Monetary Policy Report

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Monetary Policy Report
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NORGES BANK

Norges Bank

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Monetary Policy Report

The *Report* is published three times a year, in March, June and October/November. The *Report* assesses the interest rate outlook and includes projections for developments in the Norwegian economy and analyses of selected themes.

At its meeting on 27 April 2011, the Executive Board discussed relevant themes for the *Report*. At the Executive Board meeting on 8 June, the economic outlook and the monetary policy stance were discussed.
On the basis of this discussion and a recommendation from Norges Bank's management, the Executive Board adopted a monetary policy strategy for the period to the publication of the next *Report* on 19 October 2011 at the meeting held on 22 June. The Executive Board's summary of the economic outlook and the monetary policy strategy are presented in "The Executive Board's assessment". In the period to the next *Report,* the Executive Board's monetary policy meetings will be held on 10 August, 21 September and 19 October.

Table of contents

This *Monetary Policy Report* is based on information in the period to 16 June 2011.

The monetary policy strategy was approved by the Executive Board on 22 June 2011.

Monetary policy in Norway

Objective

The operational target of monetary policy is low and stable inflation, with annual consumer price inflation of approximately 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, including alternative strategies. The final decision to adopt a monetary policy strategy is made on the same day as 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 every sixth week. The analyses and the monetary policy strategy, together with assessments of price and cost developments and conditions in the money and foreign exchange markets, form a basis for interest rate decisions.

Communication of the interest rate decision

The monetary policy decision is published in a press release and announced at a press conference at 2 pm on the day of the meeting.

"The Executive Board's assessment" is published in the *Monetary Policy Report*. The assessment contains the main points of the *Report* and a summary of the main points to which the Executive Board gives weight in its discussion of monetary policy. The assessment concludes with the Executive Board's strategy for the period to the publication of the next *Report* and the key policy rate decision.

The press release, the *Monetary Policy Report*, the Executive Board's monetary policy decision – background and general assessment, and the press conference are available on www.norges-bank.no.

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 Section 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 Finansmarknadsmeldinga (Financial Market 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 Market Report.

The Executive Board's assessment

At its meeting on 8 June, Norges Bank's Executive Board discussed the monetary policy stance and the interval for the key policy rate in the period to the publication of the next *Monetary Policy Report* on 19 October. The final decision concerning the interval for the key policy rate for the period was taken at the Executive Board's meeting on 22 June.

The Executive Board has placed emphasis on the following developments:

Sovereign debt problems in some euro area countries and signs of slower growth in the US economy have caused renewed financial turbulence. Overall, global economic growth seems to be maintaining its momentum, but there are wide differences across regions and countries. There has been high growth in Asia and South America and in demand for commodities. In Europe, developments are mixed. There has been a fairly strong upturn in many northern European countries. Higher commodity prices have resulted in rising consumer price inflation, and both the European Central Bank and Sveriges Riksbank raised their key rates in April. On the other hand, there are prospects of lacklustre growth or a downturn in southern European countries and Ireland. In the US and the UK, growth in the period ahead may moderate because fiscal policy will have to be tightened. Unemployment is still high in many OECD countries. Interest rate expectations among Norway's trading partners are overall somewhat lower than they appeared to be in March. The projections in this *Report* are based on the assumption that the debt problems facing Greece will be resolved without significant spillover effects on other euro area countries.

In Norway, underlying inflation is expected to remain low for a few quarters, though a number of factors indicate that inflation will pick up further ahead. Capacity utilisation in the Norwegian economy has risen and now seems to be close to a normal level. Unemployment has fallen somewhat more than expected, and wage growth is on the rise. There are also signs that rising external inflation is feeding through to Norwegian consumer prices.

The point of departure for the Executive Board's deliberations is that the key policy rate should be set with a view to keeping inflation close to 2.5% over time. The Executive Board notes that the analyses in this *Report* suggest that the key policy rate should be raised further. The increase in the key policy rate is expected to broadly follow the projections presented in the March *Report*, but may occur slightly earlier. Inflation is expected to pick up towards 2.5% in the course of the next two years. Growth in the Norwegian economy is expected to be between 3% and 4% in the same period, partly reflecting a marked upturn in investment. Capacity utilisation is projected to rise further before returning to a normal level towards the end of the projection period.

In its deliberations, the Executive Board gave weight to signs of a tightening labour market, even though inward migration is high. Unemployment is declining somewhat more rapidly than projected, and wage growth is rising slightly more than expected. There are also signs of labour shortages in some occupational groups, such as engineers in manufacturing and construction. At the same time, high population growth will fuel demand for goods and services, including housing services. House prices are rising and rents are moving up in urban markets, and housing investment is accelerating. On the other hand, figures from Norges Bank's regional network suggest that for the time being enterprises are not experiencing any substantial labour shortages. This may be related to the ample supply of some labour skills from abroad. The outlook for the world economy now appears to be more uncertain, despite a somewhat stronger recovery so far than expected earlier. The decline in interest rate expectations among Norway's trading partners and recent weaker figures for the US economy reflect a risk of weaker growth. The debt situation in Europe reinforces this impression.

The differences between the Norwegian and international economy entail a risk of a krone appreciation, leading to inflation that is too low. This suggests proceeding with caution in interest rate setting. On the other hand, experience shows that wage and price inflation may rapidly accelerate when capacity utilisation becomes high. The risk that a low interest rate may result in imbalances in the real economy and a sharp rise in wage and price inflation somewhat further ahead suggests that the key policy rate should be raised further.

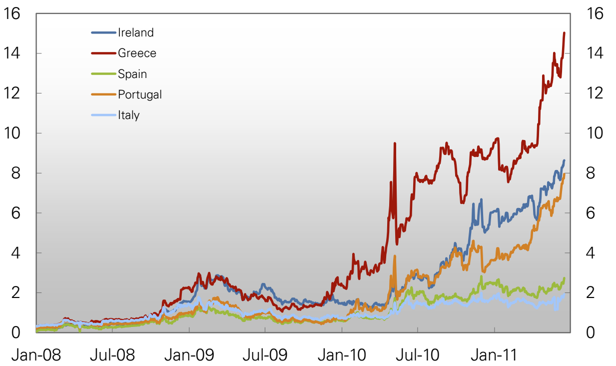
Overall, the Executive Board is of the view that the key policy rate should gradually be raised through the latter half of 2011, against the background of the current outlook and balance of risks. An unexpected jump in activity or in price and cost inflation may lead to a more pronounced upward shift in the key policy rate than currently projected. Should the turbulence in financial markets lead to considerably weaker growth or a marked krone appreciation, the increase in the interest rate may be deferred further ahead.

The Executive Board decided at its meeting on 22 June that the key policy rate should be in the interval 2¼–3¼% in the period to the publication of the next *Report* on 19 October 2011, unless the Norwegian economy is exposed to new major shocks.

At its meeting on 22 June, the Executive Board decided to leave the key policy rate unchanged at 2.25%.

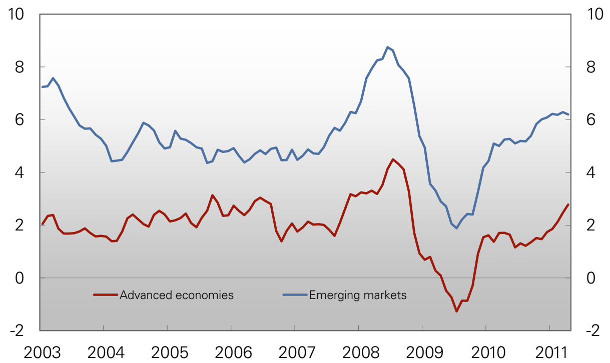
Øystein Olsen
22 June 2011

Chart 1.1 Yield spreads against German 10-year government bonds. Percentage points. 1 January 2008 – 16 June 2011



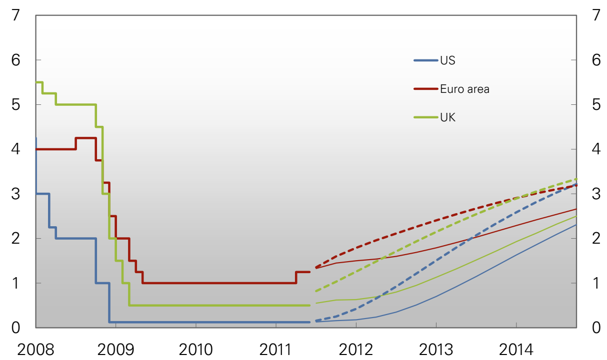
Source: Bloomberg

Chart 1.2 Consumer prices in G20 – Advanced economies[1] and emerging markets.[2] 12-month change. Per cent. January 2003 – April 2011



1) Europe is defined as the euro area and the UK
2) Weighted by GDP (PPP)
Sources: IMF, Thomson Reuters and Norges Bank

Chart 1.3 Key rates and estimated forward rates as at 10 March 2011 and 16 June 2011[1]. Per cent. 1 January 2008 – 31 December 2014[2]



1) Broken lines show estimated forward rates as at 10 March 2011. Thin lines show forward rates as at 16 June 2011. Forward rates are based on Overnight Indexed Swap (OIS) rates
2) Daily figures from 1 January 2008 and quarterly figures as at 16 June 2011
Sources: Bloomberg L.P. and Norges Bank

1 Monetary policy assessments and strategy

The economic situation

The global economic recovery has maintained its momentum, but there are wide differences across regions and countries. In the euro area, growth has been robust in Germany, Finland, France and the Netherlands, while Ireland, Greece and Portugal are still in an economic downturn. Euro area-wide unemployment has remained stable at around 10% over the past year. Growth in the US economy has slowed this year and unemployment is still at around 9%. Emerging Asian economies are expanding at a brisk pace, albeit at a slower rate than earlier.

Turbulence and uncertainty have flared up again in financial markets as a result of sovereign debt problems in some euro area countries. Government bond yields have continued to rise in Greece, Ireland and Portugal despite extensive lending and stabilisation programmes (see Chart 1.1). The projections are based on the assumption that the sovereign debt problems will be resolved without significant spillover effects on other euro area countries. Looking ahead, the global economy is projected to show moderate growth in line with that projected in the March *Report* (see further discussion in Section 2).

Energy and commodity prices remain elevated, but have edged down from the high levels prevailing earlier this year. Combined with a rapid rise in food prices, this has led to an upswing in consumer price inflation abroad (see Chart 1.2). Inflation, excluding food and energy prices, is also on the rise, particularly in emerging economies. Many of these countries have tightened monetary policy in response to rising inflation. The European Central Bank (ECB) and Sveriges Riksbank also raised their key rates in April. The effects of weak government finances in southern Europe and Ireland on economic developments are uncertain. It is likely that the expected further increase in key rates abroad has been deferred further ahead against the background of the turbulence in financial markets and heightened uncertainty. Interest rate expectations have fallen in the euro area, the UK and the US (see Chart 1.3). Long-term interest rates have again moved down to a very low level (see Chart 1.4). Global stock indices have declined and are now close to the levels prevailing immediately after the earthquake in Japan in March.

Growth in the Norwegian economy has gained a firm footing. Residential construction is particularly vigorous and petroleum investment has increased sharply. Household demand for goods and services has shown fairly moderate growth so far this year after rising rapidly towards the end of last year. Household saving is still high. According to preliminary national accounts figures, mainland GDP increased by 2.7% between 2010 Q1 and 2011 Q1. The enterprises in Norges Bank's regional network reported some improvement in the outlook at the beginning of May (see Chart 1.5).

Registered unemployment has fallen more rapidly than anticipated in March, standing at a seasonally adjusted 2.7% in May. The outcome of the wage settlements indicate that wage growth may be somewhat higher this year than projected earlier. In conjunction with the decline in unemployment, this indicates increased pressures in the economy. Overall, capacity utilisation in the Norwegian economy is now estimated to be close to a normal level.

Inflation is low. Underlying inflation is in a range between 1¼% and 1½% (see Chart 1.6). Moderate wage growth in recent years, a strong krone and higher imports from low-cost countries have contributed to holding inflation at a low level. The krone has varied to some extent and has been stronger in Q2 than projected in March.

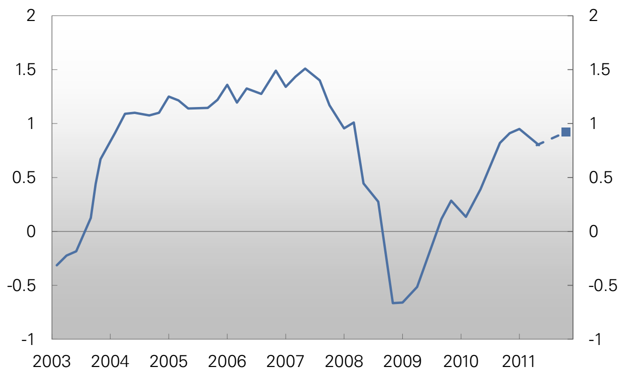
The outlook ahead

The operational target of monetary policy in Norway is low and stable inflation, with annual consumer price inflation of close to 2.5% over time. Over the past ten years, average inflation has been somewhat below but close to 2.5% (see Chart 1.7). Long-term inflation expectations seem to be stable around the inflation target, as indicated

Chart 1.4 Yield on 10-year government bonds.
Per cent. 1 January 2003 – 16 June 2011

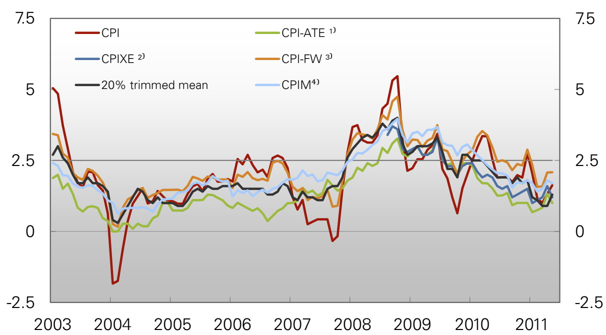
Source: Thomson Reuters

Chart 1.5 Norges Bank's regional network's indicator of change in production past three months and expected change in production next six months.
Per cent. 2003 – 2011 1)



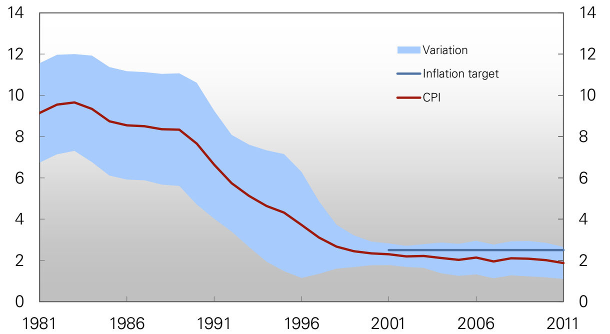
1) Most recent observation from the regional network is from May 2011
Source: Norges Bank

Chart 1.6 Consumer prices. 12-month change.
Per cent. January 2003 – May 2011



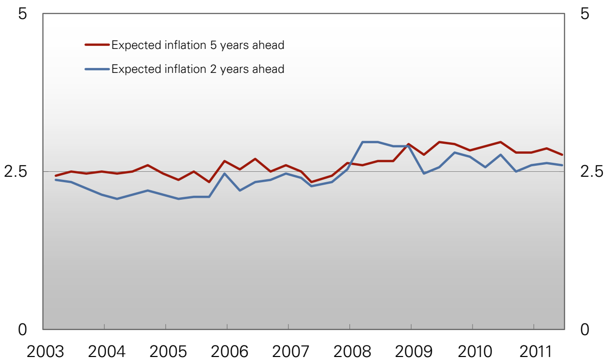
1) CPI adjusted for tax changes and excluding energy products
2) CPI adjusted for tax changes and excluding temporary changes in energy prices. Real time figures. See Norges Bank *Staff Memo* 7/2008 and 3/2009
3) CPI adjusted for frequency of price changes. See Norges Bank *Economic commentaries* 7/2009
4) Model-based indicator of underlying inflation. See Norges Bank *Economic commentaries* 5/2010
Sources: Statistics Norway and Norges Bank

Chart 1.7 Inflation. Moving 10-year average[1)] and variation[2)] in CPI[3)].
Per cent. 1981 – 2011



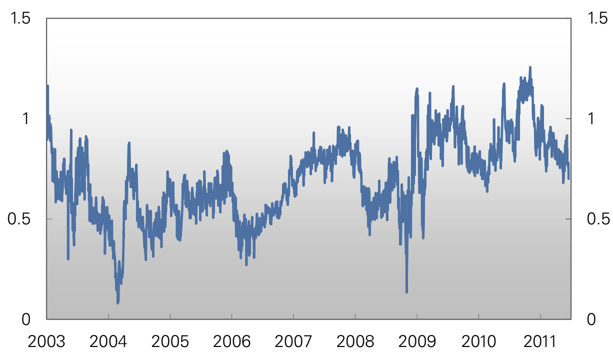
1) The moving average is calculated 10 years back
2) The band around the CPI is the variation in the CPI adjusted for tax changes and excluding energy products in the average period, measured by +/- one standard deviation
3) CPI projections in this *Report* form the basis for this estimate
Sources: Statistics Norway and Norges Bank

Chart 1.8 Expected consumer price inflation 2 and 5 years ahead.[1)]
Per cent. 2003 Q1 – 2011 Q2



1) Average of expectations of employer/employee organisations and economists (financial industry experts, macro analysts and academia)
Sources: TNS Gallup and Perduco

Chart 1.9 Five-year forward rate[1)] differential 5 years ahead between Norway and the euro area.[2)] Percentage points. 1 January 2003 – 16 June 2011



1) Based on swap rates
2) Expected inflation can be derived from the long term interest rate differential. Due to a higher inflation target in Norway, the long-term interest rate differential will normally be between 0.5 – 1 percentage point, depending on risk premium.
Sources: Thomson Reuters and Norges Bank

by Perduco's expectations survey and the expected five-year interest rate differential between Norway and the euro area five years ahead (see Charts 1.8 and 1.9).

In the wake of the international financial crisis, the key policy rate in Norway was lowered markedly in autumn 2008 and the first half of 2009 in order to dampen the impact on the Norwegian economy and prevent inflation from becoming too low. The key policy rate has been increased by a total of 1 percentage point since October 2009 and now stands at 2.25%. The key policy rate was most recently raised in May this year. When the *Monetary Policy Report* was published in March this year, there were prospects that inflation would remain low for a while and then gradually move up towards 2.5%. Capacity utilisation was expected to return to a normal level in autumn 2011. At that time our analyses implied an increase in the key rate to 3.5% in the period to summer 2012 and then a gradual upward shift to about 5% in 2014.

Evidence suggests that capacity utilisation in the Norwegian economy has increased somewhat faster than envi saged in March. Unemployment is lower than anticipated. There are prospects that capacity utilisation will rise further and that unemployment will continue falling. Low interest rates, solid income growth and high population growth are expected to lead to an upswing in output, employment, consumption and investment. Housing investment is expected to increase considerably, partly reflecting rapid population growth. The level of planned investment in the petroleum sector is also high for the period ahead. Consumption growth is also expected to pick up. High debt burdens and the prospect of higher interest rates may, nevertheless, contribute to upholding saving ahead (see Chart 1.10). Production costs have continued to increase more in Norway than in other countries (see Chart 1.11). Combined with increased uncertainty surrounding external developments and financial market turbulence, that may hamper growth in exports and business investment.

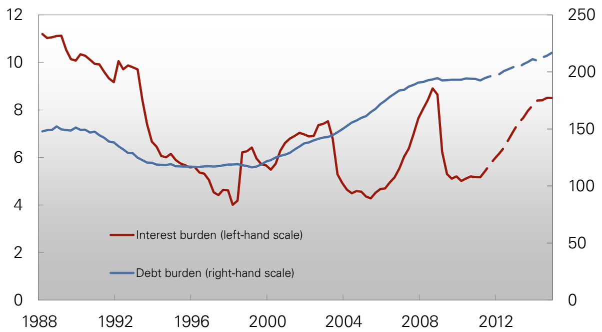
Underlying inflation is projected to remain low for a few quarters ahead, but there is now growing evidence that inflation will rise further ahead. Wage growth appears to be higher than projected. High growth in employment and somewhat lower unemployment will exert additional pressure on wage growth ahead. Increased capacity utilisation and firm growth in household income and consumption are likely to make it easier for firms to pass on higher costs to prices for consumer goods and services. In addition, higher commodity prices and higher external inflation have already fed through to selling prices for imported goods.

The key policy rate is set so that inflation remains close to 2.5% over time. The key policy rate has been low for a long time.

The consideration of stabilising activity and inflation further ahead suggests that the key policy rate should be increased further from today's low level. Experience shows that wage and price inflation may rapidly accelerate when capacity utilisation is high. If the key policy rate is kept low for too long, there is a risk that inflation will rapidly exceed target and a risk of an excessive expansion in activity with rising asset prices and debt accumulation. The key policy rate will then have to be raised even more at a later stage. Domestic factors alone would thus suggest a somewhat higher key policy rate than today's level. Higher capacity utilisation, lower unemployment and prospects for somewhat higher inflation suggest, that the key policy rate should be increased earlier than projected in the March *Report*.

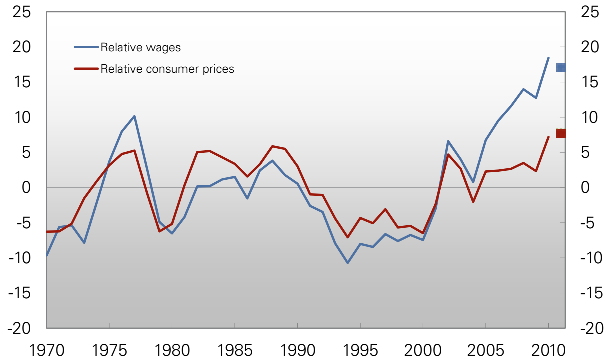
On the other hand, inflation is low and the krone is strong. There are still prospects for very low central bank interest rates abroad and the increase in interest rates has been deferred further ahead since the March *Report* (see Chart 1.12). The uncertainty surrounding the effects of weak government finances in southern Europe and Ireland on economic developments in Europe seems to have increased and financial market turbulence has flared up again. A marked increase in interest rates in Norway and a wide interest rate differential against other countries entail a risk of a further appreciation of the krone so that inflation becomes too low. This suggests that a gradualist approach to interest rate setting is appropriate. An overall assessment of the outlook and the balance of risks suggests that the key policy rate should be raised gradually ahead (see Charts 1.13 a-d).

Chart 1.10 Household debt burden[1] and interest burden[2]. Per cent. Quarterly figures. 1988 Q1 – 2014 Q4[1]



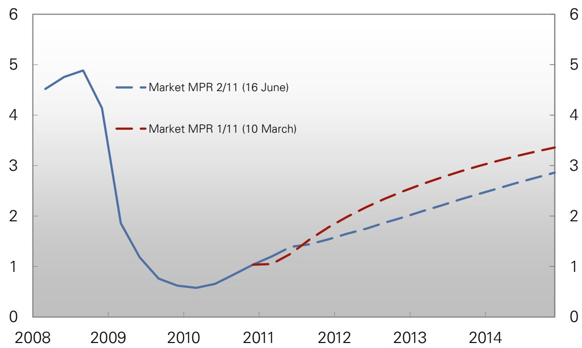
1) Loan debt as a percentage of disposable income adjusted for estimated reinvested dividends for 2000 – 2005 and redemption/reduction of equity capital for 2006 – 2014.
2) Interest expenses after tax as a percentage of disposable income adjusted for estimated reinvested dividends for 2000 – 2005 and redemption/reduction of equity capital for 2006 – 2014 plus interest expenses.
Sources: Statistics Norway and Norges Bank

Chart 1.11 Real exchange rate. Deviation from mean over the period 1970 – 2010. Per cent. 1970 – 2011[1]



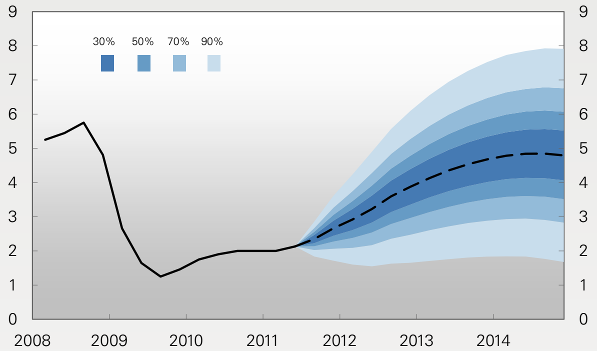
1) The squares show the average so far in 2011. A positive slope indicates weaker competitiveness
Sources: Statistics Norway, Technical Reporting Committee on Income Settlements, Ministry of Finance and Norges Bank

Chart 1.12 Three-month money market rates.[1] Trading partners. Per cent. 2008 Q1 – 2014 Q4



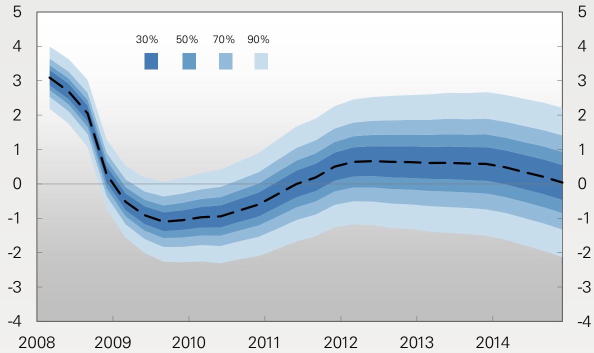
1) Forward rates are based on money market rates and interest rate swaps
Sources: Thomson Reuters and Norges Bank

Chart 1.13a Projected key policy rate in the baseline scenario with fan chart. Per cent. 2008 Q1– 2014 Q4



Source: Norges Bank

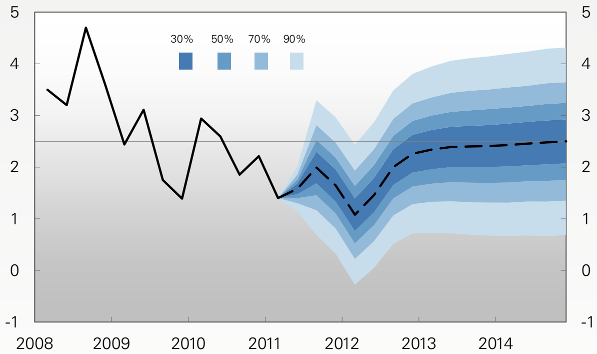
Chart 1.13b Estimated output gap[1] in the baseline scenario with fan chart. Per cent. 2008 Q1 – 2014 Q4



1) The output gap measures the percentage deviation between mainland GDP and projected potential mainland GDP

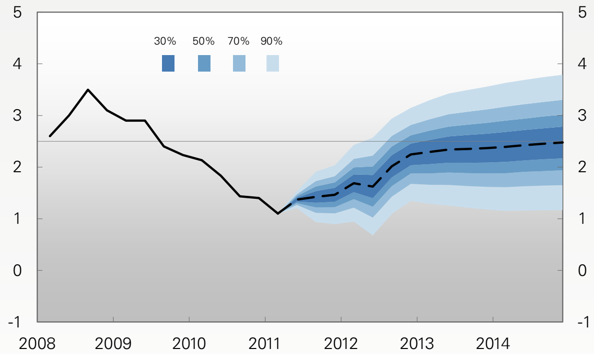
Source: Norges Bank

Chart 1.13c Projected CPI in the baseline scenario with fan chart. Four-quarter change. Per cent. 2008 Q1 – 2014 Q4



Sources: Statistics Norway and Norges Bank

Chart 1.13d Projected CPIXE[1] in the baseline scenario with fan chart. Four-quarter change. Per cent. 2008 Q1 – 2014 Q4



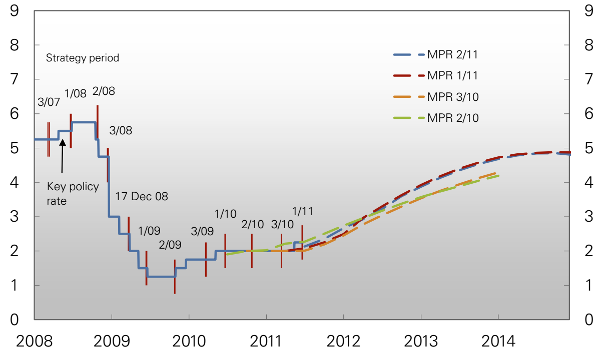
1) CPI adjusted for tax changes and excluding temporary changes in energy prices. As from August 2008, the CPIXE is a real time series. See Norges Bank *Staff Memo* 7/2008 and 3/2009

Source: Norges Bank

The upward shift in the key policy rate broadly follows the path that was presented in the March *Report*, but may occur a little earlier (see Chart 1.14 and box on page 20). The key policy rate is now projected to range between 2¾%–3% at around the end of the year. The difference between the 3-month money market rate and the key policy rate is assumed to narrow gradually from today's level of 0.5 percentage point to about 0.25 percentage point over the next year (see Chart 1.15). The interest rate differential against other countries is expected to widen somewhat and the krone is expected to remain relatively strong (see Chart 1.16).

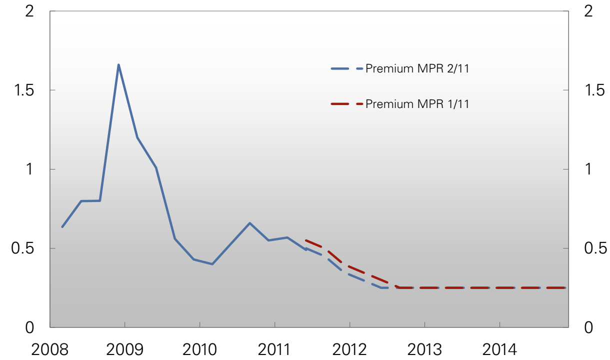
With this interest rate path and other assumptions, inflation is projected to start moving up around the turn of the year and increase further towards the inflation target through 2012 (see Chart 1.17). Capacity utilisation is projected to remain somewhat above its normal level the next few years before decreasing slightly again. Registered unemployment is projected to decline to 2¼%. Wage growth is projected to pick up to 4¾% in 2012 and 2013.

Chart 1.14 Interval for the key policy rate at the end of each strategy period, actual developments[1] and projected key policy rate in the baseline scenario. Per cent. January 2008 – December 2014



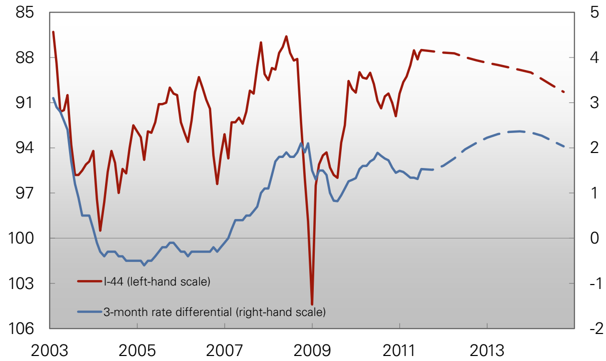
1) The Executive Board's decision of 22 June 2011 is not shown in the chart
Source: Norges Bank

Chart 1.15 Premiums in the Norwegian money market[1]
Per cent. 2008 Q1 – 2014 Q4



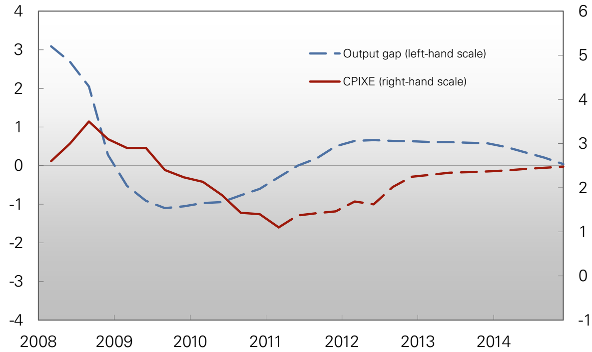
1) Norges Bank's projections from 2011 Q2
Source: Norges Bank

Chart 1.16 Three-month money market rate differential between Norway[1] and trading partners and the import-weighted exchange rate index (I-44)[2]. Monthly figures (historical) and quarterly figures (ahead). January 2003 – December 2014



1) Key policy rate in the baseline scenario plus premiums in the Norwegian money market, transformed into 3-month money market rate
2) A positive slope denotes a stronger krone exchange rate
Sources: Thomson Reuters and Norges Bank

Chart 1.17 Projected inflation[1] and output gap in the baseline scenario. Per cent. 2008 Q1 – 2014 Q4



1) CPIXE: CPI adjusted for tax changes and excluding temporary changes in energy prices. As from August 2008, the CPIXE is a real time series. See Norges Bank *Staff Memo* 7/2008 and 3/2009
Source: Norges Bank

Criteria for an appropriate interest rate path

The operational target of monetary policy is low and stable inflation, with annual consumer price inflation of approximately 2.5% over time. In interest rate setting, the forecast for future interest rate developments should satisfy the following main criteria:

1) The interest rate should be set with a view to stabilising inflation at target or bringing it back to target after a deviation has occurred. The specific time horizon will depend on the type of disturbances to which the economy is exposed and their effect on the path for inflation and the real economy ahead.

2) The interest rate path should at the same time provide a reasonable balance between the path for inflation and the path for overall capacity utilisation in the economy. In the assessment, potential effects of asset prices, such as property prices, equity prices and the krone exchange rate on stability in output, employment and inflation are also taken into account. Assuming the criteria above have been satisfied, the following additional criteria are useful:

3) Interest rate adjustments should normally be gradual and consistent with the Bank's previous response pattern.

4) As a cross-check for interest rate setting, any substantial and systematic deviations from simple, robust monetary policy rules should be explained.

The degree to which the criteria are satisfied can be expressed mathematically in the form of a loss function[1]:

$$L_t = (\pi_t - \pi^*)^2 + \lambda (y_t - y_t^*)^2 + \delta (i_t - i_{t-1})^2 + \kappa \left(i_t - i_t^{simple}\right)^2$$

The interest rate forecast that best satisfies the criteria above may be interpreted as the interest rate path that minimises the sum of current and future losses. Usually, the criteria cannot all be satisfied simultaneously in the short term. The various considerations must then be weighed against each other. The parameters λ, δ and κ express the weights attached to the various considerations relative to the cost of deviating from the inflation target.[2]

The loss function above must be regarded as a simplified representation of the more extensive assessments underlying interest rate decisions. Situations may arise where weight will be given to considerations other than those expressed in the simple loss function. In certain situations, for example, a more aggressive interest rate response than usual may be necessary to prevent particularly adverse outcomes.

1 For further details, see box in *Monetary Policy Report* 2/10.

2 In the calculations, the model is solved using a loss function where λ=0.5, δ=0.25 and κ=0.25. These parameters depend on the model and how the model is solved (see further description in Alstadheim et al. (2010)). Since the March 2011 *Monetary Policy Report,* we have re-estimated the model, which has entailed certain changes in the model parameters, including λ in the loss function. The consideration of consistency in the response pattern over time, suggests that the parameters in the loss function be quantified to provide consistency with the Bank's previous response pattern. λ = 0.5 is consistent with the response pattern applied in the March *Report.*

Assessment of the interest rate forecast

The interest rate forecast in this *Report* reflects Norges Bank's overall judgement and assessment based on the criteria for an appropriate interest rate path (see discussion in box on page 15). Under the criteria, the key policy rate should be set to bring inflation back to target without causing excessive fluctuations in output and employment. At the same time, the key policy rate should be changed gradually and should not deviate too widely from simple and robust monetary policy rules. The interest rate cannot fully satisfy all the criteria simultaneously, and the interest rate path is chosen so as to provide a balance between considerations.

Charts 1.18 a-c show forecasts for the key policy rate, the output gap and inflation when the various criteria have been satisfied.[1]

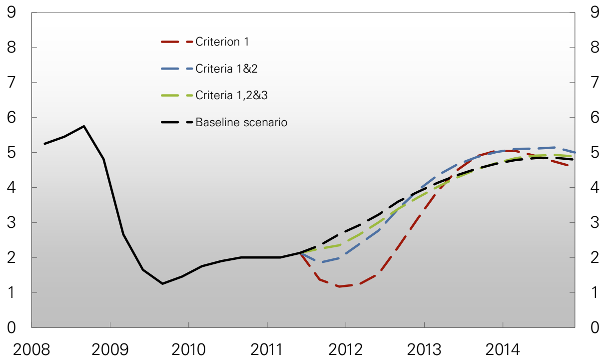
If the sole objective of monetary policy were to bring inflation rapidly back to target, the key policy rate would be lowered at a swift pace towards 1%. Inflation would then rise to 2.5% faster, but such a policy would also result in wider fluctuations in output and employment. The interest rate would then have to be raised sharply to prevent inflation from becoming too high further ahead (see criterion 1 in Charts 1.18 a-c).

When the consideration that monetary policy should not cause excessive fluctuations in output and employment is also taken into account (criteria 1 and 2 in Charts 1.18 a-c), the key policy rate will follow a more stable path. Inflation will then take somewhat longer to return to target, but developments in the real economy will be more stable, preventing wide fluctuations in output and employment.

Normally, the Bank takes a gradualist approach to interest rate setting (criterion 3), to avoid abrupt shifts in monetary policy and be able to assess the effects of the change in the interest rate. As Charts 1.18 a-c show, if

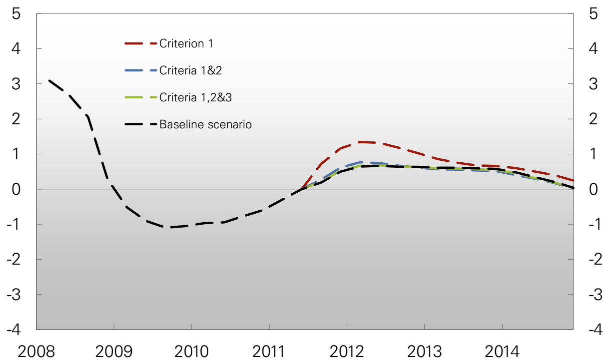
1 Illustrated using the macroeconomic model NEMO.

Chart 1.18a Key policy rate. Per cent. 2008 Q1 – 2014 Q4



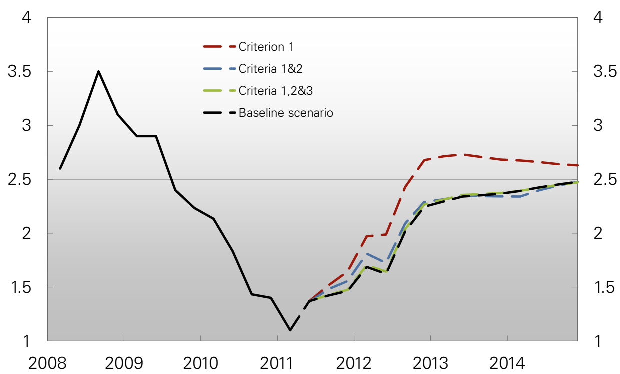
Source: Norges Bank

Chart 1.18b Output gap. Per cent. 2008 Q1 – 2014 Q4



Source: Norges Bank

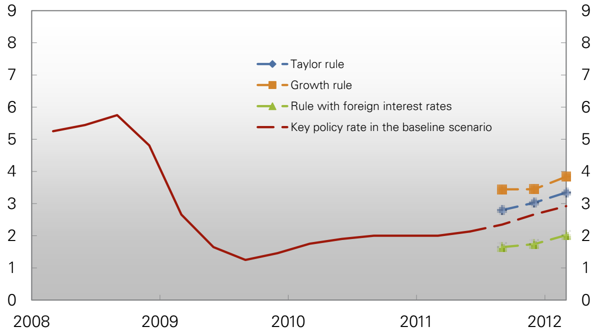
Chart 1.18c CPIXE[1)]. Four-quarter change. Per cent. 2008 Q1 – 2014 Q4



1) CPI adjusted for tax changes and excluding temporary changes in energy prices. As from August 2008, the CPIXE is a real time series. See Norges Bank Staff Memo 7/2008 and 3/2009

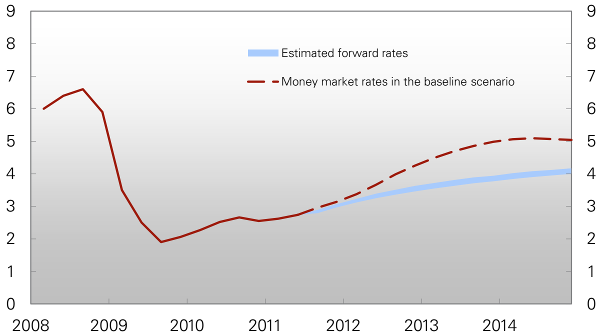
Source: Norges Bank

Chart 1.19 Key policy rate and calculations based on simple monetary policy rules.[1)] Per cent. 2008 Q1 – 2012 Q1



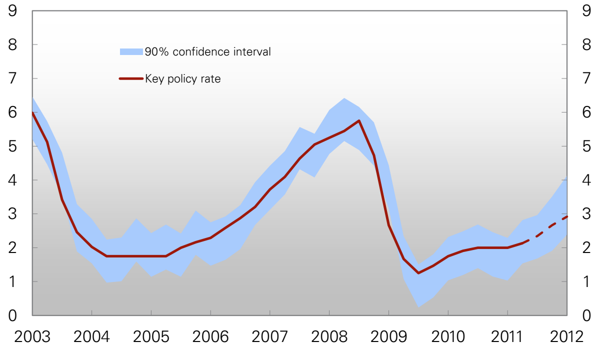
1) The calculations are based on Norges Bank's projections for the output gap, consumer prices adjusted for tax changes and excluding temporary changes in energy prices (CPIXE) and 3-month money market rates. To ensure comparability with the key policy rate, the simple rules are adjusted for risk premiums in 3-month money market rates
Source: Norges Bank

Chart 1.20 Three-month money market rates in the baseline scenario[1)] and estimated forward rates[2)]. Per cent. 2008 Q1 – 2014 Q4



1) Key interest rate plus premium in the Norwegian money market, transformed to 3-month money market rate
2) Forward rates are based on money market rates and interest rate swaps. The blue band shows the highest and lowest forward rates in the period 3 June – 16 June 2011
Sources: Thomson Reuters and Norges Bank

Chart 1.21 Key policy rate and interest rate developments that follow from Norges Bank's average pattern of interest rate setting.[1)] Per cent. 2003 Q1 – 2012 Q1



1) Interest rate movements are explained by developments in inflation, mainland GDP growth, wage growth and key rates among trading partners. The equation is estimated over the period 1999 Q1 – 2011 Q1. See *Staff Memo* 3/2008 for further discussion
Source: Norges Bank

this criterion is also applied, the key policy rate would be raised a little earlier than the forecast based on criteria 1 and 2.

Simple monetary policy rules may be robust to different assumptions about the functioning of the economy. Monetary policy may be less vulnerable to weaknesses in the system of analysis if some weight is also given to these simple rules. In the analyses, weight is therefore given to the Taylor rule, which is based on the projections for inflation, the output gap and the normal interest rate level. As Charts 1.18 a-c show (black line), if this criterion is applied, the key policy rate would be raised a little more than the forecast based on the first three criteria.

Rules that apply inflation and output suggest that the key policy rate should be somewhat higher than it is currently (see blue and yellow lines in Chart 1.19).[2] A simple monetary policy rule that gives considerable weight to changes in the interest rate differential against other countries suggests that the key policy rate should currently be somewhat lower (see green line in Chart 1.19).[3]

Forward money market rates provide another cross-check for the interest rate forecast. Estimated forward rates indicate that financial market participants expect money market rates to rise somewhat more slowly over the year ahead than projected in this *Report* (see Chart 1.20). Also further ahead, forward rates are lower than the forecast for the key policy rate in this *Report*, which may reflect continued low interest rates among our trading partners. Volatility in long-term bond yields in Europe currently makes it difficult to interpret the movements in these rates.

Norges Bank's previous interest rate setting can also serve as a cross-check for the interest rate forecast. Chart 1.21 shows an estimated model that seeks to provide a simple explanation of historical developments in the key policy

2 The Taylor rule applies the output gap, inflation and the interest rate level. The growth rule applies observed GDP growth and inflation.
3 The rule involving external interest rates applies inflation and the output gap, but also takes account of changes in the interest rate level among our trading partners that can result in changes in the exchange rate and thereby influence the inflation outlook.

rate based on inflation developments, wage growth, mainland GDP and central bank key rates abroad. The interest rate in the previous period is also important. The uncertainty in the model is expressed by the blue area. The forecast uses projections for the underlying variables from this *Report*. The chart shows that the interest rate forecast in the baseline scenario coincides with the projection from the estimated interest rate rule (see Chart 1.21).

Uncertainty surrounding the projections

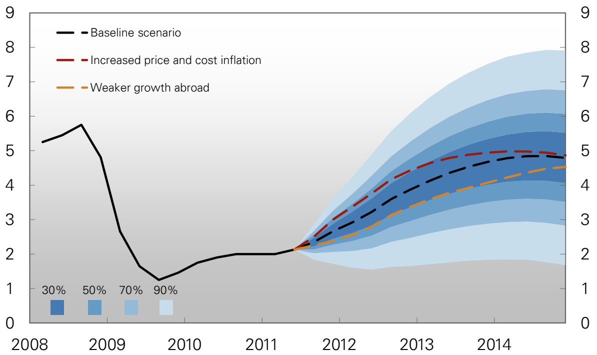
The projections for the key policy rate, inflation, output and other variables are based on Norges Bank's assessment of the economic situation and our perception of the functioning of the economy and monetary policy. If economic developments are broadly in line with projections, economic agents can expect that the interest rate path will also be approximately as projected. However, the interest rate path may differ if the economic outlook changes or if the effect of interest rate changes on inflation, output and employment differs from that projected.

The uncertainty surrounding Norges Bank's projections is illustrated using fan charts (see Charts 1.22 a-d). The width of the fans is based on observations of previous fluctuations in different variables and therefore expresses an average that includes periods of high and low uncertainty.

The effects of weak government finances in southern Europe and Ireland on economic developments in Europe are uncertain. There has been renewed financial turbulence, in addition to data indicating that the recovery in the US has been weaker than anticipated. It cannot be excluded that the turbulence will persist and spread and that global economic growth will slow considerably again.

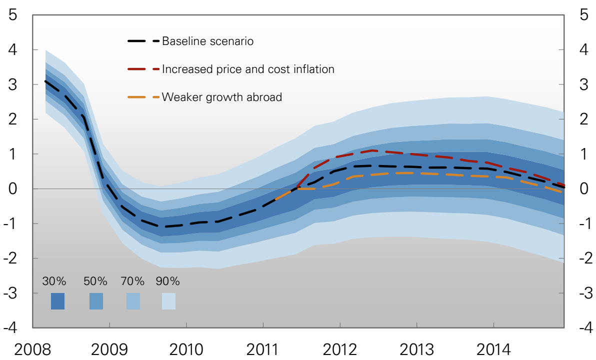
Charts 1.22 a-c (yellow lines) show the effects of a scenario with weaker developments abroad. This illustration is based on the assumption that external growth, inflation and interest rates will be lower than in the baseline sce-

Chart 1.22a Key policy rate in the baseline scenario and in the alternative scenarios. Per cent. 2008 Q1 – 2014 Q4



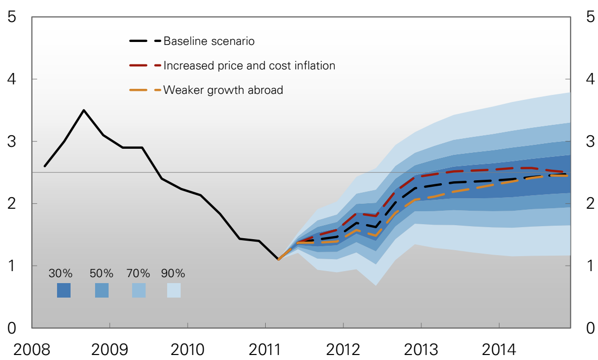
Source: Norges Bank

Chart 1.22b Output gap in the baseline scenario and in the alternative scenarios. Per cent. 2008 Q1 – 2014 Q4



Source: Norges Bank

Chart 1.22c CPIXE[1] in the baseline scenario and in the alternative scenarios. Four-quarter change. Per cent. 2008 Q1 – 2014 Q4



1) CPI adjusted for tax changes and excluding temporary changes in energy prices. As from August 2008, CPIXE is a real time series. See Norges Bank *Staff Memo* 7/2008 and 3/2009

Source: Norges Bank

nario, but also that domestic activity will moderate. The krone may appreciate. In that case, inflation is likely to be lower than expected, because of lower external price impulses, weaker demand and a stronger krone. In this alternative, the rise in interest rates will be deferred further ahead (see Charts 1.22 a-d). This will counteract the decline in activity and ensure that inflation nevertheless gradually moves up.

The projections in this *Report* are based on the assumption that inflation will be low for a while before gradually increasing from the beginning of 2012. Experience shows that price and cost inflation may accelerate when capacity utilisation is high.

The effect of higher price and cost inflation than in the baseline scenario and more in line with developments in 2006–2008 is illustrated in Charts 1.22 a-d (red lines). This may be related to somewhat higher demand and a somewhat faster decline in household savings. It might then be easier for firms to pass on costs to prices. Wage growth is likely to be higher and unemployment lower than in the baseline scenario. Higher inflation abroad may also lead to a faster rise in prices for imported consumer goods than assumed. In this alternative the increase in the key policy rate will occur earlier. A higher interest rate will curb demand and keep inflation close to 2.5%.

Changes in the projections since *Monetary Policy Report* 1/11

The key policy rate forecast in this *Report* is broadly in line with the forecast in the March 2011 *Report* (see Chart 1). The interest rate is projected to rise somewhat more in the second half of 2011 and somewhat less in the first half of 2012 compared with the projections in the March *Report*. The forecasts are based on an overall assessment of the situation in the Norwegian and global economy and on our perception of the functioning of the economy. The interest rate is set so that inflation is close to 2.5% over time.

Chart 2 shows a technical illustration of how news and new assessments have affected the changes in the interest rate forecast through their impact on the outlook for inflation, output and employment. The isolated contributions from the different factors are shown by the bars. The overall change in the interest rate forecast is shown by the black line.

The krone is stronger than assumed in the March *Report*. At the same time, the analyses in this *Report* are based on the assumption that central bank rates will be kept low longer than previously projected, in line with expectations in money and financial markets. A wider interest rate differential could in isolation lead to a further appreciation of the krone and to inflation becoming too low. Lower interest rates abroad and a stronger krone both suggest a lower key policy rate (see purple and orange bars, respectively).

Money market premiums are slightly lower than projected in the March *Report*.
In isolation, this implies a higher key policy rate (see light blue bars). Premiums are assumed to gradually revert to a more normal level.

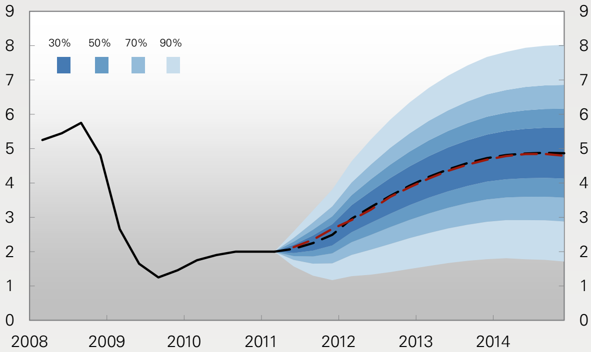
Capacity utilisation in the Norwegian economy appears to have picked up somewhat faster than envisaged in March, and unemployment has fallen somewhat more than expected. Capacity utilisation is projected to climb further. In isolation, this suggests a higher interest rate path (see red bars).

Underlying inflation has been approximately as expected since the March *Report*. Somewhat further ahead, higher external price impulses, slightly higher wage growth and an increase in enterprises' margins are expected to result in higher inflation. In isolation, this pushes up the interest rate path (see green bars).

On 10 May the Executive Board decided to reduce the number of monetary policy meetings from eight to six per year from 2012. The forecast in this *Report* has been adjusted to the new monetary policy meeting calendar (see dark blue bars).

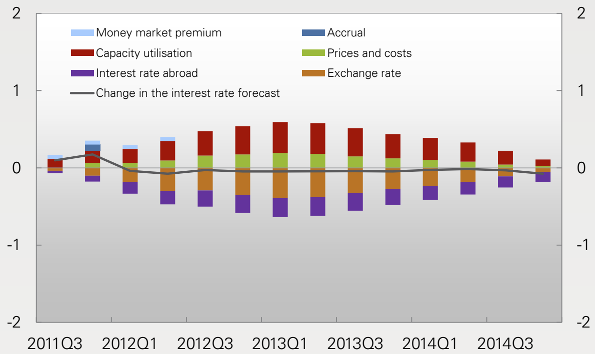
Changes in the projections for other key variables are summarised in Table 1. The changes in the projections reflect the change in the interest rate forecast as shown in Chart 2.

Chart 1 Key policy rate in the baseline scenario in MPR 1/11 with fan chart and key policy rate in the baseline scenario in MPR 2/11 (red line). Per cent. 2008 Q1 – 2014 Q4



Source: Norges Bank

Chart 2 Factors behind changes in the interest rate forecast since MPR 1/11. Accumulated contribution. Percentage points. 2011 Q3 – 2014 Q4



Source: Norges Bank

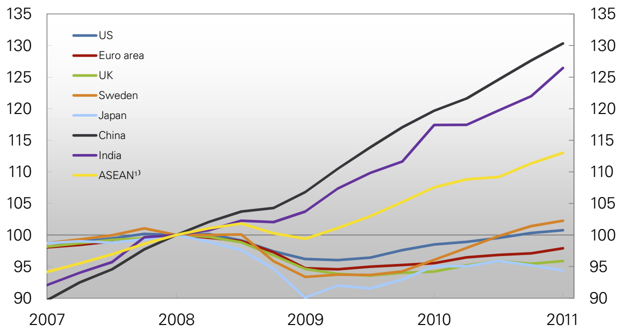
Table 1 Projections for macroeconomic aggregates in *Monetary Policy Report* 2/11. Percentage change from previous year (unless otherwise stated). Change from projections in *Monetary Policy Report* 1/11 in brackets.

	2011	2012	2013	2014
CPI	1¾ (¼)	1¾ (0)	2½ (¼)	2½ (0)
CPI-ATE[1)]	1 (0)	2 (0)	2½ (¼)	2½ (0)
CPIXE[2)]	1¼ (0)	2 (0)	2¼ (0)	2½ (0)
Annual wages[3)]	4¼ (¼)	4¾ (¼)	4¾ (0)	4½ (-¼)
Mainland demand[4)]	3¾ (-½)	4½ (½)	3 (-¼)	2¾ (0)
GDP, mainland Norway	3 (-¼)	3¾ (0)	3¼ (0)	2¾ (-¼)
Output gap, mainland Norway (level)[5)]	0 (0)	¾ (¼)	½ (0)	¼ (0)
Employment, persons, QNA	1¼ (0)	1½ (0)	1¼ (-¼)	1 (0)
Registered unemployment (rate, level)	2½ (-¼)	2¼ (-¼)	2¼ (-¼)	2½ (0)
Level				
Key policy rate[6)]	2¼ (0)	3½ (0)	4½ (0)	4¾ (0)
Import-weighted exchange rate (I-44)[7)]	88 (-¾)	88 (-1¼)	88½ (-1)	88¾ (-1½)
Foreign money market rates[8)]	1¼ (-¼)	2 (-½)	2½ (-½)	2¾ (-½)
Premiums in the Norwegian money market	½ (0)	¼ (0)	¼ (0)	¼ (0)

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) Annual wage growth is based on the Technical Reporting Committee on Income Settlements' definitions and calculations
4) Private and public consumption and mainland gross fixed investment
5)The output gap measures the percentage deviation between mainland GDP and projected potential mainland GDP
6) The key policy rate is the interest rate on banks' deposits in Norges Bank
7) The weights are estimated on the basis of imports from 44 countries, which comprise 97% of total imports
8) Forward rates are based on money market rates and interest rate swaps

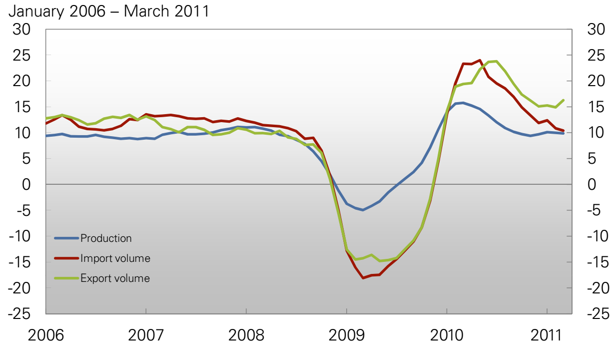
Source: Norges Bank

Chart 2.1 GDP at constant prices. Index, 2008 Q1 = 100.
2007 Q1 – 2011 Q1



1) Indonesia, Malaysia, Philippines and Thailand. GDP-weighted (PPP)
Sources: CEIC, IMF, Thomson Reuters and Norges Bank

Chart 2.2 Industrial production, exports and imports in emerging economies.
12-month change. Per cent. 3-month moving average.
January 2006 – March 2011



Source: Thomson Reuters

Table 2.1 Projections for GDP growth in other countries. Change from previous year. Per cent. Change from projections in *Monetary Policy Report* 1/11 in brackets.

	Share of world GDP[1] (per cent)	2011	2012	2013 – 2014[2]
US	20	2½ (-¼)	3 (0)	3¼ (0)
Euro area	15	2 (½)	1¾ (¼)	2 (0)
UK	3	1½ (0)	2 (0)	2½ (-½)
Sweden	0.5	4¾ (¼)	2½ (0)	2½ (0)
China	13	9¼ (0)	8¾ (-¼)	9 (0)
Trading partners[3]	65	3 (½)	2½ (0)	2¾ (0)
World (PPP)[4]	100	4¼ (0)	4½ (0)	4¾ (0)
World (market exchange rates)[4]	100	3½ (0)	3¾ (0)	3¾ (0)

1) Purchasing power parity (PPP) GDP in 2010
2) Average annual growth
3) Export weights, 26 important trading partners
4) GDP weights. Norges Bank's estimates for 26 trading partners, other estimates from IMF

Sources: IMF, Eurostat and Norges Bank

2 The projections

The global economy

Financial market turbulence has flared up again, partly as a result of increasing uncertainty regarding sovereign debt problems in some euro area countries, but also owing to recent weak economic data from the US. The recovery in the global economy is continuing, but growth rates vary considerably among Norway's trading partners. In a number of emerging economies, output is higher than pre-crisis levels (see Chart 2.1). Current indicators show that growth is now slowing, but from very high levels (see Chart 2.2). For advanced economies, the picture is mixed. Economic growth has slowed in the US, while output growth has been robust in countries with a large export sector. Germany in particular is pulling up growth in the euro area as a whole, and this is one of the factors behind the upward revision of projected GDP growth among trading partners to 3% for 2011. Capacity utilisation as a whole, however, is still lower than normal for advanced economies, and domestic demand is growing at a moderate pace.

Even though the recovery seems to have gained a foothold in most regions, the outlook is highly uncertain. The sovereign debt problems in some euro area countries have yet to be resolved. Turbulence persists, despite the support measures implemented over the past year, including extensive lending and stabilisation programs for Greece, Ireland and Portugal. So far, contagion to other countries and markets has been limited, but there is a risk that this may rapidly change. The projections are based on the assumption that the debt problems facing Greece will be resolved without significant spillover effects on other euro area countries.

Manufacturing output fell sharply in Japan following the earthquake and tsunami. Reduced supplies of parts and components from Japan will in the short term also have a negative impact on manufacturing output in other countries. The car industry is particularly vulnerable because of the high degree of specialisation in production. Through the second half of 2011 the need for reconstruction and recovery in Japan will result in higher demand for goods and services from other countries.

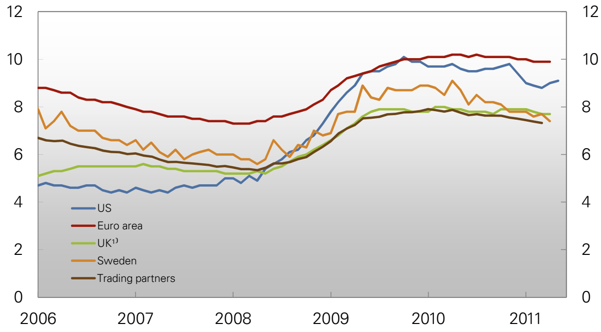
In most countries, expansionary monetary and fiscal policies during the crisis have been crucial to the recovery so far. In emerging economies, the authorities now need to tighten policy, in order to counteract strong credit growth and to prevent the sharp rise in food and energy prices from feeding through to prices for other goods and services. Many advanced economies are tightening fiscal policy in order to restore sustainable public finances. A number of countries have also started to normalise monetary policy. This is expected to lead to a somewhat lower rate of output growth ahead. Compared with the March 2011 *Monetary Policy Report*, growth projections for our trading partners for the years 2012–2014 are approximately unchanged at 2½–3% annually (see Table 2.1). Growth projections for the global economy are unchanged since the March *Report*, although growth is projected to be stronger in the euro area and lower in Japan. Global growth is projected to pick up somewhat through the projection period, from 4¼% in 2011 to 4¾% in 2014.

Growth in private consumption is expected to be moderate in most advanced economies. Policy tightening and a sharp rise in energy and commodity prices are weakening household purchasing power. This is being amplified by continued weak labour markets in many countries. There are nonetheless signs of stabilisation or improvement for most of our trading partners (see Chart 2.3).

In a number of countries, household spending will also be restrained by weak housing market developments and high debt levels. There are still imbalances in the housing market in those countries where the fall in house prices was deepest, such as the US, UK, Spain and Denmark, even though there are signs the bottom has been reached in some markets. In the euro area, banks reported further tightening in lending terms for residential mortgages in 2011 Q1 and Q2. US banks have reported relatively small changes in lending terms and standards in recent quarters.

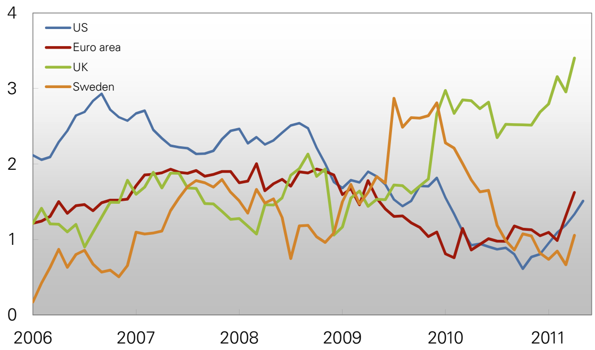
Developments in private investment are expected to be somewhat stronger. The financial crisis has resulted in a considerable lag in both maintenance and new investment in the business sector in many advanced economies. High growth in exports to emerging economies has already contributed to a moderate upswing in investment. Corporate investment funding capacity has increased, both reflecting an improve-

Chart 2.3 Unemployment. Percentage of labour force. Seasonally adjusted. January 2006 – May 2011



1) UK; average unemployment past 3 months
Source: Thomson Reuters

Chart 2.4 Consumer prices excluding food and energy[1)]. 12-month change. Per cent. January 2006 – May 2011



1) HICP excluding energy, food, alcohol and tobacco for the euro area, UK and Sweden
Source: Thomson Reuters

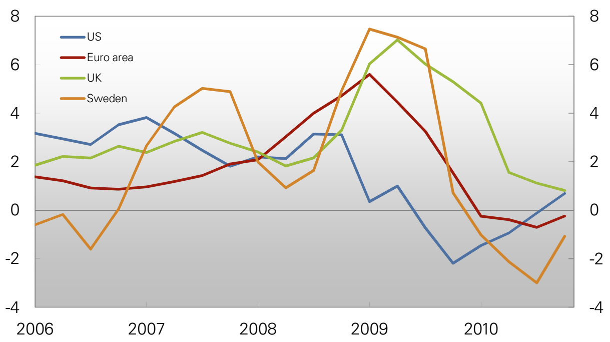
Table 2.2. Projections for consumer prices in other countries (change from previous year, per cent) and oil price. Change from projections in *Monetary Policy Report* 1/11 in brackets.

	2011	2012	2013–14[1)]
US	3¼ (1)	1¾ (¼)	2 (0)
Euro area[2)]	2½ (¼)	1¾ (¼)	2 (¼)
UK	4½ (¼)	2½ (¼)	2 (0)
Sweden	3¼ (¾)	2¾ (½)	2¼ (0)
China	5 (½)	3¾ (¼)	2½ (0)
Trading partners[3)]	3 (½)	2¼ (¼)	2 (0)
Oil price Brent Blend[4)]	114	113.7	108

1) Average annual rise
2) Weights from Eurostat (each country's share of euro area consumption)
3) Import weights, 26 important trading partners
4) Futures prices (average for the past five trading days). USD per barrel. For 2011, an average of spot prices so far this year and futures prices for the rest of the year are used

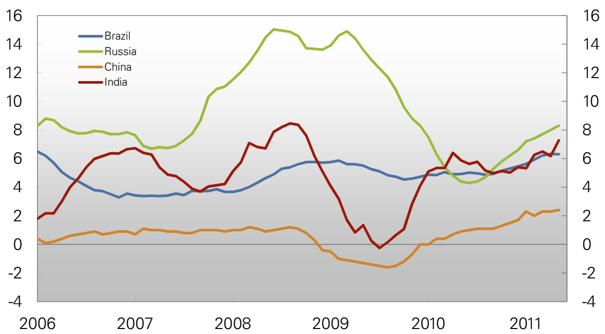
Sources: Eurostat, Thomson Reuters and Norges Bank

Chart 2.5 Unit labour costs. Total economy. Four-quarter change. Per cent. 2006 Q1– 2010 Q4



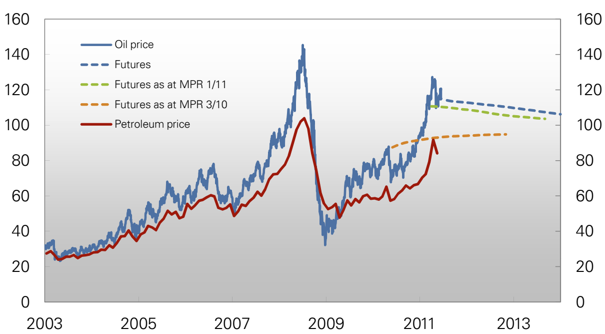
Source: OECD

Chart 2.6 Core inflation in emerging markets[1]. 12-month change. Per cent. January 2006 – May 2011



1) India; wholesale prices for manufactured goods
Source: Thomson Reuters

Chart 2.7 Oil price (Brent Blend), prices for Norwegian petroleum exports[1] (USD/barrel). January 2003 – January 2014



1) Weighted average of Norwegian crude oil and gas exports
Sources: Statistics Norway, Thomson Reuters and Norges Bank

ment in financial positions and somewhat easier access to bank credit. However, weak developments in private consumption are expected to dampen investment growth in the initial years of the projection period.

In many emerging Asian economies, capacity utilisation is already at or above the normal level. Growth is expected to slow somewhat in the years ahead, compared with the high rate of growth in 2010. High expenditure on food and energy will curb household demand for other goods and services. The policy tightening measures implemented will at the same time slow investment growth. A moderate appreciation of real exchange rates is expected in most emerging Asian economies.

Inflation among Norway's trading partners continued to pick up through the first half of 2011. Although commodity prices have edged down since April, the twelve-month rise in consumer prices will continue to be higher for a period ahead owing to the previous increase in these prices. Projected CPI inflation among our trading partners for 2011 has been revised up by ½ percentage point since the March *Report* (see Table 2.2).

Inflation excluding food and energy has also picked up somewhat in advanced economies in recent months (see Chart 2.4). A high level of spare capacity and high unemployment are nonetheless dampening underlying inflationary pressures. Wage growth has remained low, while productivity growth has picked up further (see Chart 2.5). Underlying inflation is expected to edge up gradually ahead, while the effects of higher commodity prices unwind.

Cost pressures have been stronger in emerging economies, where capacity utilisation is high. Underlying inflation has picked up (see Chart 2.6). The policy tightening now being implemented is expected to curb inflation further out in the projection period. For trading partners as a whole, inflation has been revised up since the March *Report* by ¼ percentage point to 2¼% in 2012 and is expected to be around 2% thereafter.

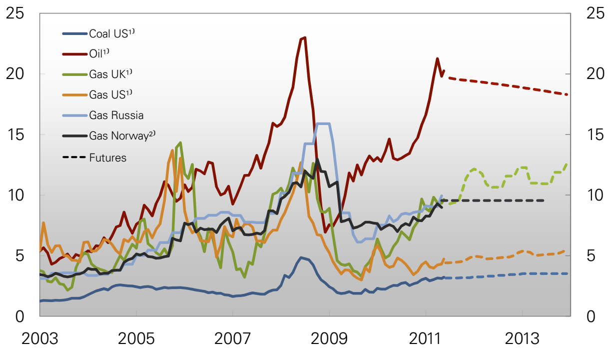
The impact of the financial crisis on production capacity, and thereby potential growth, among our trading partners is highly uncertain. So far in 2011, inflation has picked up more rapidly than expected. This may be a sign that capacity utilisation is higher than assumed. If so, underlying inflationary pressures may be stronger than anticipated. There is also a risk that high capacity utilisation in emerging economies will have a more pronounced impact on inflation than assumed.

Oil prices rose to USD 125 per barrel at the beginning of May, but have since edged down to around USD 118 at present, which is slightly higher than at the time of the March *Report*. The projections in this *Report* are based on the assumption that oil prices will move in line with futures prices (see Table 2.2 and Chart 2.7). Futures prices imply that oil prices will be somewhat lower ahead but will nevertheless remain above USD 100 per barrel throughout the period to 2014. Growth in oil demand is expected to fall somewhat as a result of lower global economic growth in 2011 than in 2010. On the other hand, the supply of oil has decreased in recent months because the other OPEC countries have not fully compensated for the shortfall in Libyan oil supply. If this situation persists, the oil market will become tighter. Higher-than-expected growth in emerging economies may also lead to higher oil prices in the years ahead. Should the political unrest in North Africa and the Middle East recede, oil prices may edge down again.

Prices for Norwegian gas exports increased further in 2011 Q1, reflecting the continued rise in oil prices as most Norwegian gas is sold on long-term contracts at prices linked to oil prices. Since gas prices in these contracts move in tandem with oil prices with some lag, gas prices are also expected to rise further in the period ahead (see Chart 2.8). In addition, British gas futures prices indicate that prices for other Norwegian gas exports could rise.

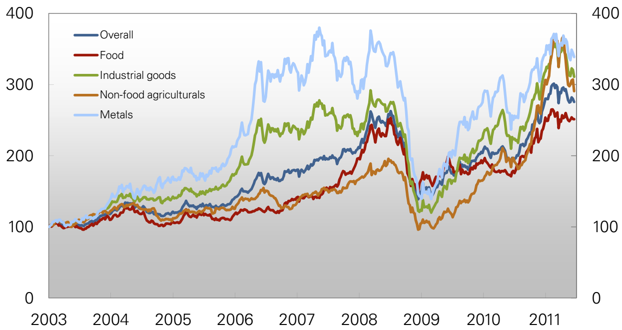
The Economist commodity-price index has edged down since the March *Report* (see Chart 2.9). Prices for non-food agriculturals in particular, such as cotton, have shown a considerable decrease (see Chart 2.10). Some of the fall in commodity prices reflects lower demand growth. High prices also make it profitable to increase production, and agricultural production usually responds relatively quickly to a rise in prices. However, as in the case of energy prices, futures prices indicate that prices for other commodities are expected to remain high ahead. This is related to expectations of continued solid growth in emerging economies, while boosting production of many commodities seems to be facing increasing challenges.

Chart 2.8 Prices for coal, oil and natural gas. USD per MMBTU.
January 2003 – January 2014



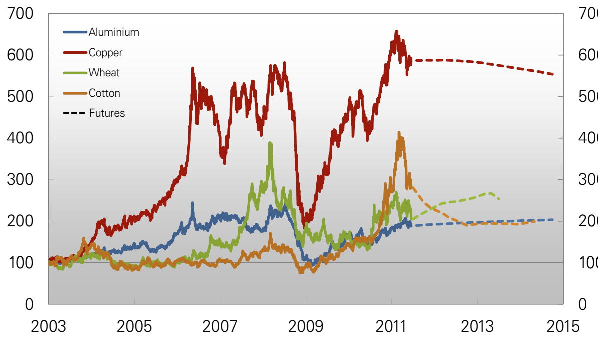
1) For June 2011 calculated as daily average
2) Calculation of future gas prices for Norway based on assumptions in 2011 National Budget
Sources: IMF, Thomson Reuters, Statistics Norway, Ministry of Finance and Norges Bank

Chart 2.9 *The Economist* price indices. USD.
Index, January 2003 = 100. January 2003 – June 2011



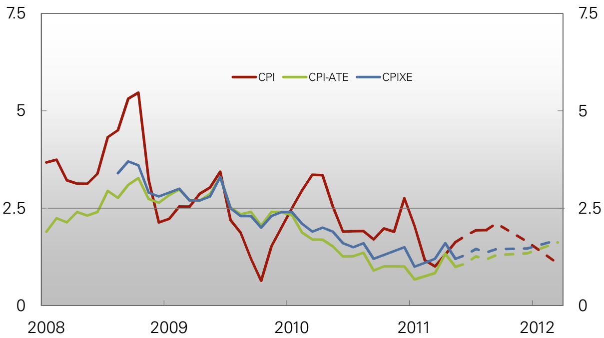
Source: Thomson Reuters

Chart 2.10 Commodity prices. USD. Spot and futures prices.
Index, January 2003 = 100. January 2003 – December 2014



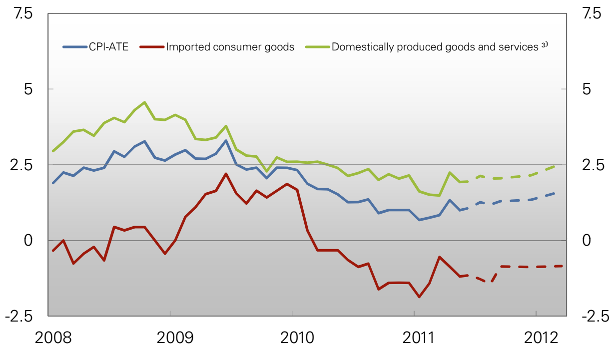
Sources: CME Group and Thomson Reuters

Chart 2.11 CPI, CPI-ATE[1] and CPIXE[2]. 12-month change. Per cent. January 2008 – March 2012[3]



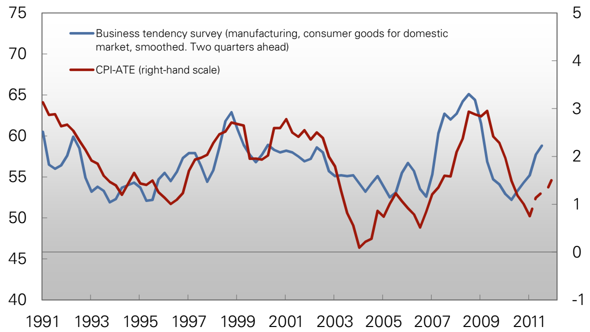
1) CPI adjusted for tax changes and excluding energy products
2) CPI adjusted for tax changes and excluding temporary changes in energy prices. Real time figures. See Norges Bank *Staff Memo* 7/2008 and 3/2009
3) Projections for June 2011 – March 2012 (broken lines). Monthly figures to September 2011, then quarterly figures
Sources: Statistics Norway and Norges Bank

Chart 2.12 CPI-ATE[1]. Total and by supplier sector. 12-month change. Per cent. January 2008 – March 2012[2]



1) CPI adjusted for tax changes and excluding energy products
2) Projections for June 2011 – March 2012 (broken lines). Monthly figures to September 2011, then quarterly figures
3) Norges Bank's estimates
Sources: Statistics Norway and Norges Bank

Chart 2.13 Enterprises' price expectations next quarter and CPI-ATE[1]. Diffusion index from business tendency survey and four-quarter change CPI-ATE. 1991 Q1 - 2012 Q1[2]



1) CPI adjusted for tax changes and excluding energy products
2) Projections for 2011 Q2 – 2012 Q1 (broken lines)
Sources: Statistics Norway and Norges Bank

The Norwegian economy in the year ahead

Prices

Consumer prices (CPI) have risen somewhat more than projected in the March *Monetary Policy Report* (1/11), primarily reflecting higher-than-expected electricity prices. In May, the twelve-month rise in the CPI was 1.6% (see Chart 2.11). Inflation adjusted for tax changes and excluding temporary changes in energy prices (CPIXE) was 1.2%, approximately as projected in the March *Report*. Inflation adjusted for tax changes and excluding energy products (CPI-ATE) was 1.0% in May.

The rise in prices for domestically produced goods and services in the CPI-ATE fell markedly through 2010 and continued to fall into 2011. Lower cost inflation, below normal capacity utilisation and increased price competition in the grocery trade contributed to restraining inflation. In the past two months, overall domestic inflation has edged up, primarily as a result of a marked increase in air travel prices, which in turn reflect higher fuel prices. The rise in prices for other services and domestically produced goods has also increased somewhat. In the period ahead, wage growth is projected to pick up and price competition in the grocery trade to decrease. Higher demand may make it easier to pass on cost increases to prices. Overall, the rise in prices for domestically produced goods and services in the CPI-ATE is projected to move up from 1.9% in May 2011 to 2½% in 2012 Q1 (see Chart 2.12). Norges Bank's regional network contacts and the enterprises responding to Statistics Norway's business tendency survey also expect increased inflation ahead (see Chart 2.13).

The rise in prices for imported consumer goods in the CPI-ATE fell through 2010 and in early 2011. In recent months, the increase in these prices has been higher, reflecting a sharper rise in prices abroad for imported consumer goods and a change in the method for calculating clothing and footwear prices in Norway. The krone exchange rate is expected to be about 2½% stronger in 2011 than in 2010 and will thereby curb inflation somewhat in the period ahead. Higher external price impulses, measured in foreign currency, are having the opposite effect (see Chart 2.14). The annual rise in prices for imported consumer goods in the CPI-ATE is expected to increase from negative 1.2% in May 2011 to negative ¾% in 2012 Q1.

Overall, CPI-ATE inflation is projected to pick up from 1.0% in May 2011 to 1½% in 2012 Q1. Norges Bank's inflation projections for the coming quarters are virtually unchanged since the March *Report*. The projections from Norges Bank's System for Averaging short-term Models (SAM)[1] also show little change since March and are somewhat lower than the projections in the baseline scenario (see Chart 2.15). The impact of higher external price impulses is less pronounced in SAM than in the baseline scenario. At the same time, the effect of higher energy prices is not yet fully reflected in the SAM projections.

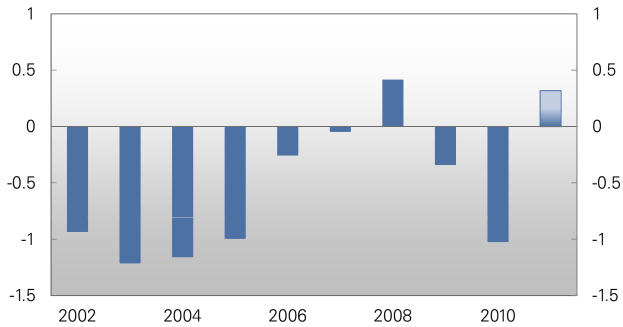
Futures prices for electricity and oil indicate that CPIXE inflation will be somewhat higher than CPI-ATE inflation in the coming quarters. The twelve-month rise in the CPIXE is projected at 1¾% in 2012 Q1. On average for 2011, CPIXE and CPI inflation are projected to rise by 1¼ and 1¾% respectively.

Output and demand

The upturn in the Norwegian economy has gained a firm footing. Conditions in some sectors, such as the sharp decline in traditional fishing and the power sector, have nonetheless pushed down mainland GDP growth over the past half-year. Mainland GDP grew by 0.6% in 2011 Q1, but the rise was 0.9% excluding electricity production. Sectors with particularly low production levels in the past quarters are expected to show more normal developments in production ahead. As a result, GDP growth will regain some momentum in Q2. Through the second half of the year, quarterly growth is projected at 1% (see Chart 2.16). The driving forces behind growth are high population growth, strong terms of trade (see Chart 2.17), low interest rates and solid import growth among trading partners. Private demand is expected to provide the largest contribution to the upturn. Mainland GDP is projected to rise by 3% in 2011.

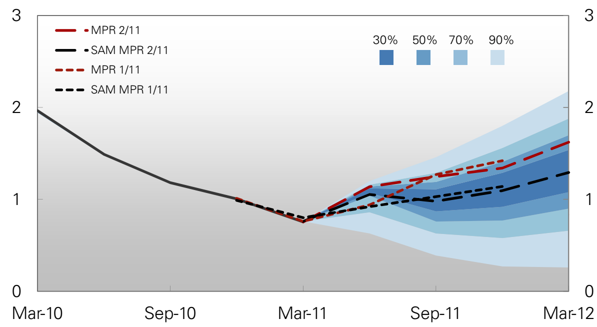
1 See Norges Bank's website: http://www.norges-bank.no

Chart 2.14 Indicator of external price impulses to imported consumer goods measured in foreign currency. Annual change. 2002 – 2011[1)]



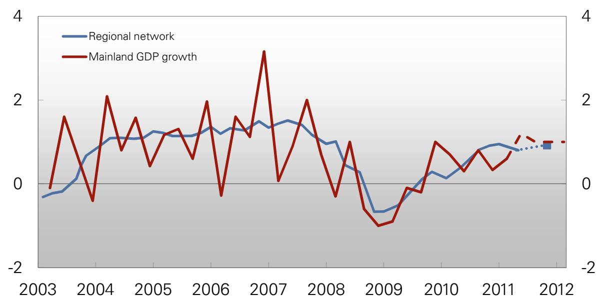
1) Projections for 2011
Source: Norges Bank

Chart 2.15 CPI-ATE[1)]. Actual figures, baseline scenario and projections from SAM[2)] with fan chart. Four-quarter change. Per cent. 2010 Q1 – 2012 Q1[3)]



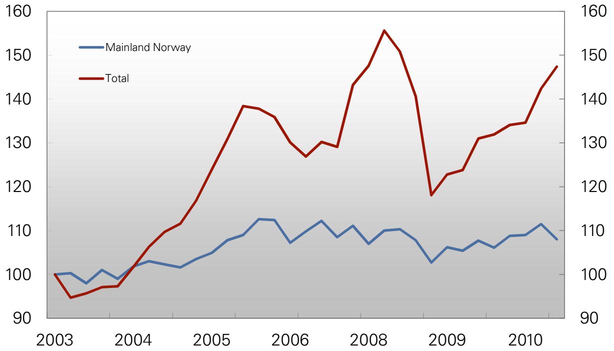
1) CPI adjusted for tax changes and excluding energy products
2) System for averaging models
3) Projections for 2011 Q2 – 2012 Q1 (broken lines)
Sources: Statistics Norway and Norges Bank

Chart 2.16 GDP mainland Norway[1)] and Norges Bank's regional network's indicator of change in production past three months and expected change in production next six months. Per cent. 2003 Q1 – 2012 Q1[2)]



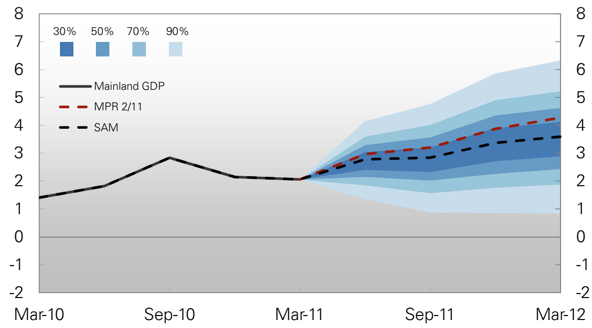
1) Seasonally adjusted quarterly change. Volume
2) Latest observation in the regional network is May 2011. Latest GDP observation is 2011 Q1, projections for 2011 Q2 – 2012 Q1 (broken line)
Sources: Statistics Norway and Norges Bank

Chart 2.17 Terms of trade. Index. 2003 Q1 = 100.
2003 Q1 - 2011 Q1



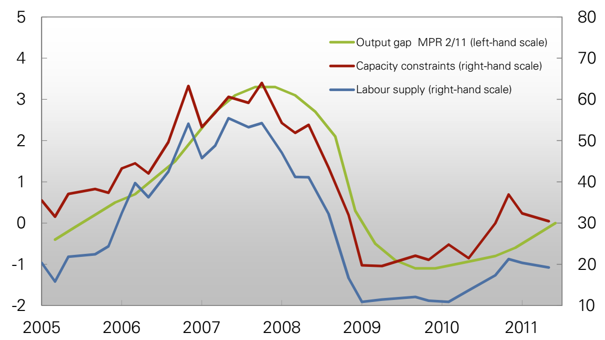
Sources: Statistics Norway and Norges Bank

Chart 2.18 GDP mainland Norway. Actual figures, baseline scenario and projections from SAM[1)] with fan chart. Four-quarter change. Volume. Seasonally adjusted. Per cent. 2010 Q1 – 2012 Q1[2)]



1) System for averaging models
2) Projections for 2011 Q2 – 2012 Q1 (broken lines)
Sources: Statistics Norway and Norges Bank

Chart 2.19 Estimated output gap and capacity constraints and labour supply.[1)] Per cent. January 2005 – May 2011



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
Sources: Norges Bank and Norges Bank's regional network

Norges Bank's regional network contacts reported in May that output growth in the previous three months had been somewhat lower, partly owing to the cold winter. However, enterprises are more optimistic about the outlook and expect higher growth in the next half-year (see Chart 2.16). This particularly applies to contacts in construction, the oil supplier industry and retail trade.

In the System for Averaging short-term Models (SAM), projected four-quarter growth in mainland GDP has been revised down somewhat since the March *Report*. This is related to low mainland GDP growth in Q1. Projected average quarterly growth through the remainder of the year is slightly higher than the SAM projections in the March *Report*. The projections in this *Report* are somewhat higher than the SAM projections, because in the former growth is expected to regain somewhat more momentum after temporary low growth in the past two quarters. The baseline path is nonetheless within the most likely range of outcomes in the SAM projections to end-2011 (see Chart 2.18).

Capacity utilisation in the Norwegian economy is on the rise. Employment is increasing and unemployment has fallen more rapidly than projected. Registered unemployment is slightly lower than the average for the past ten years. Statistics Norway's business tendency survey indicates that labour shortages are now a somewhat greater constraint on production. According to the regional network, the share of enterprises experiencing capacity constraints is higher than in summer 2010, but has fallen slightly so far in 2011 (see Chart 2.19).

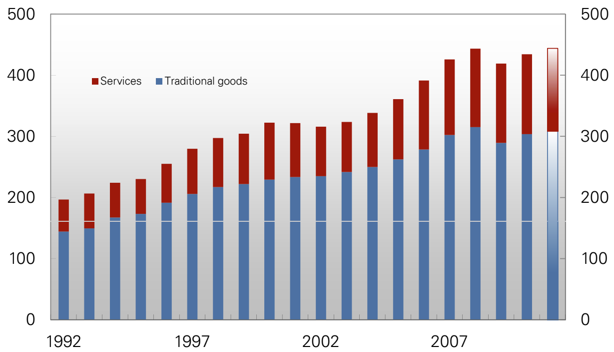
Overall, capacity utilisation in the Norwegian economy is estimated to be close to a normal level. Unemployment has fallen and further labour market tightening is expected ahead. Increasing labour shortages are reflected in a pickup in wage growth, at a more rapid pace than previously envisaged. Registered unemployment is projected to be ¼ percentage point lower at end-2011 than in the March *Report*. Projected wage growth for 2011 has been revised up by ¼ percentage point.

Traditional goods exports have picked up over the past two years, after falling markedly towards the end of 2008 and in early 2009. The rise has been driven by the recovery in world trade and higher production capacity for industrial chemicals and mineral products. Import growth among our trading partners is projected at 6¾% in 2011 and around 6% annually in the period 2012–2014. This will provide considerable impetus to the Norwegian export industry. However, Norwegian exporters are expected to lose market shares as a result of high cost inflation. Traditional goods exports are projected to increase by 1½% from 2010 to 2011 (see Chart 2.20).

Growth in private consumption was strong in the second half of 2010, but slowed markedly in 2011 Q1. High electricity prices, owing to a cold winter, may have curbed demand for other goods and services. Growth in private consumption is expected to pick up again. According to the regional network, enterprises in retail trade and household services expect solid growth over the next half-year. The saving ratio is relatively high and income growth is solid. Confidence indicators are at a high level, reflecting favourable developments in the Norwegian economy with strong terms of trade and low unemployment. Growth in household borrowing has picked up somewhat recently. High debt burdens will probably continue to restrain consumption growth as interest rates gradually rise. The level of household saving is uncertain. According to financial sector accounts, household net lending was appreciably lower in 2010 than reflected in the institutional sector accounts. The difference between the two accounts increased considerably from 2009 to 2010. Private consumption is projected to rise by 3½% in 2011 (see Chart 2.21). Household real disposable income (excluding dividend income) is also projected to grow by about 3½% in 2011 (see Chart 2.21). The saving ratio (excluding dividend income) will thus remain approximately unchanged from 2010 to 2011 at 5¼% (see Chart 2.22).

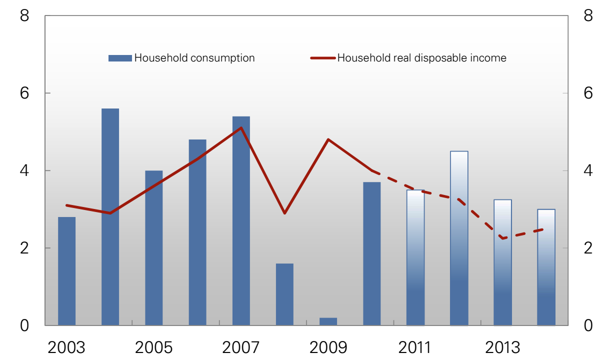
Housing investment fell markedly through both the financial crisis and the following year. Housing starts numbered about 20 000 in 2009, far lower than the increase in the number of households. Over the past ten years, the number of annual housing starts has averaged 26 300.

Chart 2.20 Exports from mainland Norway. Constant 2007 prices. In billions of NOK. 1992 – 2011[1)]



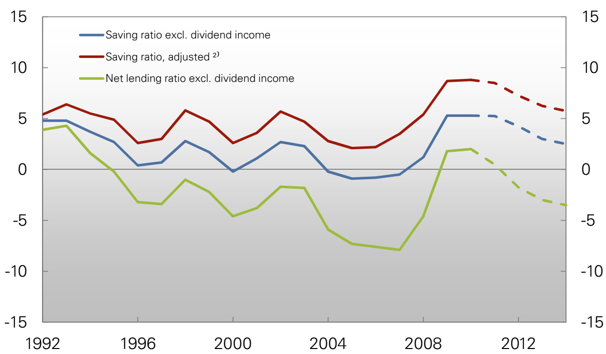
1) Projections for 2011
Sources: Statistics Norway and Norges Bank

Chart 2.21 Household consumption[1)] and real disposable income[2)]. Annual change. Per cent. 2003 – 2014[3)]



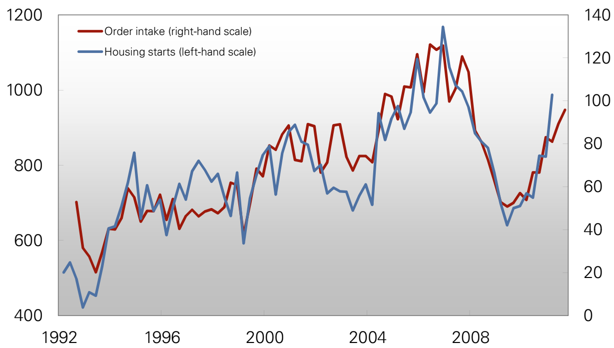
1) Includes consumption among non-profit organisations. Volume
2) Excluding dividend income
3) Projections for 2011 – 2014 (broken line)
Sources: Statistics Norway and Norges Bank

Chart 2.22 Household saving and net lending as a share of disposable income. Per cent. 1992 – 2014[1)]



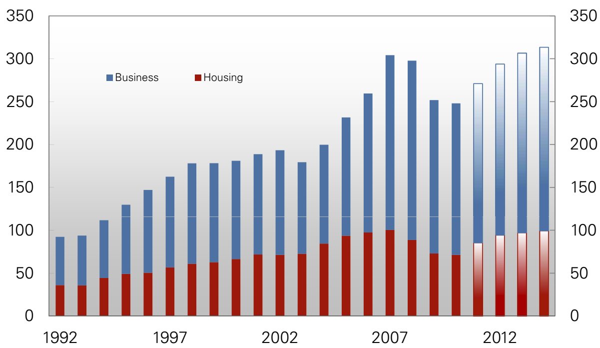
1) Projections for 2011 – 2014 (broken lines)
2) Adjusted for estimated reinvested dividends for 2000 – 2005 and redemption/reduction of equity capital for 2006 – 2014
Sources: Statistics Norway and Norges Bank

Chart 2.23 Housing starts[1] and order intake for residential construction[2]. 1992 Q1 - 2011 Q1



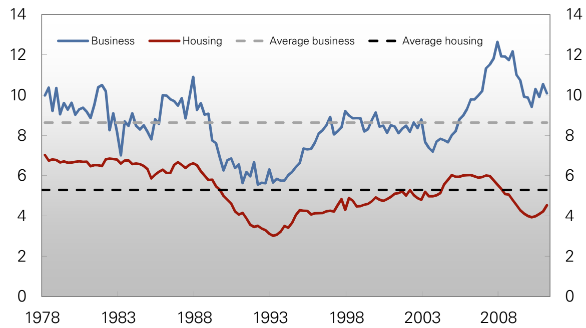
1) In 1000s of square meters. Seasonally adjusted
2) Value index deflated by the price index for housing investment in the national accounts. Deferred two quarters forward. 2007 = 100
Sources: Statistics Norway and Norges Bank

Chart 2.24 Investment in mainland Norway excluding public sector. Constant 2007 prices. In billions of NOK. 1992 – 2014[1]



1) Projections for 2011 – 2014
Sources: Statistics Norway and Norges Bank

Chart 2.25 Investment as share of GDP mainland Norway. Per cent. Seasonally adjusted. 1978 Q1 – 2011 Q1



Source: Statistics Norway

Residential construction rose through 2010 and has picked up sharply since the turn of the year. Sales of new homes have increased, and both order intake and the order backlog for residential construction have picked up considerably (see Chart 2.23). Strong population growth, increasing centralisation, solid income growth and robust confidence in the economic outlook imply high demand for housing. Increased house prices makes it more profitable to build a new home, which implies a further pickup in housing investment. Housing starts are projected to show an annualized increase of about 30 000 towards the end of the year. Housing investment will then increase by about 20% in 2011 (see Chart 2.24).

Mainland business investment has declined considerably since 2008, but picked up through 2010 (see Chart 2.25). Low interest rates, improved profitability and higher capacity utilisation have fuelled investment growth. Enterprises in the regional network are planning to increase investment ahead. Figures for orders and building starts also indicate that investment will rise. Mainland business investment is projected to increase by 5% from 2010 to 2011. Investment in services and the power sector will provide the largest contribution to growth.

The labour market

Output growth since autumn 2009 is largely the result of a productivity increase achieved by making better use of the existing workforce (see Chart 2.26), as many enterprises did not reduce their workforce to the extent implied by the decline in output just after the financial crisis. There is expected to be somewhat less room for an increase in productivity ahead. Enterprises will therefore have to expand their workforces to a greater extent in order to meet rising demand.

Employment has risen gradually since spring 2010 and the rise is projected to continue ahead. Regional network contacts expected in May that employment would show solid growth over the next three months (see Chart 2.27). The business survey for 2011 carried out by the Norwegian Labour and Welfare Administration (NAV) shows that a higher number of enterprises expect a rise in employment than was the case a year ago, particularly in the private sector. Increased labour demand is also reflected in an increase in vacancies advertised by NAV. Employment is projected to rise by 1¼% in 2011.

Many enterprises will be able to meet the rising need for labour by employing foreign labour. According to Statistics Norway's population statistics, net immigration to Norway has totalled 45 000 over the past four quarters (see Chart 2.28), not least as a result of large migration flows from Poland and the Baltic countries. Immigration is projected to remain at a high level, although inflows from the Baltic region in particular may slow as the economic situation in the region improves. At the same time, Germany and Austria lifted the transitional rules for EU citizens from eastern European member states on 1 May 2011. Labour inflows must therefore be expected to be somewhat lower further ahead than in recent years.

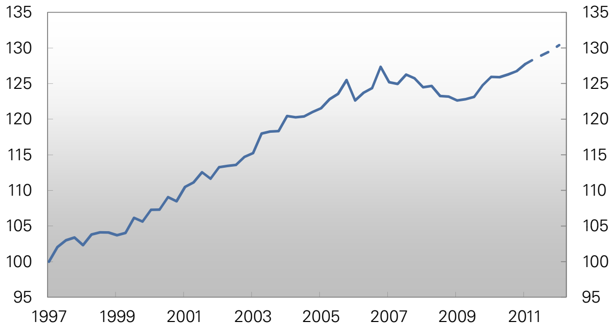
Normally there has been a close relationship between developments in the labour supply and cyclical conditions in Norway. Many exit the labour force when labour demand diminishes, but return when economic conditions improve. With the fall in unemployment, the increase in the number of vacancies and rising wage growth, the labour force is projected to expand by 1% in 2011 (see Table 2.3).

Unemployment began to decrease around the turn of the year and has been lower than projected in the March *Report*. Registered unemployment adjusted for seasonal variations was 2.7% of the labour force in May 2011. According to the Labour Force Survey (LFS), the seasonally adjusted unemployment rate was 3.3% in March. Growth in labour demand is projected to exceed supply to a certain extent, leading to a further decrease in unemployment. Registered unemployment is projected to fall from 2.7% in May to 2.4% at end-2011 (see Chart 2.29).

Wage growth

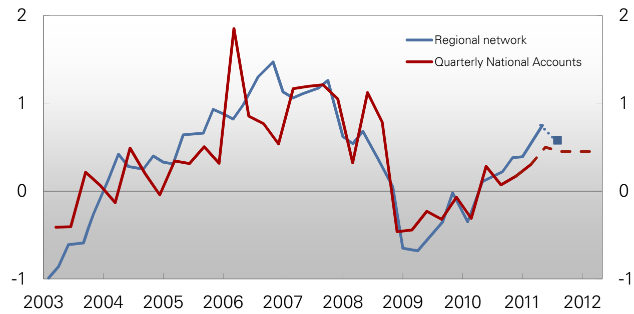
The wage settlement between the Norwegian Confederation of Trade Unions (LO) and the Confederation of Norwegian Enterprise (NHO) will according to the parties, result in annual wage growth of 3.65% in 2011. The

Chart 2.26 GDP per hour worked for mainland Norway. Index, 1997 Q1 = 100. Seasonally adjusted. Market value. 1997 Q1 – 2012 Q1[1)]



1) Projections for 2011 Q2 – 2012 Q1 (broken line)
Sources: Statistics Norway and Norges Bank

Chart 2.27 Employment growth[1)] and Norges Bank's regional network's indicator of change in employment and expected change in employment next three months. Per cent. 2003 Q1 – 2012 Q1[2)]



1) Seasonally adjusted quarterly change
2) Latest observation in the regional network is May 2011. Latest observation in the Quarterly National Accounts is 2011 Q1, projections for 2011 Q2 – 2012 Q1 (broken line)
Sources: Statistics Norway and Norges Bank

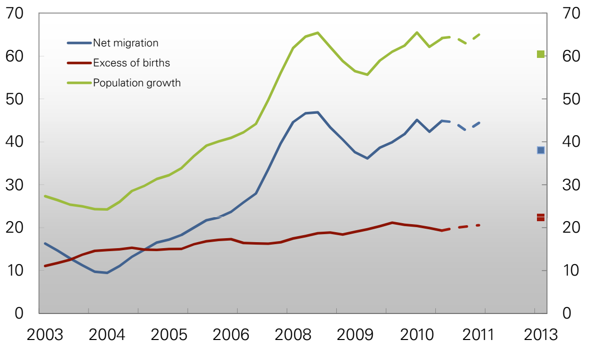
Table 2.3. Population and labour force growth. Change from previous year. Per cent

	2010	2011
Population growth in the age group 15-74	1¾	1¾
Growth in labour force conditional on unchanged labour force participation[1)]	1¼	1¼
Labour force growth	½	1

1) Unchanged labour force participation in every age group since the 2007 level

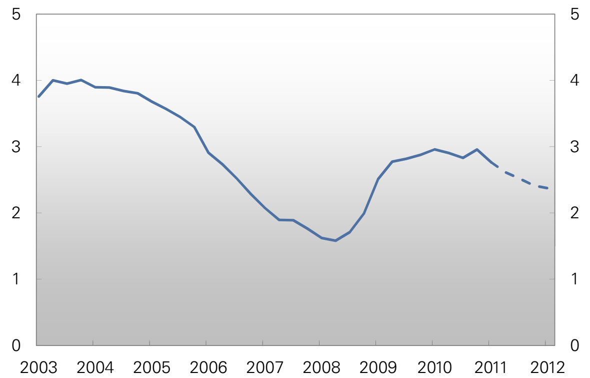
Sources: Statistics Norway and Norges Bank

Chart 2.28 Population growth, net migration and excess of births. Sum of four previous quarters. In 1000s of persons. 2003 Q1 – 2011 Q4[1)]



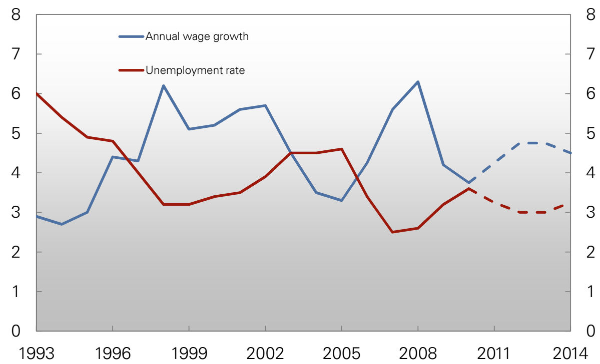
1) Quarterly projections for 2011 Q2 - Q4. The squares show the annual average for 2012 - 2014
Sources: Statistics Norway and Norges Bank

Chart 2.29 Registered unemployment. Percentage of labour force. Seasonally adjusted. 2003 Q1 – 2012 Q1[1)]



1) Projections for 2011 Q2 – 2012 Q1 (broken line)
Sources: Norwegian Labour and Welfare Administration, Statistics Norway and Norges Bank

Chart 2.30 Annual wage growth[1)] and LFS unemployment. Per cent. 1993 – 2014 [2)]



1) Including estimated costs of increase in number of vacation days and introduction of mandatory occupational pensions
2) Projections for 2011 - 2014 (broken lines)
Sources: Statistics Norway, Technical Reporting Committee on Income Settlements and Norges Bank

outcome of the wage negotiations for the local and central government sectors was annual wage growth of 4¼ and 3.9% respectively. Increased activity in the Norwegian economy and a tighter labour market suggest that local pay increases in the private sector may be somewhat higher than estimated in the wage settlement. The Technical Reporting Committee on Income Settlements (TBU) reported in April that the average wage carry-over into 2011 was estimated at 1.9%, somewhat higher than indicated by preliminary figures. In view of a higher wage carry-over and somewhat higher projected wage drift in the private sector, the Bank's projections for annual wage growth in 2011 have now been revised up to 4¼% (see Chart 2.30).

In May, regional network enterprises expected 4% wage growth in 2011, an upward revision of ½ percentage point on their January assessment. According to Perduco's expectations survey for 2011 Q2, the social partners also expect wage growth to average 4% in 2011, up from 3.6% in Q1.

Assumptions concerning fiscal policy and petroleum investment from 2011 to 2014

Fiscal policy

Fiscal policy was a significant factor in cushioning the impact of the global downturn in Norway. The non-oil budget deficit rose from NOK 1bn in 2007 to NOK 97bn in 2009 (see Chart 2.31). In the Revised National Budget for 2011, petroleum revenue spending is estimated at NOK 116bn in 2011. Approximately one out of every eight kroner of budget expenditure will be covered by revenues from petroleum activities.

The level of petroleum revenue spending has nonetheless proved to be lower than estimated in the National Budget for 2010. This is related to higher-than-expected revenues from the mainland economy. Direct and indirect tax revenues from the mainland economy of NOK 714bn in 2010 were NOK 37bn higher than projected.

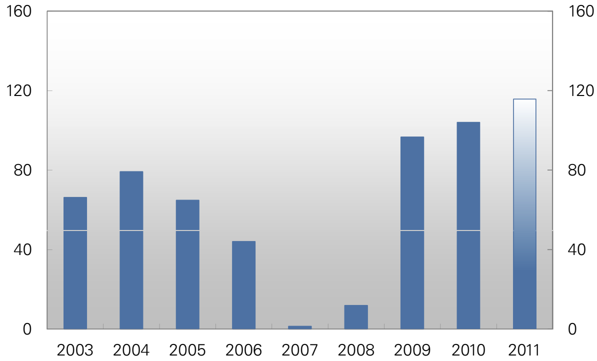
When cyclical conditions improve, the budget balance is automatically strengthened as tax revenues rise and spending on unemployment benefit decreases. Adjusted for cyclical fluctuations in the budget balance, petroleum revenue spending will increase ahead, but the rate of increase will be lower than in recent years. Petroleum revenue spending may also increase somewhat less than the expected real return on the Government Pension Fund Global (see Chart 2.32). Prospects for continued solid growth in the Norwegian economy imply that petroleum revenue spending should be kept below 4% of the Fund. At the same time, budget savings in the years ahead may ease fiscal adjustment as the expected rise in costs related to an ageing population picks up in earnest. Underlying petroleum revenue spending is projected to fall from 3.7% of the Fund's capital in 2011 to 3.5% in 2014. This calculation is based on developments in the Fund as estimated by the Ministry of Finance in the Revised National Budget for 2011. The budget is based on the assumption that oil prices will be lower in the years ahead than currently indicated by futures prices.

Even under the assumption of an increase in petroleum revenue spending, public sector consumption and investment may grow at a relatively moderate pace in the years ahead in view of an expected pickup in social security spending growth, primarily as a result of higher expenditure on retirement pensions.

Petroleum investment

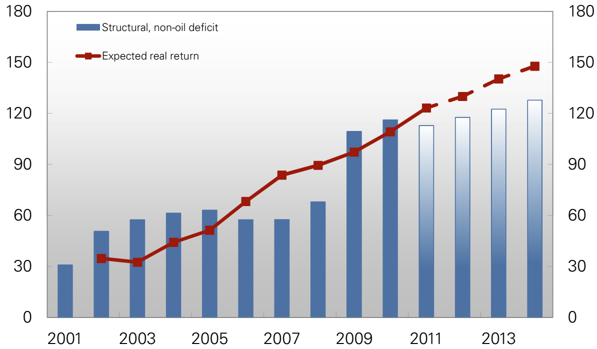
Investment in the petroleum sector fell by over 12% in 2010 (see Chart 2.33). The decline was related to postponements of projects as a result of the financial crisis and the subsequent fall in oil prices. Improved prospects and a sharp increase in oil prices in the past two years have prompted oil companies to approve a number of offshore developments. Petroleum investment is projected to increase by 15% in volume from 2010 to 2011 and to increase further in 2012 and 2013. Investment in 2011–2013 will be fuelled by major investments in the Goliat, Gudrun and Valemon fields and high activity in the Ekofisk area.

Chart 2.31 Actual use of oil revenues. The non-oil budget deficit. In billions of NOK. 2003 – 2011[1)]



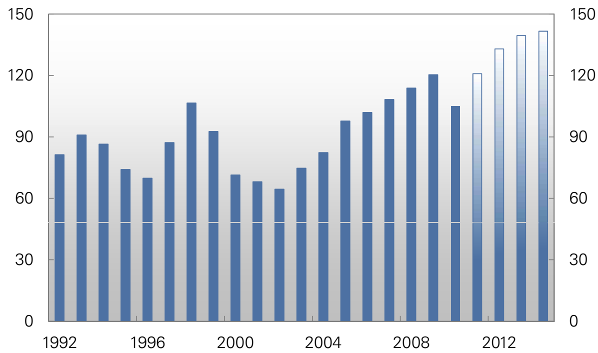
1) Projections for 2011
Source: Ministry of Finance

Chart 2.32 Underlying use of oil revenues. Structural, non-oil deficit and expected real return on the Government Pension Fund Global. Constant 2011 prices. In billions of NOK. 2001 – 2014[1)]



1) Projections for 2011 – 2014
Sources: Ministry of Finance and Norges Bank

Chart 2.33 Petroleum investment. Constant 2007 prices. In billions of NOK. 1992 – 2014[1)]



1) Projections for 2011 – 2014
Sources: Statistics Norway and Norges Bank

Annex

Boxes 2006 – 2011

1 / 2011
Population growth and labour immigration
Evaluation of the projections for 2010

3 / 2010
Why are long-term interest rates so low?
CPIM: A model-based indicator of underlying inflation

2 / 2010
Criteria for an appropriate interest rate path

1 / 2010
The level of the normal interest rate
Evaluation of the projections for 2009

3 / 2009
Unwinding of extraordinary measures
CPI adjusted for the frequency of price changes

2 / 2009:
The arrangement for the exchange of government securities for bonds
Structural liquidity
Household behaviour

1 / 2009:
Deep downturn in the global economy
Evaluation of the projections for 2008

3 / 2008:
The NIBOR market
Norwegian financial crisis measures
How does the financial crisis affect developments in the real economy?
A summary of financial market events since June

2 / 2008:
Underlying inflation
SAM - System of models for short-term forecasting

1 / 2008:
Factors driving the rise in domestic and global food prices
Cross-checks for the krone exchange rate
Evaluation of the projections for 2007

3 / 2007:
Liquidity management in Norges Bank
Central bank response to financial turbulence
Household saving
Fiscal policy and local government finances
High petroleum investment
NEMO - a new projection and monetary policy analysis model

2 / 2007:
Is global inflation on the rise?
Developments in productivity growth
How often do firms change their prices?

1 / 2007:
Will the global economy be affected by a slowdown in the US?
Uncertainty surrounding wage growth ahead
Competition and prices
Evaluation of projections for 2006

3 / 2006:
Output gap uncertainty

2 / 2006:
Money, credit and prices - a monetary cross-check
Foreign labour in Norway
Short-term forecasts for mainland GDP in Norway

1 / 2006:
Choice of interest rate path in the work on forecasting
Productivity growth in Norway
The yield curve and economic outlook in the US
Evaluation of Norges Bank's projections for 2005

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4/2009	*Costs in the Norwegian payment system.* Olaf Gresvik and Harald Haare
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Norwegian covered bonds - a rapidly growing market. Bjørn Bakke, Kjetil Rakkestad and Geir Arne Dahl

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Productivity growth in Norway 1948–2008. Kåre Hagelund

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Household net lending – what the micro data indicate. Magdalena D. Riiser

1/2009:

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Economic perspectives. Address by Governor Svein Gjedrem at the meeting of Norges Bank's Supervisory Council on 12 February 2009

Regional network: enterprises and organisations interviewed

Adam og Eva frisør AS
Adecco Norge AS, Bodø
Advanced Production and Loading AS
AEO Midt-Norge AS
Airlift AS
Aker Solutions ASA
Aker Solutions ASA, forretningsområde MMO
Akershus fylkeskommune
Aksel L. Hansson AS
Alfr. Nesset AS
Alta kommune
AMFI Moa
Anlegg Øst AS
Applica AS
AS Kristiansands Cementstøperi
Atlantic Auto AS
Backe gruppen
BDT Viken revisjon AS, Horten
Berge & Co AS
Berggren AS
Berg-Hansen reisebureau AS
Bertel O. Steen AS
Bewi produkter AS
Billettservice AS
BioMar AS
Block Watne AS
Bohus interiørsenter AS
Boliden AS
Borregaard industries Ltd., Norge
Bring Logistics AS
Brødrene Midthaug AS
Brødrene Sperre AS
BSH husholdningsapparater AS
Buer entreprenør AS, Skien
Byggmo eiendom AS
Bølgen og Moi AS
Bårdshaug Herregård AS
Capgemini Norge AS
Cavotec Micro-control AS
Christie Partner AS
City syd AS
Clear Channel Norway AS
Comrod AS
ConocoPhillips Norge
Consto AS
Coop Finnmark SA
Coop Innlandet SA
Coop Økonom SA
CrediCare AS, Førde
De 4 roser AS
DnB NOR bank ASA, Tønsberg
Domstein ASA
Drag industrier AS
EFG Hov Dokka AS
Egil Kristoffersen & sønner AS
Eidskog Stangeskovene AS
Eidsvaag AS
EiendomsMegler 1 Buskerud Vestfold AS
Eiendomsspar AS
Einar Valde AS
Elektro AS
Elektrotema Agder AS
Elkem AS, Materials Kristiansand
Elkjøp Svolvær AS
Ernst & Young AS
Ernst & Young AS, Bergen
Ernst & Young AS, Lillehammer
Euro sko Norge AS
Fenix Outdoor Norge AS
Fesil AS, Rana metall
Finnøy Gear & Propeller AS
Fiskars Brands Norge AS
Fitjar kommune
Fjord 1 Nordfjord-Ottadalen AS
FM Gruppen AS
Fokus bank, bedriftsmarked
Folk i husan eiendomsmegling AS
Framo Engineering AS
Frøya havbruksservice AS
Frøya kommune
Frøysland industriservice AS
GE Money Bank
Gjensidige forsikring ASA, region Nord privatmarked
Gjesdal kommune
Gjestal AS
Gjøco AS
Glava AS, Stjørdal
Glåma bygg AS
Grieg Logistics AS
Grilstad AS
Grimstad kommune
Gunnar Klo AS
H & M Hennes & Mauritz AS
H. & O. Bernhardsen AS
H.J. Økelsrud AS
Hagen og Godager AS
Handelsbanken
Haram kommune
Harstad kommune
Harstad sparebank
Havila Shipping ASA
Heatwork AS
Heimdal eiendomsmegling AS
Heimdal gruppen AS
Helse Nordmøre og Romsdal HF
Helse Sørøst
Hennig-Olsen is AS
Hitra kommune
Hotelldrift Ålesund AS
House of Oslo AS
Hunter Douglas Norge AS
Hurtigruten ASA
Huse I P AS
Hustadmarmor AS
Hydrolift AS
Ibas AS
Ica distribusjon AS, Arendal
Idecon AS
Impec AS

Imaas Bil AS
Ineos Norge AS, Rafnes
Inmedia AS
Intersport Alta AS
Island Offshore AS
ISS Facility Services AS, Kristiansand
Istad kraft AS
IT partner Finnmark AS
Jadargruppen AS
Jak Restaurantdrift A/S
Jemar Norpower AS
Johs J Syltern AS
Jonas B. Gundersen AS, Mandal
Jøtul ASA
K. Lund AS
Kantega AS
Keno reklame AS
Kewa Invest AS
Kitron Arendal AS
Kiwi Norge AS
Kluge advokatfirma DA
Klaastad brudd DA
Kongsberg gruppen ASA
Konkurrenten AS
KPMG AS, Bodø
Kristiansand næringsforening
Kristiansund kommune
Kvadrat kjøpesenter
Lefdal elektromarked AS, Tiller
Leonhard Nilsen & Sønner AS
Lerøy Midnor AS
Lillrent AS
Lindesnes kommune
Linjebygg Offshore AS
Living AS
Lundal Nord AS
Lyse Energi AS
Løvenskiold handel AS
Løvenskiold-Fossum
Malorama AS
Malthus AS
Mandal kommune
Maritime hotell, Flekkefjord
Martin M. Bakken AS
Meca Norway AS
Melbu Systems AS
Melhus sparebank
Mesta konsern AS
Mesterjobb bemanning AS
Min Boutique gruppen AS
Mindus AS
Moelven Nordia AS, Trondheim
Moelven Wood AS
Motor Sør AS
Multiconsult AS, Trondheim
Møller bil Sør-Rogaland AS
Mørenot AS
Narud Stokke Wiig
Narvik kommune
Narvikgården AS
Natre Vatne
NAV Telemark
Nedre Eiker kommune
Net Trans Services AS, Tønsberg
Neumann bygg AS
Noodt & Reiding AS
Norcem AS
Norgesvinduet Svenningdal AS
Norisol Norge AS
Norli Bokhandel, avd. Stavanger
Norrøna storkjøkken AS
NovaGroup AS
Nycomed Pharma AS
Nymo AS
Opera Software ASA
Oppegård kommune
Oppland entreprenør AS
Orkdal transport AS
Os kommune
P4 radio hele Norge AS
Parker ScanRope AS, Tønsberg
Pedersens Lastebiltransport AS
Perry Hamar AS
Petroleum Geo-Services ASA
Polarkonsult AS
PricewaterhouseCoopers AS, Førde
PricewaterhouseCoopers AS, Trondheim
Proaktiv Eiendomsmegling AS
Proffice AS
Profil lakkering AS
Profilhuset Meny-Ultra
Paa Bordet AS
Qvam Eigendom AS
Ramsvik Frisør AS
Rana Gruber AS
Retro AS
Rica Hotel Hamar
Rieber & Søn ASA
Rieber & søn ASA, Elverum
Ring mekanikk AS
Ringerike kommune
Ringsaker kommune
Rogaland fylkeskommune
Rolfs elektro AS
Rolls-Royce Marine AS
Romerike trelast AS
Rosenvold klær AS
Ruukki Norge AS, region Nord
Rype AS
Safetec Nordic AS
SAS Norge AS
Schlumberger Norge AS
Sektor Kongssenteret drift AS
SG finans AS
Sig. Halvorsen AS
Simon Møkster Shipping AS
Sintef MRB AS
Skagen hotell AS
Skanem Moss AS
Skanska Norge AS, bygg region Vest
Skeidar AS
Skipsteknisk AS
Skistar Norge AS, Trysil
Solsiden spa og velværesenter AS
Solstrand Fjord Hotel AS
Sortland entreprenør AS
Sortland kommune
Sparebank 1 SR-bank
Sparebanken Hedmark
Sparebanken Narvik
Sparebanken Sogn og Fjordane

Sparebanken Sør, Arendal
Sport og fritid AS
Sportshuset Melhus AS
St. Olavs hospital HF
Stabburet AS
Statens vegvesen, region Sør
Steertec Raufoss AS
Stiftelsen Sintef
Storebrand ASA
Støren trelast AS
Sweco Norge AS
Swix sport AS
Sykehuset i Vestfold HF
Sykehuset Innlandet HF
Sørbø gruppen AS
Sørensen maskin AS
Taubåtkompaniet AS
Thon Hotels AS
Tibe reklamebyrå AS
Tine BA
Topp auto AS
Toten transportsentral AS
Trebetong AS
Trondheim kommune
Trondos SA
Trotan AS
TV 2 gruppen AS
Tønsberg kommune
Unifab AS
Vestre Toten kommune
VIC Harstad AS
Vikeså Glassindustri AS
Ving Norge AS
Visma Services Norge AS
Våler kommune
Washington Mills AS
Weber Saint-Gobain byggevarer AS
West Wacker Holding Norway AS
Wiersholm Mellbye & Bech adv. AS
Wonderland AS
Yara International ASA
Øveraasen AS
Øyer kommune
Aas mek verksted AS
Åsen & Øvrelid AS

Monetary policy meetings
with changes in the key policy rate

Date	Key policy rate[1)]	Change
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	2.00	+0.25
24 March	1.75	0
3 February	1.75	0
16 December	1.75	+0.25
28 October	1.50	+0.25
23 September	1.25	0
12 August 2009	1.25	0
17 June 2009	1.25	-0.25
6 May 2009	1.50	-0.50
25 March 2009	2.00	-0.50
4 February 2009	2.50	-0.50
17 December 2008	3.00	-1.75
29 October 2008	4.75	-0.50
15 October 2008	5.25	-0.50
24 September 2008	5.75	0
13 August 2008	5.75	0
25 June 2008	5.75	+0.25
28 May 2008	5.50	0
23 April 2008	5.50	+0.25
13 March 2008	5.25	0
23 January 2008	5.25	0
12 December 2007	5.25	+0.25
31 October 2007	5.00	0
26 September 2007	5.00	+0.25
15 August 2007	4.75	+0.25
27 June 2007	4.50	+0.25
30 May 2007	4.25	+0.25
25 April 2007	4.00	0
15 March 2007	4.00	+0.25
24 January 2007	3.75	+0.25

[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 bank reserves, 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	Main-land GDP	Private con-sumption	Public con-sumption	Mainland fixed investment	Petroleum investment[1]	Mainland exports[2]	Imports
2006		2.3	4.9	4.8	1.9	11.9	4.3	8.5	8.4
2007		2.7	5.6	5.4	3.0	15.7	6.3	8.8	8.6
2008		0.7	1.8	1.6	4.1	-0.8	5.1	4.1	4.3
2009		-1.7	-1.8	0.2	4.8	-10.9	5.8	-5.4	-11.7
2010		0.3	2.1	3.7	2.2	-3.1	-12.4	3.0	9.0
2010[3]	Q2	-0.1	0.3	-0.2	0.7	7.9	6.2	-5.7	6.7
	Q3	-1.6	0.8	1.2	1.0	-1.8	-15.1	8.7	-1.5
	Q4	2.3	0.3	1.1	-0.6	6.4	12.7	-5.5	0.5
2011[3]	Q1	-0.4	0.6	0.0	-0.2	0.7	7.2	0.6	10.7
2010-level, in billions of NOK		2 496	1 937	1 073	558	357	124	444	715

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

Source: Statistics Norway

Table 2 Consumer prices

Annual rise/ twelve-month rise. Per cent		CPI	CPI-ATE[1]	CPIXE[2]	CPI-AT[3]	CPI-AE[4]	HICP[5]
2007		0.8	1.4	1.9	0.5	1.6	0.7
2008		3.8	2.6	3.1	3.9	2.5	3.4
2009		2.1	2.6	2.6	2.1	2.7	2.3
2010		2.5	1.4	1.7	2.4	1.4	2.4
2011	Jan	2.0	0.7	1.0	1.9	0.7	2.0
	Feb	1.2	0.8	1.1	1.0	0.9	1.1
	Mar	1.0	0.8	1.2	0.8	1.1	0.9
	Apr	1.3	1.3	1.6	1.2	1.5	1.3
	May	1.6	1.0	1.2	1.4	1.2	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. As of August 2008. the CPIXE is a real-time series. 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 main economic aggregates

	In billions of NOK	Percentage change from previous year (unless otherwise stated)				
			Projections			
	2010	2010	2011	2012	2013	2014
Prices and wages						
CPI		2.5	1¾	1¾	2½	2½
CPI-ATE[1)]		1.4	1	2	2½	2½
CPIXE[2)]		1.7	1¼	2	2¼	2½
Annual wages[3)]		3¾	4¼	4¾	4¾	4½
Real economy						
GDP	2 496	0.3	1¾	2¾	2¼	2
GDP, mainland Norway	1 937	2.1	3	3¾	3¼	2¾
Output gap[4)], mainland Norway (level)		-¾	0	¾	½	¼
Employment, persons, QNA		-0.2	1¼	1½	1¼	1
Labour force, LFS		0.5	1	1¼	1¼	1
LFS unemployment (rate, level)		3.6	3¼	3	3	3¼
Registered unemployment (rate, level)		2.9	2½	2¼	2¼	2½
Demand						
Mainland demand[5)]	1 988	2.0	3¾	4½	3	2¾
- Private consumption	1 073	3.7	3½	4½	3¼	3
- Public consumption	558	2.2	2	2¼	.	.
- Fixed investment, mainland Norway	357	-3.1	8¼	7	.	.
Petroleum investment[6)]	124	-12.4	15	10	5	1½
Mainland exports[7)]	444	3.0	2¼	5	.	.
Imports	715	9.0	8¾	4	.	.
Interest rate and exchange rate						
Key policy rate (level)[8)]		1.9	2¼	3½	4½	4¾
Import-weighted exchange rate (I-44)[9)]		90.3	88	88	88½	88¾

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

. Not available

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

Monetary Policy Report No. 2 - June

2011