapidly and fund new loans directly in the financial market, systemic risk may increase.

Norges Bank's advice to increase the countercyclical capital buffer will primarily be based on four key indicators: i) the ratio of total credit (C2 households and C3 mainland non-financial enterprises) to mainland GDP, ii) the ratio of house prices to household disposable income, iii) commercial property prices and iv) the wholesale funding ratio of Norwegian credit institutions.[2] The four indicators have historically risen ahead of periods of financial instability.

As part of the basis for advice on the countercyclical capital buffer, Norges Bank will analyse developments in the key indicators and compare the current situation with historical trends (see box on page 32). Norges Bank's advice will also build on recommendations from the European Systemic Risk Board (ESRB). Under the EU Capital Requirements Directive (CRD IV), national authorities shall on a quarterly basis calculate a buffer guide as a reference in setting the countercyclical buffer rate.

There will not be a mechanical relationship between the indicators, the gaps or recommendations from the ESRB[3] and Norges Bank's advice on the countercyclical capital buffer. The advice will be based on the Bank's professional judgement, which will also take into account other factors. Other requirements applying to banks will be a part of the assessment, particularly when new requirements are introduced.

The countercyclical capital buffer is not an instrument for fine-tuning the economy. The buffer rate should not be reduced automatically even if there are signs that financial imbalances are receding. In long periods of low loan losses, rising asset prices and credit growth, banks should normally hold a countercyclical buffer.

The buffer rate can be reduced in the event of an economic downturn and large bank losses. If the buffer functions as intended, banks will tighten lending to a lesser extent in a downturn than would otherwise be the case. This may mitigate the procyclical effects of tighter bank lending. The buffer rate will not be reduced to alleviate isolated problems in individual banks.

The key indicators are not well suited to signalling whether the buffer rate should be reduced. Other information, such as market turbulence and loss prospects for the banking sector, will then be more relevant.

1 See also "Criteria for an appropriate countercyclical capital buffer", *Norges Bank Papers* 1/2013.

2 As experience and insights are gained, the set of indicators can be developed further.

3 Guidance from the ESRB will be issued in the form of an ESRB Recommendation in the second half of 2014.

TREND CALCULATION AND BUFFER GUIDE[1]

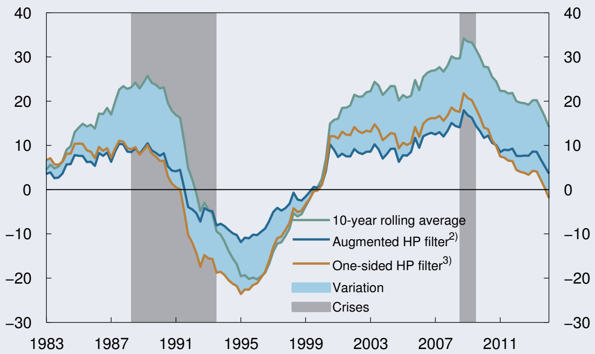
Norges Bank analyses developments in four key indicators and compares the current situation with long-term trends. There is considerable uncertainty related to trend calculations and hence to measures of financial imbalances. Given this uncertainty, different methods for calculating trends have been considered.

Norges Bank has so far used three methods to calculate the trends[2]: a one-sided Hodrick-Prescott (HP) filter as applied by the Basel Committee on Banking Supervision, a one-sided HP filter augmented with a simple projection, and historical averages. For house prices relative to disposable income and real commercial property prices, the average is calculated recursively throughout the period, while for credit

1 See also "Criteria for an appropriate countercyclical capital buffer", *Norges Bank Papers* 1/2013.

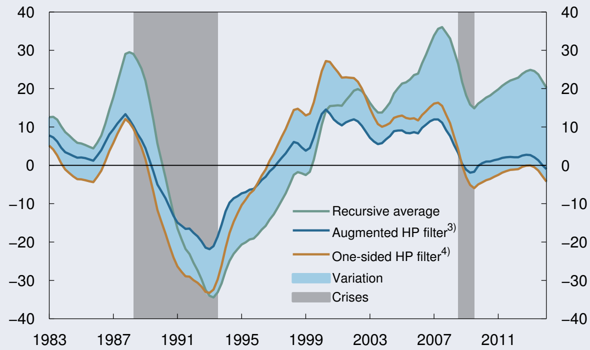
2 For further details, see box on measuring financial imbalances on page 30 in *Monetary Policy Report* 2/2013.

Chart 3.17a Credit gap. Total credit[1)] mainland Norway as a percentage of mainland GDP. Deviation from estimated trends. Percentage points. 1983 Q1 – 2014 Q1



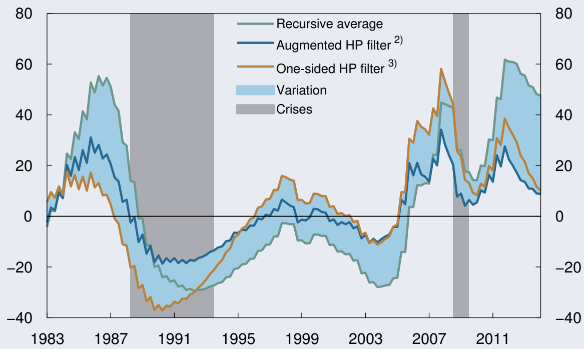
1) The sum of C2 households and C3 non-financial enterprises in mainland Norway (all non-financial enterprises pre-1995). C3 includes C2 and foreign debt.
2) One-sided Hodrick-Prescott filter estimated on data augmented with a simple projection. Lambda = 400 000.
3) One-sided Hodrick-Prescott filter. Lambda = 400 000.
Sources: Statistics Norway, IMF and Norges Bank

Chart 3.17b House price gap. House prices[1)] as a percentage of disposable income[2)]. Deviation from estimated trends. Percent. 1983 Q1 – 2014 Q1



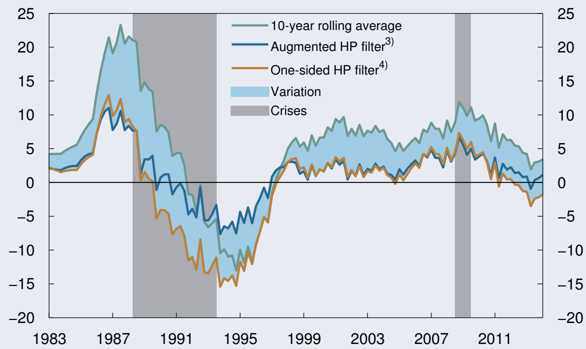
1) Quarterly pre-1990 figures are calculated by linear interpolation of annual figures.
2) Adjusted for estimated reinvested dividend income for 2000 – 2005 and redemption/reduction of equity capital for 2006 Q1 – 2012 Q3.
3) One-sided Hodrick-Prescott filter estimated on data augmented with a simple projection. Lambda = 400 000.
4) One-sided Hodrick-Prescott filter. Lambda = 400 000.
Sources: Statistics Norway, Eiendom Norge, Norwegian Association of Real Estate Agents (NEF), Finn.no, Eiendomsverdi and Norges Bank

Chart 3.17c Real commercial property price gap. Real commercial property prices[1)] as deviation from estimated trends. Percent. 1983 Q1 – 2014 Q1



1) Estimated market prices for office premises in Oslo deflated by the GDP deflator for mainland Norway.
2) One-sided Hodrick-Prescott filter estimated on data augmented with a simple projection. Lambda = 400 000.
3) One-sided Hodrick-Prescott filter. Lambda = 400 000.
Sources: Dagens Næringsliv, OPAK, Statistics Norway and Norges Bank

Chart 3.17d Wholesale funding gap. Banks'[1)] wholesale funding as a percentage of total assets.[2)] Deviation from estimated trends. Percentage points. 1983 Q1 – 2014 Q1



1) All banks and covered bond mortgage companies in Norway excluding branches and subsidiaries of foreign banks in Norway.
2) Quarterly figures pre-1989 are calculated by linear interpolation of annual figures.
3) One-sided Hodrick-Prescott filter estimated on data augmented with a simple projection. Lambda = 400 000.
4) One-sided Hodrick-Prescott filter. Lambda = 400 000.
Source: Norges Bank

relative to GDP and banks' share of market funding, a 10-year rolling average is used.

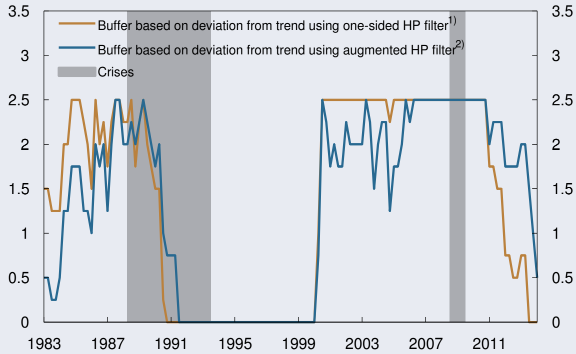
Chart 3.17 a shows the credit indicator as deviation from the estimated trends. The gaps between the indicator and the trends have narrowed in recent years, but the indicator is still higher than two out of three trends. While the credit indicator was fairly stable in the years following the financial crisis, the trend calculated using the one-sided HP filter has continued to rise rapidly. If the pre-financial crisis growth rate is not sustainable, this method may underestimate financial imbalances. From experience, the credit gap is a better leading indicator of crises when the trend is based on an augmented HP filter.

Charts 3.17 b–d show the other key indicators as deviations from calculated trends. All the indicators are at high levels. In recent years, the deviations between indicators and trends have narrowed, but most of the gaps are positive.

The Basel Committee has proposed a simple rule for calculating a reference rate for the buffer based on the credit-to-GDP ratio.[3] Under the rule, the buffer will be activated when the credit gap exceeds 2 percentage points. When the credit gap is between 2 and 10 percentage points, the reference rate will vary linearly between 0% and 2.5%. When the credit gap is 10 percentage points or more, the reference rate for the countercyclical capital buffer will be 2.5%. The reference rate for the buffer is 0% in 2014 Q1 when the trend is calculated using a one-sided HP filter. When the trend calculation is based on an augmented HP filter, the reference rate is ½% (see Chart 3.18).

3 See *Guidance for national authorities operating the countercyclical capital buffer*, Basel Committee on Banking Supervision (2010), Bank for International Settlements.

Chart 3.18 Reference rates for the countercyclical capital buffer under alternative trend estimates. Percent. 1983 Q1 – 2014 Q1



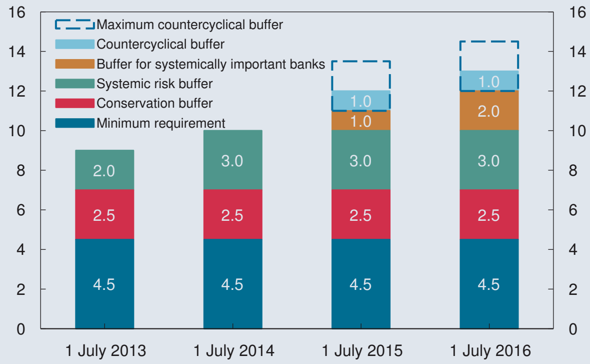
1) One-sided Hodrick-Prescott filter. Lambda = 400 000.
2) One-sided Hodrick-Prescott filter estimated on data augmented with a simple projection. Lambda = 400 000.
Sources: Statistics Norway, IMF and Norges Bank

CHANGES TO NORWEGIAN CAPITAL ADEQUACY REGULATIONS

On 12 May 2014, the Ministry of Finance laid down criteria for designating a financial institution as systemically important. Financial institutions with total assets of at least 10% of mainland GDP and/or at least a 5% market share of loans to the private and municipal sector in Norway are, as a main rule, to be designated as systemically important.[1] The Ministry of Finance designated DNB ASA, Nordea Bank Norge ASA and Kommunalbanken AS[2] as systemically important. The required CET1 ratio will be raised by 1.0 percentage point for these banks as from 1 July 2015 and 2.0 percentage points as from 1 July 2016 (see Chart 3.19). Finanstilsynet (Financial Supervisory Authority of Norway) will by the end of the first quarter each year provide advice to the Ministry of Finance on which banks should be designated as systemically important. The decision of the Ministry should normally take effect no earlier than 12 months after the decision.

1 See Regulation on the Designation of Systemically Important Financial Institutions, Ministry of Finance 2014 [in Norwegian].
2 Kommunalbanken AS is a wholly state-owned limited company that provides loans to the municipal sector in Norway.

Chart 3.19 Common Equity Tier 1 capital requirements in the new regulatory framework. Percent. 1 July 2013 – 1 July 2016



Sources: Ministry of Finance and Norges Bank

EU capital adequacy legislation (CRD IV/CRR) entered into force on 1 January 2014. The legislation will eventually apply in Norway through the EEA Agreement. The capital and buffer requirements in CRD IV were incorporated into Norwegian legislation in summer 2013. Finanstilsynet has drawn up a proposal containing rules for the implementation of several of the remaining provisions of CRD IV until they are incorporated into the EEA Agreement. The proposed regulatory changes may result in some increase in the reported CET1 ratios of banks using the Internal Ratings Based (IRB) approach. Finanstilsynet's regulatory proposal was circulated for comment, with closing date on 15 May.

IRB banks were required as from 1 January 2014 to use a minimum loss-given-default (LGD) rate of 20% when calculating the risk weights for residential mortgages. This resulted in an increase in the weights for residential mortgages for all Norwegian IRB banks. The rules nevertheless have different implications for these institutions' capital ratios. Half of the IRB banks are still bound by the transitional rule[3]. For those banks, the increase in residential mortgage weights does not entail a change in capital ratios. For banks that are not bound by the transitional rule, risk-weighted assets are now higher, and hence capital ratios lower, as a result of the increase in residential mortgage risk weights. Finanstilsynet has also announced possible additional requirements for IRB banks' models for calculating residential mortgage risk weights, which may further raise the risk-weighted assets of some banks.

3 Under the transitional rule, the sum of risk-weighted assets for IRB banks must be at least 80% of that which would have applied under Basel I. Under CRD IV, the transitional rule will continue to apply until 2017.

BOXES

International economy – developments in different regions and countries

Household debt by birth cohort

Household saving

Export market growth and developments in Norwegian mainland exports

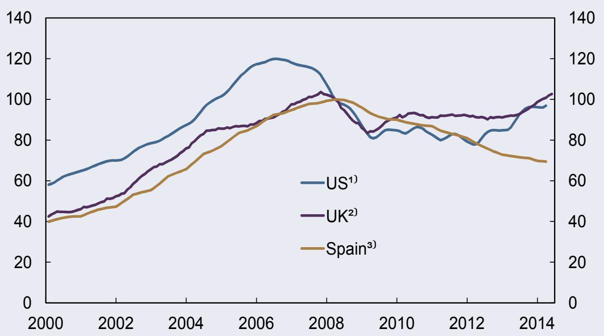
INTERNATIONAL ECONOMY – DEVELOPMENTS IN DIFFERENT REGIONS AND COUNTRIES

In the US, GDP fell in 2014 Q1, largely as a result of extreme weather conditions through winter. Private consumption grew at a solid pace, while investment fell markedly. Developments were weaker than anticipated in the March 2014 *Monetary Policy Report*. New data, however, point towards relatively solid underlying growth with improvements in manufacturing, retail trade and the labour market. The projection for GDP growth in 2014 has nonetheless been revised down somewhat. With regard to growth further ahead, there is particular uncertainty concerning developments in the housing market. Following a marked improvement in the housing market over the past few years, activity has softened somewhat since autumn 2013. House prices continue to rise (see Chart 1), although this is partly due to a low supply of homes for sale. Turnover has fallen. This can partly be attributed to weather conditions and increases in residential mortgage rates, but the weakening has been somewhat more pronounced than expected. However, several indicators now point towards a rebound in activity.

Employment has risen, but a falling labour participation rate has made a substantial contribution to the decline in unemployment (see Chart 2). Long-term unemployment is still historically high and wage growth is low. Looking ahead, US economic growth is still expected to pick up gradually (see Table 3 in Annex). The projections are based on the assumption that a continued improvement in the labour and housing markets, low interest rates and reducing fiscal tightening will underpin private consumption. Investment as a share of GDP is low, but improved prospects and the need to renew capital stock are expected to push up the rate of investment growth.

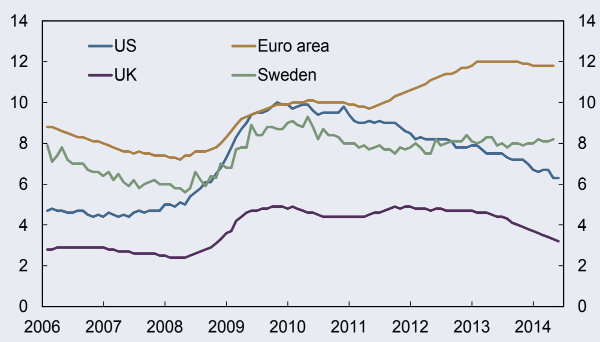
For the euro area as a whole, GDP growth in 2014 Q1 was weaker than projected in the March *Report*. Several major economies were affected by the unusually mild winter weather, but the impact on growth differed widely. In Germany, high activity in the construction industry provided a boost to overall growth. In several other countries, such as the Netherlands and France, energy consumption and production fell to such an extent that GDP growth was lower than expected. However, activity indicators suggest that the improvement in underlying growth has continued (see Chart 3). In line with this, the Bank's projections are still based on the assumption that euro area activity will pick up further. Growth is expected to be positive in virtually all euro area countries, with a stronger contribution from domestic demand. Domestic demand is being supported by an expansionary monetary policy, a gradual improvement in funding conditions and less contractionary fiscal policy.

Chart 1 House prices. Index. January 2008 = 100. January 2000 – May 2014



1) Case-Shiller Composite 20 index. To March 2014.
2) Nationwide Building Society house price index.
3) Ministry of Housing, Spain, appraisal values of dwellings. Converted from quarterly figures. To March 2014.
Source: Thomson Reuters

Chart 2 Unemployment. Percentage of labour force. January 2006 – May 2014



Source: Thomson Reuters

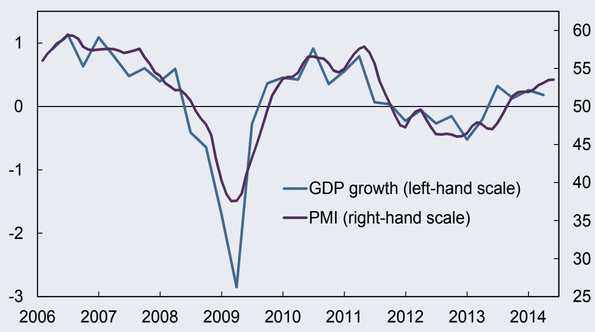
At the same time, the need for deleveraging in the private and public sector will dampen the pace of growth and contribute to persistently high unemployment. Lending to the private sector has fallen since autumn 2012. The European Central Bank (ECB) semi-annual survey on the access to finance of small and medium-sized enterprises shows that access to credit is still a considerable problem for many enterprises. Developments are, however, going in the right direction and the April 2014 ECB bank lending survey confirms that lending conditions are no longer being tightened, for households or for enterprises. In June, the ECB announced measures aimed at increasing bank loans to non-financial enterprises.

The European Banking Authority (EBA) has released its macroeconomic scenarios for the 2014 stress test of the banking sector. Combined with the ECB's quality reviews of banks' balance sheets, the stress test is expected to strengthen market participants' confidence in European banks, in particular in countries with very weak economies, where uncertainty around bank assets has pushed up banks' funding costs. Lower funding costs can improve banks' solidity and, in the long term, provide a basis for lower bank lending rates. For 2014, however, the effect on lending growth may have been negative in some countries, to the extent banks have sought to adjust their balance sheets prior to their review by the authorities.

Consumer price inflation in the euro area has been somewhat lower than assumed in the March *Report*. Factors contributing to the low rate of inflation include low commodity price inflation, the appreciation of the euro, low capacity utilisation and the need to improve competitiveness in several euro area countries. Consumer price inflation is expected to remain around the April and May level through the summer and autumn before beginning to rise gradually towards the end of the year.

High GDP growth in the UK continued into Q1 and was somewhat stronger than assumed in March. The UK now has the highest growth rate among major advanced economies. Services have contributed in particular, but manufacturing activity has also increased. Unemployment has continued to fall through winter. Growth in domestic demand has picked up and growth in household consumption is higher than implied by income growth. While inflationary pressures are receding, house price inflation has been high for several years. There are growing concerns that a new housing bubble is developing, particularly in London. House prices have reached the pre-crisis level (see Chart 1). Growth projections have

Chart 3 Euro area: Quarterly GDP growth. Percent. 2006 Q1 – 2014 Q1. PMI, three-month average. Diffusion index centred around 50. January 2006 – May 2014



Source: Thomson Reuters

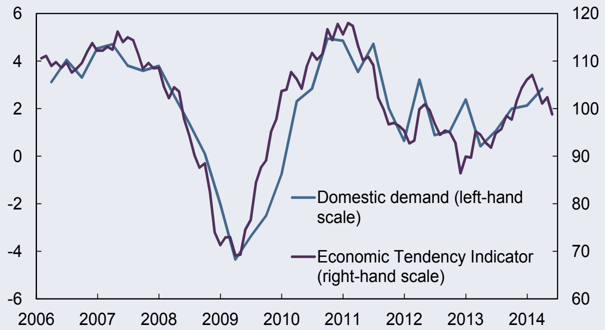
been revised up somewhat in 2014 as a result of strong growth in Q1. The Bank expects that expansionary monetary policies, favourable labour market developments and slowing inflation will contribute to solid growth in private consumption and investment. A higher contribution from net exports is also expected as euro area growth picks up.

GDP growth in Sweden slowed more than expected in 2014 Q1. Underlying growth, however, is stronger than developments in overall GDP would indicate. Lower-than-expected growth primarily reflects strong import growth. The growth contribution from domestic demand was in line with that anticipated in the March *Report*. Confidence indicators suggest sustained demand growth in Q2 (see Chart 4). Household confidence has improved considerably over the past year, supported by solid growth in employment. Combined with a high saving ratio, income tax reductions and low interest rate levels, this gives reason to expect solid growth in private consumption ahead. With high growth in consumption and an expected upswing in business investment, imports are likely to pick up considerably this year after falling in 2013. At the same time, higher international demand and rising export orders point towards a pick-up in exports. All in all, the growth contribution from net exports is expected to be close to zero in the years ahead.

Consumer price inflation is unusually low also in Sweden. For 2014 overall, the Bank expects CPI inflation to be around zero. Some of the fall in inflation is directly related to the Riksbank's reduction in the key rate, but CPI inflation is also low when adjusted for interest rate changes (CPIF, the CPI with a fixed mortgage rate). Low underlying inflation is related to low imported inflation, relatively low capacity utilisation and likely also reduced corporate margins. The Bank expects that underlying inflation will remain low through summer and autumn before picking up in pace with higher capacity utilisation and higher imported inflation. The CPI including interest rate changes will rise somewhat more rapidly further ahead

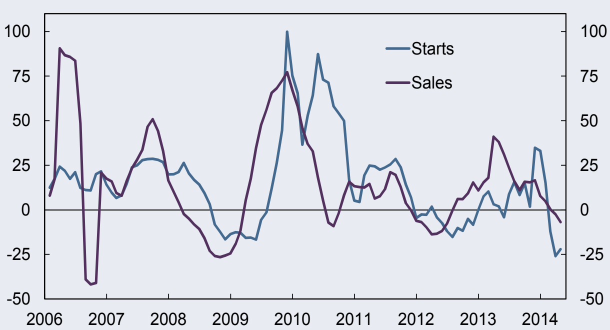
Four-quarter growth in China softened from 7.7% in 2013 Q4 to 7.4% in 2014 Q1. More subdued domestic demand reflects tighter credit conditions and previous policy tightening. Foreign trade has also been weak, despite some improvement in recent months. The property market has cooled in recent months (see Chart 5). Lower growth in property investment is expected to continue in the period ahead. The Bank's growth projections for China have been revised down somewhat. With prospects for a further improvement in exports, increased infrastructure investment and continued solid growth in domestic consumption,

Chart 4 Sweden: Four-quarter growth in domestic demand[1]. 2006 Q1 – 2014 Q1. Economic Tendency Indicator[2]. January 2006 – May 2014



1) Private and public consumption and investment (except inventories).
2) Swedish firms' and households' view on economic developments. Historical average = 100.
Source: Thomson Reuters

Chart 5 China: Starts and sales of new buildings. Residential and commercial properties. Square metres. Twelve-month change. Percent. January 2006 – April 2014



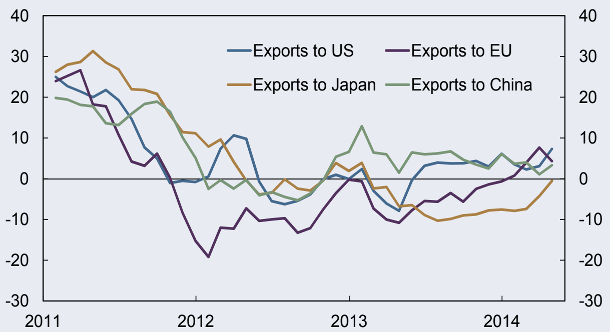
Source: CEIC

the Bank does not expect a substantial fall in growth in the coming years. The developments in the property market have nonetheless increased the risk of an abrupt decline in investment, which could have significant ripple effects both in China and in other countries. This is discussed in more detail in *Economic Commentaries* 5/2014, "Consequences of an abrupt slowdown in China's property market" (forthcoming).

In other emerging economies in Asia, growth has been approximately in line with projections in the March *Report*. Higher real interest rates have curbed growth in domestic demand, while current account balances have improved in several countries because of previous currency depreciations. In India, growth appears to be bottoming out. Business confidence has improved and public investment and higher exports are expected to boost growth ahead. In Thailand, growth prospects have been weakened by political unrest, which has led to heightened uncertainty and postponements of public investment projects. In Russia, four-quarter GDP growth slowed from 2% in 2013 Q4 to 0.9% in 2014 Q1. Tensions around the situation in Ukraine have contributed to a surge in capital outflows from Russia, and consumer and business confidence has fallen. Capital outflows and rising inflation have led to monetary policy tightening that is expected to restrain growth further ahead. In Brazil, growth prospects have weakened somewhat because of drought and poor crop yields.

The situation in financial markets in emerging economies has improved, including broad currency appreciation. This may be related to the rapid policy response in countries such as Indonesia and India and signals that fiscal measures may be introduced to boost growth in China. The two episodes of market turbulence in the past year have nonetheless revealed vulnerabilities in several emerging economies. Economic policy tightening is expected to dampen growth for some time ahead, while further normalisation of monetary policy in the US may contribute to additional episodes of increased volatility in financial markets. Growth is expected to edge up in 2015, to 3½% as a result of better export prospects (see Chart 6) and a moderate release of pent-up domestic demand. Compared with the March *Report*, growth in emerging economies has been revised down by ½ percentage point in 2014 and 2015 and ¼ percentage point annually further out in the projection period.

Chart 6 Asia: Export growth to trading partners.
Twelve-month change, three-month moving average. Percent.
January 2011 – April 2014



Sources: Thomson Reuters and Norges Bank

HOUSEHOLD DEBT BY BIRTH COHORT

Total household debt has continued to rise in recent years and debt is now at a historically high level relative to disposable income. Indebtedness is closely linked to the household life cycle. Data on debt and income for different birth cohorts can shed led light on possible changes over time in household behaviour in various phases of the life cycle.[1]

Chart 1 shows developments in debt at constant prices for different household birth cohorts. A birth cohort consists of households where the main income earners are born in the same year. We focus on six different cohorts. The cohorts are born at ten-year intervals between 1922 and 1972. The coloured lines in the chart show developments over time for these cohorts. For each year the cohort moves to the right in the chart. Data are available from 1987 to 2012. Households in the cohort born in 1952 are thus included in the data from the age of 35. The grey curves show developments for the entire adult population in the years 2004, 2007 and 2012.

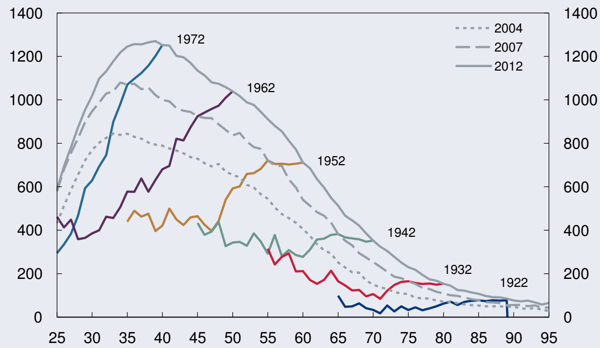
1 The analysis is based on household income and wealth data from Statistics Norway. See also Lindquist, Riiser, Solheim and Vatne, "Ten years of household micro data. What have we learned?", *Norges Bank Staff Memo* 8/2014.

Average debt increased sharply through the 2000s. The grey curves in the chart show a marked upward shift over time. The largest upward shift is for young households that raise debt to finance the acquisition of a dwelling. A large amount of debt raised in one phase of the life cycle is carried over into future phases. The life cycle profile that is shown by the coloured lines in the chart illustrates that later cohorts consistently have more debt than the earlier cohorts had in the same phase.[2] This must be seen against the background of the sharp increase in the value of housing in the 2000s and easier access to raising loans secured on dwellings.

The household debt ratio is often measured as debt as a percentage of disposable income, where disposable income is defined as income after tax and interest expenses. Disposable income is a measure of household income available for consumption and saving. By this measure, debt ratios increased sharply in the 2000s, particularly for the later cohorts (see Chart 2).

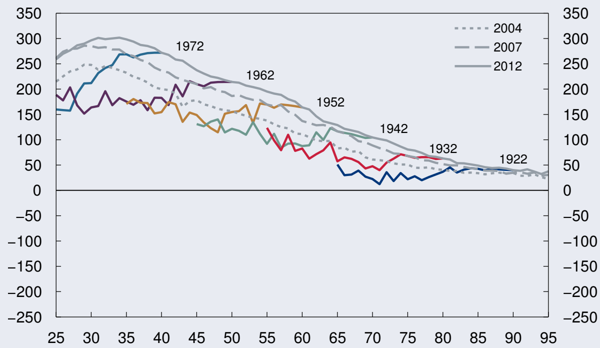
2 The exceptions occur during the Norwegian banking crisis in the period 1988–1993. Average real debt for several cohorts declined during and in the aftermath of the crisis, as evident for the cohort born in 1962.

Chart 1 Average debt by age of main income earner[1)].
Constant 2000-prices. NOK 1000. Cohort analysis. 1987 – 2012



1) Wage earners and benefit recipients. Self-employed excluded.
Sources: Statistics Norway (Household Income and Wealth) and Norges Bank

Chart 2 Debt-to-disposable income ratio[1)] by age of main income earner [2)].
Percent. Cohort analysis. 1987 – 2012



1) Disposable income is after-tax income less interest expenses.
2) Wage earners and benefit recipients. Self-employed excluded.
Sources: Statistics Norway (Household Income and Wealth) and Norges Bank

For some cohorts, debt reached 300% of disposable income in 2012. A comparison of debt ratios in a specific phase of the life cycle across cohorts shows that debt ratios for later cohorts are considerably higher than what was the case for earlier cohorts. This may indicate that later cohorts are more vulnerable to a loss of income and higher lending rates than the earlier ones were in the same phase of the life cycle.

While many households have accumulated considerable debt, they have also accumulated substantial savings. The size of household bank deposits grew rapidly in the 2000s, particularly for older households. Bank deposits can easily be used to reduce debt. Chart 3 shows developments using an alternative measure of the household debt ratio, where debt is replaced by net debt measured as household debt less bank deposits.[3] Also by this measure, debt ratios for the later cohorts increased markedly in the 2000s.

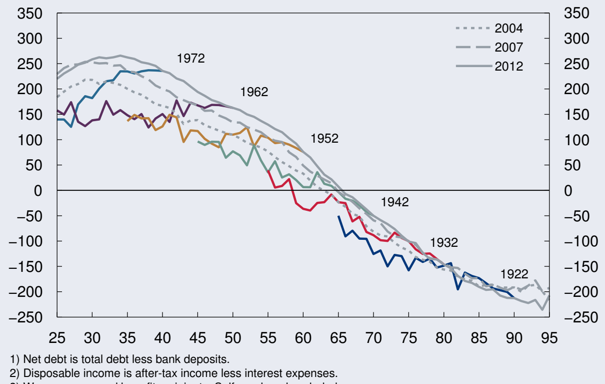
When taking into account growth in bank deposits, the coloured lines show that debt ratios fall through the life cycle for the earlier cohorts in particular.

A third measure of the household debt ratio is net debt as a percentage of income after tax and ordinary consumption expenditure, as estimated by SIFO.[4] This is a measure of household income available for interest and principal payments after expenditure on ordinary consumption. Household income has increased faster than SIFO's measure of ordinary consumption expenditure in recent decades. Accordingly, debt-servicing capacity has increased. Measured as a percentage of debt-servicing income, the increase in the indebtedness of later cohorts has been moderate (see Chart 4). The difference between debt ratios across cohorts in the same phase of the life cycle is also smaller.

3 In 2012, bank deposits accounted for about half of household financial wealth, excluding insurance claims. The remainder (excluding insurance claims) is more volatile, difficult to value and unevenly distributed. Bank deposits are therefore a good measure of the liquid financial wealth of a vast majority of households.

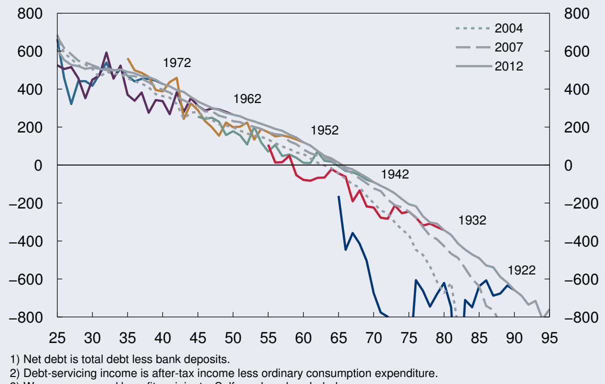
4 Ordinary, current expenditure on food, clothing, toiletries, etc., and expenditure on less frequent purchases of consumer durables such as furniture and electrical appliances. Defined by SIFO – National Institute for Consumer Research (see SIFO Standard Budget).

Chart 3 Net debt-to-disposable income ratio[1)2)] by age of main income earner[3)]. Percent. Cohort analysis. 1987 – 2012



1) Net debt is total debt less bank deposits.
2) Disposable income is after-tax income less interest expenses.
3) Wage earners and benefit recipients. Self-employed excluded.
Sources: Statistics Norway (Household Income and Wealth) and Norges Bank

Chart 4 Net debt-to-debt servicing income ratio[1)2)] by age of main income earner[3)]. Percent. Cohort analysis[4)]. 1987 – 2012



1) Net debt is total debt less bank deposits.
2) Debt-servicing income is after-tax income less ordinary consumption expenditure.
3) Wage earners and benefit recipients. Self-employed excluded.
4) Due to few observations, the series for the 1922-cohort is volatile.
Sources: Statistics Norway (Household Income and Wealth), National Institute for Consumer Research and Norges Bank

HOUSEHOLD SAVING

Household saving as a share of disposable income (saving ratio) has increased since 2007. According to figures from Statistic Norway's institutional sector accounts, the saving ratio was 9% in 2014 Q1. Excluding dividend income[1], the ratio was about 6% (see Chart 1).

The saving ratio normally fluctuates in pace with the business cycle, usually falling in upturns and rising in downturns.[2] The current cyclical situation in the Norwegian economy implies a saving ratio close to a normal level. Chart 2 shows a simple model for the relationship between the saving ratio and the cyclical situation as measured by Norges Bank's output gap.[3] The model now implies a saving ratio excluding dividend income just above the historical average of 2%. The increase in the saving ratio between 2008 and 2010 can to a great extent be explained by cyclical developments, but the model is not able to capture developments since 2010.

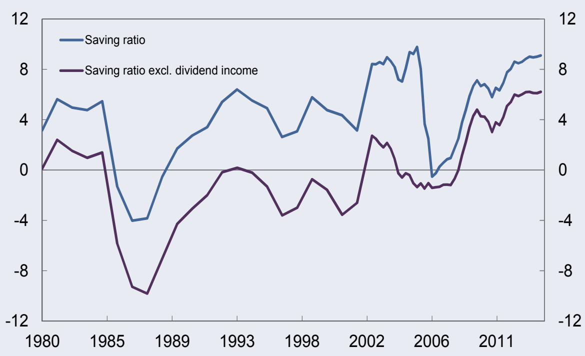
1 We use this measure of the saving ratio to restrict movements in the data series due to tax-related factors. A relatively small share of the population receives a relatively large share of total dividend income. The saving ratio adjusted for dividend income may therefore be a better measure of general household saving behaviour.
2 This empirical relationship can be explained theoretically by changes in expected lifetime income or saving motivated by caution when households change their view of the probability of a fall in income.
3 Quarterly figures for the saving ratio are not available before 2002. We have therefore constructed quarterly figures based on annual income data and quarterly consumption data. This method has also been used since 2002.

Norway has an ageing population. Such demographic changes can affect the overall saving ratio if different age groups have very different saving preferences. Calculations carried out by Statistics Norway indicate, however, that the difference in saving behaviour across age groups is too small for an ageing population to have any appreciable effect on the saving ratio from one year to another.[4] The particularly pronounced increase in the saving ratio in recent years probably reflects other factors to a greater extent. In the following, we examine the possible effects of the pension reform and high labour immigration.

There are several reasons why changes in the pension system in recent years may have influenced the saving ratio. Today, about 50 000 persons in the 62-67 age group combine wage income with a retirement pension[5] without having their pension reduced by the amount of wage income earned. This was not possible before the reform. These persons, however, have high incomes in their last years of working life, which provides an incentive to save some of this extra income in order to smooth consumption over the remaining lifespan. We do not know the actual saving

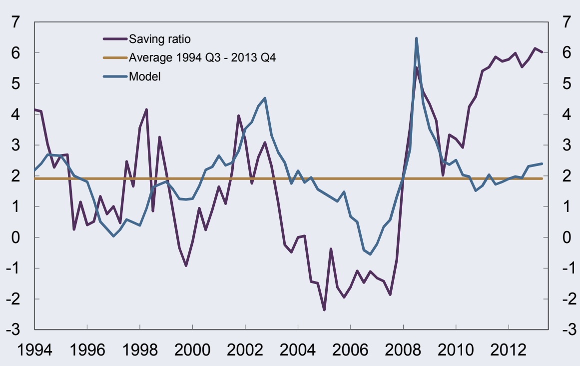
4 See *Norske husholdningers sparing* [Household saving in Norway], *Økonomiske analyser* 3/2011.
5 See *Utviklingen i alderspensjon pr. 31. mars 2014* [Developments in the retirement pension as at 31 March 2014], statistics paper by the Norwegian Labour and Welfare Administration (NAV).

Chart 1: Saving ratio. Sum of past four quarters. Percent. 1980 Q4 - 2014 Q1



Source: Statistics Norway

Chart 2: Saving ratio excl. dividend income. Percent. 1994 Q3 - 2013 Q4



Sources: Statistics Norway and Norges Bank

preference for this group, but if it is assumed that they save their retirement pension in its entirety, the option of a flexible pension drawdown may have raised the saving ratio by just below 1 percentage point.[6] The actual effect of this part of the pension reform is probably lower. In a survey conducted by the Norwegian Labour and Welfare Administration (NAV), 70% of the respondents state that the intention to save their retirement pension has been a factor influencing their choice to draw a retirement pension while continuing to earn wage income.[7]

The introduction of life expectancy adjustment in the new pension system means that an increase in life expectancy among pensioners will result in a corresponding decrease in annual pension payments. All current and future wage-earners below the age of 60 will then receive lower annual pension payments at a given retirement age than prior to the reform.[8] Those who are economically active can counteract this effect by working longer. It is also likely that wage-earners will compensate to some extent for life expectancy adjustment by saving more during the course of their working career.[9] According to the Norsk Finansbarometer 2014 survey, 23% of Norwegian households save and a further 26% are planning to save as a result of the pension reform. The effect on the saving ratio is uncertain, but it is nonetheless likely that the life expectancy adjustment combined with increased awareness of the need for personal savings has pushed up the saving ratio in recent years.

High labour immigration in recent years may also have had an impact on the overall saving ratio. Foreign workers planning to return home to low-cost countries may have incentives to save more than other population groups. This does not apply to the same extent to labour immigrants with a long time horizon for their stay or who come from countries where the cost level is in line with that of the host country. Since 2010, the number of labour immigrants from low-cost countries in eastern Europe increased by about 70 000. Surveys indicate that eastern European labour immigrants largely plan to return to their home country at some point.[10] Data that could provide an indication of the saving preferences of labour immigrants in Norway are relatively limited, making it

6 Based on an average annual post-tax pension payment of about NOK 200 000.

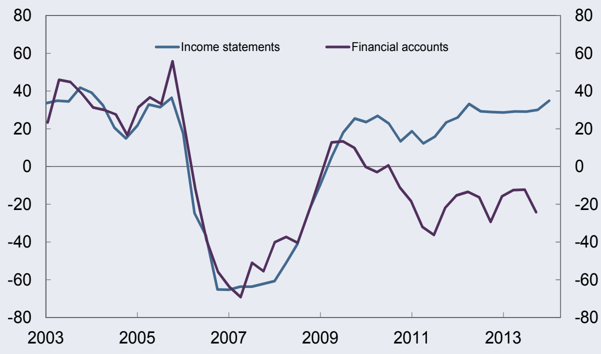
7 See *Ja takk - begge deler? En spørreundersøkelse om arbeid og pensjon* [Survey on combining work and pensions]. Mølster Galaasen and Steinung Dahl. NAV Report 4-2013.

8 A transitional arrangement applies for persons born before 1954.

9 An average wage-earner is around 45 and would have to save about 2% extra of their disposable income to fully compensate for the life expectancy adjustment.

10 See *Polonia i Oslo 2010* [Polonia in Oslo 2010]. Friberg and Eldring. Report from the Fafo research institute 2011:27.

Chart 3: Net lending. Income statements and financial accounts. Sum of past four quarters. In billions of NOK. 2003 Q1 - 2014 Q1



Source: Statistics Norway

difficult to quantify the effect on the saving ratio. If we base our assessment on average annual post-tax income for this group of NOK 275 000, and consumer expenditure as defined by the National Institute of Consumer Research (SIFO) standard budget, these persons will save around one third of their post-tax income. This saving is equivalent to about ½ percentage point of the saving ratio.

There is also uncertainty with regard to the measurement of the saving ratio. Household saving comprises net lending and net fixed investment. The institutional sector accounts are the only source that provides a complete picture of household saving. Statistics Norway also publishes net lending figures from the financial accounts. There is a substantial difference in net lending figures between the sector accounts and the financial accounts (see Chart 3). In the sector accounts, net lending is calculated as a residual item after consumption and net fixed investment have been deducted from disposable income. In the financial accounts, net lending is calculated directly as a change in the household stock of financial assets after correction for price changes.

Historically, both series of statistics have been substantially revised in the main revisions. Statistics Norway will publish revised national accounts figures in November 2014. Previous main revisions have normally resulted in a smaller divergence in net lending figures between the financial and the sector accounts as both series are revised.

We have discussed some factors that may explain the increase in the saving ratio in recent years. Both the pension reform and continued high labour immigration are factors that may sustain the saving ratio at a level that is higher than implied by the cyclical situation in the years ahead. At the same time, it is very unlikely that these factors alone can explain the increase in the saving ratio since 2010. Tighter bank credit standards[11] and increased income uncertainty, in combination with a high debt level, may have supported the high level of the saving ratio in the wake of the financial crisis. However, the contributions from these factors are difficult to quantify. Some of the increase may also reflect problems related to measurement, and the main revision in November may result in some change in the path for the household saving ratio in recent years. Looking ahead, household saving behaviour is not expected to change substantially and consumption growth is projected to be approximately in line with income growth.

11 Developments in the credit standards indicator in Norges Bank's lending survey suggest that credit standards have been tighter in recent years.

EXPORT MARKET GROWTH AND DEVELOPMENTS IN NORWEGIAN MAINLAND EXPORTS

The analyses in this *Report* are based on the assumption that exports from mainland Norway[1] will gradually increase in the years ahead in pace with the pick-up in growth among Norway's trading partners. This box presents the assessments underlying this assumption.

Market growth for Norwegian exporters is closely linked to activity among Norway's trading partners. Total import growth among Norway's trading partners is Norwegian firms' *export market growth*. Among Norway's trading partners[2], import growth has traditionally been twice as high as GDP growth[3] (see Chart 1). The difference between GDP growth and import growth is normally smaller in periods of low economic growth, as in the past few years. This is related to the fact that low growth often accompanies weak developments in demand components with a high import content, such as private consumption and business investment.

There is a close relationship between export market growth and developments in Norwegian mainland exports (see Chart 2).[4] Nonetheless, Norwegian exporters have for many years lost market share in export markets. Market growth has averaged 5% since 1996, while export growth has been 3.8%. Mainland exports have thus increased on average by around 70% of export market growth. Loss of market share is a trend that can be observed in a number of advanced economies and is related to strong export growth in many emerging economies. In addition, several years of relatively high cost growth in Norway has weakened our cost competitiveness.

The composition of Norwegian mainland exports has changed substantially over the past 20 years. Exports from the oil industry supplier sector have gained ground and currently account for about 20% of traditional exports.[5] Growth in global investment in offshore oil extraction was particularly strong

1 Exports of services and goods other than crude oil, natural gas, natural gas condensates, ships and oil platforms.

2 For further details on the countries included in the trade aggregate, see Slettvåg, "Norges Bank's trading partner aggregate revised to include more emerging economies", *Norges Bank Staff Memo* 12/2013.

3 Growth in world trade has over time been higher than output growth. This is partly the result of the falling costs of trade, international production chains, relatively high productivity growth in the exposed sector, and an increase in prosperity that has led to higher spending on internationally traded goods. For a more detailed review, see for example "Why has world trade grown faster than world output?", *Bank of England Quarterly Bulletin* Autumn 2004.

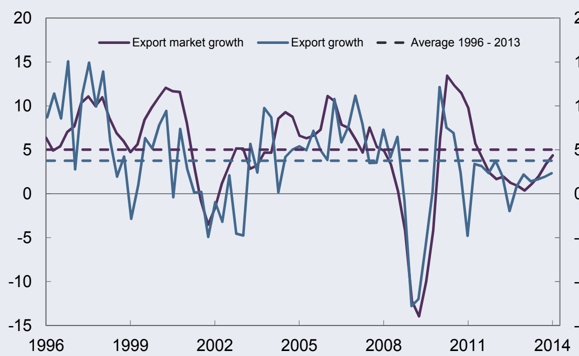
4 The correlation between annual export market growth and growth in Norwegian mainland exports in the period 1996-2013 is about 0.8.

5 According to data compiled by Rystad Energy and Menon for the Ministry of Petroleum and Energy.

Chart 1: Export market growth. 25 trading partners. Weighted average. Percent. 1980 - 2017

Sources: Statistics Norway and Norges Bank

Chart 2: Export market growth and growth in Norwegian mainland exports. Four-quarter growth. Percent. 1996 Q1 - 2014 Q1



Sources: Statistics Norway and Norges Bank

between 2000 and 2010, contributing to a substantial increase in exports from the supplier sector in this period. Since 2010, growth in these investments has slowed markedly. It appears that this sector has over time maintained its market share internationally.

GDP growth for Norway's trading partners is expected to increase from 1¼% in 2013 to 2¼% in 2014 and to around 2½% in the following years. GDP growth is expected to be accompanied by stronger growth in demand components with a high import content, such as private demand and business investment. In line with this, export market growth is projected at 4¾% in 2014, 5½% in 2015 and 6% in both 2016 and 2017 (see Chart 1). Our projections are based on the assumption that mainland exports, excluding the petroleum sector, will increase in pace with a pick-up in demand from export markets, with a loss of market share on a par with the average for the past 20 years. Many oil companies have postponed large projects, and investment in the global offshore petroleum sector is expected to show little growth in 2014 and 2015, followed by an upswing.[6] Exports from the oil industry supplier sector are expected to expand in pace with the projected pick-up in investment.

Overall, growth in mainland exports is projected to be fairly moderate in 2014 and 2015 and to pick up to around 4% towards the end of the projection period, supported by higher export market growth and increased growth in global offshore oil investment.

6 Source: Rystad Energy

ANNEX

MONETARY POLICY MEETINGS WITH CHANGES IN THE KEY POLICY RATE

Date	Key policy rate[1]	Change
22 October 2014		
17 September 2014		
18 June 2014	**1.50**	**0**
7 May 2014	1.50	0
26 March 2014	1.50	0
4 December 2013	1.50	0
23 October 2013	1.50	0
18 September 2013	1.50	0
19 June 2013	1.50	0
8 May 2013	1.50	0
13 March 2013	1.50	0
19 December 2012	1.50	0
31 October 2012	1.50	0
29 August 2012	1.50	0
20 June 2012	1.50	0
10 May 2012	1.50	0
14 March 2012	1.50	-0.25
14 December 2011	1.75	-0.50
19 October 2011	2.25	0
21 September 2011	2.25	0
10 August 2011	2.25	0
22 June 2011	2.25	0
12 May 2011	2.25	+0.25
16 March 2011	2.00	0
26 January 2011	2.00	0
15 December 2010	2.00	0
27 October 2010	2.00	0
22 September 2010	2.00	0
11 August 2010	2.00	0
23 June 2010	2.00	0
5 May 2010	2.00	+0.25
24 March 2010	1.75	0
3 February 2010	1.75	0
16 December 2009	1.75	+0.25
28 October 2009	1.50	+0.25
23 September 2009	1.25	0
12 August 2009	1.25	0
17 June 2009	1.25	-0.25
6 May 2009	1.50	-0.50

1 The key policy rate is the interest rate on banks' sight deposits in Norges Bank. This interest rate forms a floor for money market rates. By managing banks' access to liquidity, Norges Bank ensures that short-term money market rates are normally slightly higher than the key policy rate.

TABLE 1 MAIN MACROECONOMIC AGGREGATES

Percentage change from previous year/quarter		GDP	Mainland GDP	Private consumption	Public consumption	Mainland fixed investment	Petroleum investment[1]	Mainland exports[2]	Imports
2008		0.1	1.5	1.8	2.7	-1.3	5.2	4.5	3.9
2009		-1.6	-1.6	0.0	4.3	-13.2	3.4	-8.4	-12.5
2010		0.5	1.7	3.8	1.3	-4.5	-9.5	7.5	9.0
2011		1.3	2.6	2.6	1.1	6.3	11.3	1.0	3.8
2012		2.9	3.4	3.0	1.8	4.5	14.6	1.1	2.3
2013		0.6	2.0	2.1	1.8	4.4	17.1	1.9	2.9
2013[3]	Q2	1.0	0.3	0.0	0.1	4.5	8.1	2.1	2.5
	Q3	0.7	0.5	0.0	0.3	-2.5	6.1	0.0	1.7
	Q4	-0.2	0.5	0.3	0.5	0.7	-2.9	-0.2	-1.3
2014	Q1	0.3	0.5	0.8	0.9	-1.9	2.4	0.5	-2.6
2013 level, in billions of NOK		3 011	2 314	1 234	658	441	208	478	848

1 Extraction and pipeline transport.
2 Traditional goods, travel and exports of other services from mainland Norway.
3 Seasonally adjusted quarterly data.

Sources: Statistics Norway and Norges Bank

TABLE 2 Consumer prices

Annual change/twelve-month change. Per cent		CPI	CPI-ATE[1]	CPIXE[2]	CPI-AT[3]	CPI-AE[4]	HICP[5]
2007		0.7	1.4	1.9	0.5	1.6	0.7
2008		3.8	2.6	3.1	3.9	2.5	3.4
2009		2.2	2.6	2.6	2.1	2.7	2.3
2010		2.4	1.4	1.7	2.4	1.4	2.3
2011		1.3	1.0	1.1	1.1	1.1	1.2
2012		0.7	1.2	1.0	0.6	1.4	0.4
2013		2.1	1.6	1.4	2.1	1.6	2.0
2014	Jan	2.3	2.4	2.2	2.3	2.4	2.1
	Feb	2.1	2.4	2.1	2.1	2.4	1.9
	Mar	2.0	2.6	2.4	2.0	2.6	1.8
	Apr	1.8	2.5	2.3	1.8	2.6	1.5
	May	1.8	2.3	2.2	1.8	2.3	1.6

1 CPI-ATE: CPI adjusted for tax changes and excluding energy products.
2 CPIXE: CPI adjusted for tax changes and excluding temporary changes in energy prices. See Norges Bank *Staff Memo* 7/2008 and Staff Memo 3/2009 for a description of the CPIXE.
3 CPI-AT: CPI adjusted for tax changes.
4 CPI-AE: CPI excluding energy products.
5 HICP: Harmonised Index of Consumer Prices. The index is based on international criteria drawn up by Eurostat.

Sources: Statistics Norway and Norges Bank

TABLE 3 PROJECTIONS FOR GDP GROWTH IN OTHER COUNTRIES

Change from projections in *Monetary Policy Report* 1/14 in brackets	Share of world GDP		Change from previous year. Percent.				
	PPP	Market exchange rates[1]	2013	2014	2015	2016	2017
US	20	23	1.9	2¼ (-½)	3 (-¼)	3¼ (0)	3¼ (0)
Euro area	14	18	-0.4	1 (-¼)	1½ (0)	1½ (0)	1¾ (0)
UK	3	4	1.7	3 (¼)	2½ (0)	2½ (0)	2½ (0)
Sweden	½	¾	1.5	2½ (-¼)	3 (0)	2¾ (¼)	2½ (0)
China	15	10	7.7	7¼ (0)	6¾ (-¼)	6¾ (-¼)	6½ (-¼)
Emerging economies[2]	16	12	3	2¾ (-½)	3½ (-½)	4¼ (-¼)	4¼ (-¼)
Trading partners[3]	74	78	1¼	2¼ (0)	2½ (0)	2½ (0)	2½ (-¼)
World (PPP)[4]	100	100	3	3½ (-¼)	3¾ (-¼)	4 (0)	4 (0)
World (market exchange rates)[4]	100	100	2½	3 (-¼)	3¼ (-¼)	3½ (0)	3½ (0)

1 Country's share of global output measured in a common currency (market exchange rate). Average 2010–2012.
2 Emerging economies in the trading partner aggregate excluding China: Brazil, India, Indonesia, Russia, Turkey, Poland and Thailand. GDP weights.
3 Export weights, 25 main trading partners.
4 GDP weights. Norges Bank's estimates for 25 trading partners, other estimates from IMF.

Sources: IMF, Thomson Reuters and Norges Bank

TABLE 4 PROJECTIONS FOR CONSUMER PRICES IN OTHER COUNTRIES

Change from projections in *Monetary Policy Report* 1/14 in brackets	Change from previous year. Percent.				
	2013	2014	2015	2016	2017
US	1.5	1¾ (¼)	2 (0)	2 (0)	2¼ (0)
Euro area	1.3	½ (-½)	1 (-¼)	1½ (0)	1¾ (0)
UK	2.6	1¾ (-¼)	2 (0)	2 (0)	2 (0)
Sweden	0	0 (-½)	1¾ (-½)	2½ (0)	2¼ (0)
China	2.6	2¾ (-¼)	3 (-½)	3 (-¼)	3 (0)
Emerging economies[1]	6.5	6 (0)	5½ (0)	5¼ (0)	5¼ (0)
Trading partners[2]	1.7	1½ (-¼)	2 (-¼)	2¼ (0)	2¼ (0)
Oil price Brent Blend. USD per barrel[3]	109	109	104	100	97

1 Emerging economies in the trading partner aggregate excluding China: Brazil, India, Indonesia, Russia, Turkey, Poland and Thailand. GDP weights.
2 Import weights, 25 main trading partners.
3 Futures prices (average for the past five trading days). For 2014, an average of spot prices so far this year and futures prices for the rest of the year is used.

Sources: IMF, Thomson Reuters and Norges Bank

TABLE 5 PROJECTIONS FOR MAIN ECONOMIC AGGREGATES

	In billions of NOK	Percentage change from previous year (unless otherwise stated)				
			Projections			
	2013	2013	2014	2015	2016	2017
Prices and wages						
CPI		2.1	2	2	2¼	2¼
CPI-ATE[1]		1.6	2¼	2	2¼	2¼
Annual wages[2]		3.9	3½	3½	4	4
Real economy						
GDP	3011	0.6	1½	1¾	2¼	2¾
GDP, mainland Norway	2314	2.0	2	2¼	2¾	3
Output gap, mainland Norway (level)[3]		0.0	-½	-¾	-½	-¼
Employment, persons, QNA		1.2	1	¾	1	1¼
Labour force, LFS		1.0	1	1	1	1
LFS unemployment (rate, level)		3.5	3½	3¾	3¾	3½
Registered unemployment (rate, level)		2.6	2¾	3	3	2¾
Demand						
Mainland demand[4]	2333	2.5	1¾	3¼	3¼	2¾
- Private consumption	1234	2.1	2¼	3½	3¼	2¾
- Public consumption	658	1.8	2¼	2¼	-	-
- Fixed investment, mainland Norway	441	4.4	-1	4	-	-
Petroleum investment[5]	208	17.1	2½	-10	0	5
Mainland exports[6]	478	1.9	2	2½	3¾	4½
Imports	848	2.9	¼	3¼	-	-
Interest rate and exchange rate						
Key policy rate (level)[7]		1.5	1½	1½	1¾	2
Import-weighted exchange rate (I-44)[8]		89.0	91½	90	89¼	89

1 CPI-ATE: CPI adjusted for tax changes and excluding energy products.
2 Annual wage growth is based on the Technical Reporting Committee on Income Settlements' definitions and calculations.
3 The output gap measures the percentage deviation between mainland GDP and projected potential mainland GDP.
4 Private and public consumption and mainland gross fixed investment.
5 Extraction and pipeline transport.
6 Traditional goods, travel and exports of other services from mainland Norway.
7 The key policy rate is the interest rate on banks' deposits in Norges Bank.
8 Level. The weights are estimated on the basis of imports from 44 countries, which comprise 97% of total imports.

\- Not available

Sources: Statistics Norway, Technical Reporting Committee on Income Settlements, Norwegian Labour and Welfare Administration and Norges Bank

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