It’s getting better all the time!

Global recovery despite crises
Continued Norwegian growth
Gradual rate normalisation
Contents

SUMMARY
Recovery and rate normalisation 4

GLOBAL ECONOMY
Recovery amid new crises 5

SPECIAL TOPIC
The resource dilemma 9

NORWEGIAN MACRO OUTLOOK
Brighter outlook 14

NORWEGIAN MACRO OUTLOOK
Gradually higher inflation 18

INTEREST RATE OUTLOOK
Higher interest rates ahead 21

CURRENCY OUTLOOK
Strong NOK ahead 25

Key ratios 27

Disclaimer 28

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SUMMARY

Recovery and rate normalisation

The global recovery has taken hold; however, emerging economies show signs of overheating, while rising energy and commodity prices heighten expectations of rate hikes in Europe. The Norwegian economy is sound and thus ready for continued rate normalisation. We nevertheless fear that both the private and the public sector face significant challenges as oil and gas activity eventually winds down.

Energy and commodity prices add to overheating and rate hike expectations

The global recovery has taken hold, but it is accompanied by new increases in energy and commodity prices. This is one of the reasons why the ECB has signalled the beginning of rate normalisation. However, the risk of overheating is much greater in emerging economies, such as India and China. Given their desire to restrict currency appreciation, the Chinese authorities are hesitant to raise rates, preferring to apply regulatory measures that heighten the risk of a sudden slowdown in growth.

Weakness in Japan, greater strength in the US and a two-speed Europe

Japan’s natural disaster is likely to significantly dampen the country’s growth this year, but it is unlikely to have a great effect on the world economy (except for a possible increase in the demand for Norwegian seafood and a greater likelihood of persistently high electricity prices in Europe). The US economy seems much stronger, yet risks are also present there, with monetary and fiscal stimulation being weakened and reversed, respectively. We do not share concerns over uncontrolled US inflation, but we see a risk for growth being dampened by high energy and food prices, even though the economy should be more robust to such shocks than in the 1970s. The European economies differ: the advanced industrial countries in the north show strength, while significant weakness is evident in countries with precarious government finances. State finances continue to present a significant risk for the entire region.

Continued growth in the Norwegian economy...

The outlook for the Norwegian economy is sound. Following a mild recession, growth in the Norwegian economy picked up last year, helped by rising commodity prices and falling import prices. We expect good growth to continue in the years ahead, driven by household spending and a strong revival in investment. Exports are supported by the global recovery, although the high Norwegian cost level and ample international spare capacity will present challenges. So far during this upturn, employment has grown modestly. Looking ahead, we believe firms will increase their workforce at a faster pace. However, growth in the labour force, boosted by inward labour migration, is likely to dampen both the fall in the unemployment rate and the acceleration of wage growth.

...implies gradual rate normalisation

Despite increased activity, core inflation has fallen by more than expected over the past half year. The current low inflation, combined with the prospects of persistent below-target inflation, has been the main reason why the key policy rate has been kept on hold since last May. Looking ahead, we expect inflation to pick up gradually, driven in part the global rise in energy prices. Norges Bank is likely to raise its key policy rate before summer; however, the interest rate path towards the end of the year could prove to be less steep than that implied by the central bank’s most recent forecast. Future interest rate developments are nevertheless highly uncertain. A further deterioration of the European debt crisis could lead to new problems for the European banking sector, with ripple effects to the Norwegian economy.

Too much of government oil revenues used to finance transfers and consumption

High oil prices have rekindled the debate over Norway’s oil wealth. Although we are sceptical about proposals to invest the entire sovereign wealth fund domestically, we worry that too much of the return is going towards financing consumption and inactivity rather than investment in infrastructure and know-how or tax cuts. We particularly worry that current earnings in the mainland economy may contain elements of resource rent because of the geographical advantage gained through the Norwegian oil and gas industry. That may translate into significant challenges once oil and gas activity eventually winds down.

Significant challenges after the oil era

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GLOBAL ECONOMY

Recovery amid new crises

Despite new crises and rising energy and commodity prices, the global recovery is taking hold. Overheating is a problem, but only in the emerging economies. Interest rates should gradually normalise in most places.

The global recovery seems to have taken hold. However, conditions vary across regions amid some global trends.

Rising energy and commodity prices

The increase in energy and commodity prices that started in 2006 was interrupted by the global recession, but it returned last year. Although short-term factors like extreme weather and natural disasters may have mattered, we believe that the trend has been driven by long-term forces. Whereas demand is being stimulated by the continued growth of the emerging economies, supply is being limited by the pool of global resources. Even though technological advances may add to supplies (for example, of foodstuffs), we expect a continued rising trend in the relative prices of energy, metals, and food throughout our forecast period, which runs through to 2013.

Global energy and commodity prices

Source: Reuters Ecowin

Oil prices have furthermore been stimulated by political turmoil in North Africa and the Middle East. The Libyan conflict does not look like ending soon. Saudi oil may replace the lost Libyan oil, but this will just reduce the remaining spare capacity all the more. Moreover, we cannot ignore the possibility of additional unrest in the region. We thus expect oil prices to stay high and have revised our forecast for this year from USD 92 to USD 110 per barrel. We expect some moderation next year provided that the political situation stabilises, but we see continued tightness in the global balance between demand and supply.

Oil price forecast, USD per barrel

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Source: Handelsbanken Capital Markets
The effects of the disasters in Japan are so far unclear. The loss of nuclear generators should raise the demand for fossil fuels, especially gas (LNG) and fuel oil, the latter because refineries have been affected as well. On the other hand, Japan’s overall energy demand is likely to be dampened by an overall economic slowdown. What seems clearer is that European electricity prices will be elevated by new restrictions on nuclear power. Fossil fuels will be preferred in the short run, but coal and gas are more likely than oil.

**Subdued growth in Japan after the disaster**

Natural disasters regularly cause great economic losses, but their effect on economic activity is usually short and limited. The reason is partly the stimulatory effect of reconstruction and partly that standard measures of economic activity, such as GDP, are defined as gross of such losses. However, the recent disastrous earthquake in Japan is likely to cast longer shadows. For one thing, the disaster hit a vulnerable economy that had barely recovered from the global recession and that continues to suffer from chronic deflation. For another, the destruction was much worse than that caused, for example, by the Kobe earthquake in 1995, especially in terms of infrastructure. Thirdly, the disruption to global supply chains complicates matters. And the fourth problem is naturally the nuclear scare, which threatens to dampen activity for quite some time.

The fear of radioactivity could raise the demand for imported food ahead, a possible benefit for the Norwegian fishing industry. The effect on shipping should be negative at first because of lower activity, for example in the automotive industry. Over time, however, new demand could be generated from the transportation of reconstruction materials.

**Overheating emerging economies**

Meanwhile, growth remains high in emerging economies; but overheating presents new challenges. In India, this has been apparent for some time and has led to a two percentage point rise in interest rates in the past two years. The Chinese situation is more precarious because of the uncertainty surrounding the government’s tightening measures. For fear of increasing appreciation pressure on the currency, the authorities tend to shy away from rate increases and instead use a cocktail of alternative measures, such as repeated tightening of banks’ reserve requirements and quantitative restrictions on mortgage financing. As a result, house prices seem to be levelling out, but overall inflation is showing no signs of abating. Thus, the measures chosen do not seem to have been effective. Yet their unconventional nature risks unintended effects, such as a sudden brake on growth. If inflation does not come down, the government might also decide to use more effective measures, which in turn could hurt growth as well. We finally note that underlying, potential growth seems to have come down a little, although no further than to the 7-8 percent range.

**United States: Continued growth, but also risks**

US GDP has recovered to its pre-recession peak. This performance is better than the one in Germany, but still weaker than previous recoveries after deep recessions. Factors dampening the recovery include the housing industry, which remains in the doldrums, households’ caution to incur new debt, and banks’ reluctance to lend to small and medium-sized businesses. In contrast, sentiment is very upbeat among large manufacturing firms, which are now producing more and more for export.

Several risk factors are worth mentioning. Firstly, fiscal policy has been completely reversed, from stimulation to sharp tightening. The extent of federal tightening will depend on the political tug-of-war between the President and Congress. State and local budgets are being tightened significantly because tax revenues are shrinking. Secondly, monetary policy is expected to be tightened somewhat in the summer. No rate hike is expected yet, nor is the Fed likely to start shrinking its balance sheet by selling securities. However, the Fed is expected to let its quantitative easing programme expire when it comes up for review this summer. We will then get to see how self-propelled the US recovery really is.
Meanwhile, there have been a number of warnings suggesting that quantitative easing may lead to uncontrolled inflation. One of the arguments is that current high unemployment is structural because of the continued problems in construction and that aggregate-demand stimulation thus produces bottlenecks. Experience to date does not support this argument, however. Inflation has picked up, but only slightly, which was the aim of the policy, namely to avoid deflation. Critics furthermore point to the rise in long Treasury yields that has occurred despite massive Fed purchases. However, yields have also risen for inflation-indexed bonds, so the reason can hardly be a rise in inflation expectations. On the contrary, we interpret this development as an indication that the Fed has succeeded in raising expectations about real growth, which indeed should raise yields. European and Norwegian yields have followed this movement, which we expect to continue.

On the other hand, the increase in the relative prices of energy, food and other commodities has raised concerns about a possible repeat of the 1970s experience, when price shocks produced at least two recessions. However, academic research as well as the experience of recent decades suggests that the US economy now is much more robust to such shocks. Research furthermore reveals the futility of trying to pinpoint a tipping point for when oil prices start to hurt the economy. Nevertheless, we see a possibility that gasoline prices of USD 4 a gallon or more could set off a psychological response among US households, which could dampen consumption demand.

**A divided Western Europe**

Among the advanced industrial nations of Northern Europe, the recovery has proved to be unusually brisk, to some extent driven by Asian demand. The gloomy outlook for the countries hit by fiscal crises provides a rather stark contrast. This group obviously includes Greece and Ireland, which have already received bailout packages, but also Portugal, which is likely to do so soon. Spain ought to be able to avoid this fate, but this remains uncertain, partly because the Spanish banking system may prove even weaker than expected and partly because market fears may result in self-fulfilling prophecies as government yields climb to unsustainable heights.

We should furthermore note the interdependence between the strong and the weak countries of Western Europe. We note in particular that French and German financial institutions hold sizeable claims on clients in Ireland, Portugal and Spain. If the Spanish situation turns into a fully-blown crisis, we should expect significant effects on Northern Europe, including Norway.

The United Kingdom continues to enjoy high bond-market confidence, partly because of harsh tightening measures (even though these measures are weakening the British economy). Meanwhile, British inflation has paradoxically risen to more than twice the Bank of England’s target. Although this development is surely at least partly attributable to

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**GDP indices**

![GDP indices chart](chart)

**ECB rates**

![ECB rates chart](chart)

Source: Reuters Ecowin

**Gasoline prices at USD 4 a gallon could spark a response from US households**

**Full-blown Spanish crisis would likely have large effects on Northern Europe**
indirect tax increases, some argue that the British output gap may not be as wide as previously assumed. There is thus a risk that the Bank of England will start tightening despite the weak economy.

**A time for rate normalisation**

The Bank of England is not the only central bank facing this dilemma. Despite draconian budget cuts and fiscal risks among many of its member states, the ECB has now repeatedly signalled its intention of a quickly approaching rate hike. The signals are partly based on the fact that inflation has come in above the central bank’s 2 percent target for four months in a row. The ECB takes little comfort in the fact that this is being driven by the global trend towards higher energy and commodity prices rather than by domestic demand pressure. This is partly out of fear that the rises in these prices will have second-round effects on other prices and wages, which could undermine general confidence in price stability. The ECB has also argued that eurozone growth is now strong enough to be weaned off extraordinary interest rate stimulation.

The ECB policy rate, the refi rate (the minimum rate for ECB refinancing auctions), has remained at 1 percent for almost two years. That does not mean, however, that monetary policy has been completely stationary during this period. Before the financial crisis, the ECB sought to provide just enough liquidity to keep the overnight rate in the euro interbank market, the EONIA rate, as close to the policy rate as possible. During the crisis, however, the ECB allowed the EONIA rate to fall all the way to the “floor” of the ECB’s “corridor,” defined by the central bank’s deposit rate of 0.25 percent. Thus, in practice, euro short-term rates have roughly equalled dollar rates. Starting last autumn, however, we have seen signs of ECB tightening, in that the EONIA rate has started to trend upwards and is now significantly closer to the policy rate. Together with the ECB’s repeated advance signals, this trend should dampen market reactions if and when the ECB makes good on its tightening indications. The FX market has clearly priced in the expected tightening, as the euro has strengthened significantly against the dollar.

Japan, on the other hand, is most unlikely to raise rates in the foreseeable future, as the recent disaster comes on top of years of chronic deflation. The Federal Reserve also seems in no hurry to raise its policy rate, although the quantitative easing programme seems likely to be completed this summer.

Rates normalise when the business cycle improves. Rate normalisation is thus a good sign for the world economy.

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SPECIAL TOPIC

The resource dilemma

High oil prices have rekindled the debate about investing and spending the government’s oil revenues, along with the prospects for the economy after oil and gas. Although continued financial investment of the oil fund in global markets seems desirable, we feel that too much of the return has been spent on consumption and transfers, with too little going on real investment such as infrastructure. We fear that the Norwegian economy will face significant challenges once oil and gas activity eventually winds down.

Three debates:

Oil revenue spending under fiscal rule

The first debate centres on the additional government revenue made possible by the fiscal rule and how wisely this revenue has been spent. Governor Øystein Olsen argued in his recent annual address that the original intention of the fiscal rule had been to enable additional investment in infrastructure, research and development, but that this intention has not been followed.

Financial investment vs. domestic real investment

The second debate asks whether the oil fund has been sensibly invested. This debate is related to the first one because a popular alternative to financial investment abroad is domestic real investment in infrastructure, research and development.

The Norwegian economy after oil

The third debate questions what will happen to the Norwegian economy once oil and gas activity eventually winds down. While researchers at Statistics Norway are unconcerned (as they believe Norwegian labour will be equally productive in other industries), Norwegian School of Management professors Bjørnland and Moen question this conclusion.

This chapter presents our view on these topics. We conclude that the government has spent too much of its oil revenue on transfers to individuals, while important investment needs have been neglected and taxes have remained too high. Furthermore, despite the oil fund, the overall level of government spending is unlikely to be sustainable once the oil and gas industry eventually winds down in 15-20 years. The entire Norwegian economy is likely to face significant challenges and a potentially painful transition.

From prevention of Dutch disease to caring for future generations

The aim of the oil fund (now officially called the Government Pension Fund Global) when it was established was not simply to care for future generations; at least as important was the fear of Dutch disease, by which government spending drives up wages and thus crowds out traditional export industries.

We were among the first to argue against this view. We agreed that higher government spending would likely cause traditional export industries to lose out to domestic services in the competition to attract workers, although we preferred to see that as a reallocation of resources rather than the destruction of jobs. We also agreed that somewhat higher interest

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1 Introduced in 2001, the fiscal rule allows an annual oil-corrected, structural budget deficit corresponding to 4 percent of the fund’s balance, as an average over time
2 “Economic perspectives,” annual address by Governor Øystein Olsen, February 17, 2011
4 Hilde Bjørnland and Espen Moen, “Norge etter oljen” (“Norway after the oil”) Dagens Næringsliv, Jan 6, 2011, and “Oljens ringvirkninger” (“Oil ripple effects”), Dagens Næringsliv, Jan. 18, 2011
6 Handelsbanken Markets, Macro report on the Norwegian economy, October 2000
rates and a somewhat stronger currency could result; however, we viewed these as acceptable side effects of the citizens’ enjoyment of the new riches. Above all, we expected popular demand for the government to let voters share in the new wealth. That is precisely what happened. We believe that was the real reason why the government introduced the fiscal rule in March of 2001, which allows an annual oil-corrected, structural budget deficit corresponding to 4 percent of the fund’s balance, as an average over time.

This rule introduced a major shift in Norwegian fiscal philosophy. From warning against the inflationary consequences of increased spending, the Ministry of Finance shifted its focus to preserving the wealth for future generations. In one stroke, fiscal neutrality was redefined from a structurally balanced budget ex oil to an oil-corrected, structural deficit corresponding to 4 percent of the fund. The principle of fiscal neutrality in normal times was effectively abandoned.

What resulted from the oil revenue?
The introduction of the fiscal rule raised great expectations about all the things that the government now could afford. However, the excitement was quickly replaced by frustration over all the needs that remained unfilled. In his annual address, Norges Bank’s Governor recently pointed out that the government’s original purpose was for taxes to be cut and to use the new revenue to finance new spending on infrastructure, research and development.

That is not the way things turned out. Taxes have, if anything, been raised, universities have had to tighten their belts, and public dissatisfaction with infrastructure has rarely been greater. Yet it is hard to pinpoint exactly where the new money actually went. Childcare has been expanded, public sector salaries have accelerated, and health and nursing care needs have continued to rise. Importantly, however, transfers to individuals in the form of pensions and a myriad of welfare programmes have also increased significantly. Although these transfers have not risen faster than the overall budget, the intention was for the budget to expand in directions other than paying people for not working. Instead of forward-looking, growth-enhancing initiatives, including tax cuts, the fiscal rule has thus reinforced the already strong dependence on various welfare programmes. Rather than financing productive investments for the future, the oil revenues have been used to finance current consumption and leisure.

Are oil revenues sensibly invested?
The management of the oil fund is a recurring topic in Norwegian public debate. We consider this healthy, although as macroeconomists we have little to add to the debate on financial fund management. However, another debate that has recently resurfaced asks whether it makes sense to invest the fund in global financial markets rather than in domestic real investment in infrastructure, research and education. The main argument is that systemic risk makes global markets much more vulnerable than standard measures of market volatility indicate. According to this argument, a global collapse could wipe out all financial investments, whereas the fruits of domestic real investment would remain intact.

The argument about systemic risk is naturally much more convincing now than before the global financial crisis. However, we suspect that the value of domestic assets would also be affected by a global collapse. As a small country, Norway will always be dependent on the global economy.

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8 According to the Ministry of Finance, the government’s spending on transfers to individuals stayed between 33 and 35 percent of the overall budget ex oil during 1997-2009.
On the other hand, we are sympathetic to claims that the Norwegian government invests too little on infrastructure, research and education. The problem is not that young Norwegians spend too few years in school—they do not—but rather that the quality of education leaves a good deal to be desired. However, we fail to see the connection between this debate and the one discussing the proper investment of oil revenues. Socially profitable investment projects should be carried out whether or not the government has access to extraordinary revenues such as oil and gas resource rent. Providing the government is creditworthy, financing can just as well be found in global financial markets as in funds that have been stashed away.

The question of which investments are considered socially profitable remains. On this, the Norwegian Ministry of Finance has traditionally been rather restrictive, although the subject is to be reviewed by a new study group9. Determining social profitability is naturally not an exact science. However, other countries seem significantly less restrictive regarding infrastructure investments; the contrast with generous Norwegian welfare programmes is striking.

**Challenges after the oil era**

Researchers at Statistics Norway make no prediction as to which industries will prove to be profitable after the eventual decline in oil and gas activity. Instead, they focus on the labour resources that will then be released. Under the assumption that these resources will be equally productive elsewhere, they conclude that growth in the Norwegian economy can continue unabated.

They also point out that oil and gas resource rent has generated extraordinary, but temporary, revenues. However, they claim that this rent has essentially been collected by the government and invested in the oil fund, the return on which can then provide a lasting source of revenue over and above the normal return to labour and capital.

Like professors Bjørnland and Moen, we fear that this analysis is too simple. In particular, we suspect that the current high earnings in mainland industries reflect not only high productivity, but also that non-oil industries are able to appropriate part of the resource rent because of a local, natural monopoly as suppliers to the oil and gas industry proper. We also believe that this effect is not limited to industries usually classified under oil supply, as the majority of mainland companies benefit from oil and gas activity, directly or indirectly. The financial industry, hotels, and restaurants are obvious examples.

**Evidence of rent in mainland industries**

Some comparisons between the Norwegian and Swedish economies help make this point clear10. With similar cultures and equal access to modern technology, we would expect the two economies to be equally productive in the technical sense. Apart from the direct contribution from oil and gas extraction, GDP per capita should then be comparable when expressed in the same currency. The left graph below shows Norwegian mainland GDP per capita as a percentage of Swedish GDP per capita, both expressed in the same currency. The graph tells a story of striking differences. Before the turn of the century, the values created by the Norwegian mainland economy were up to 20 percent weaker than those created in Sweden. However, over the past decade, the mainland Norwegian economy has skyrocketed to a GDP per capita almost 50 percent above that of Sweden.

The graph on the right illustrates the likely significance of resource rent. It decomposes the relative progression in GDP per capita since 2000 into price and volume changes. The yellow area shows that production volumes grew faster on the Norwegian side in the latter part of the period, an obvious consequence of the shallower Norwegian recession. However, the

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9 Ministry of Finance press release, Feb 18, 2011
10 We presented some of this evidence in our Macro Reports on the Norwegian economy of October 2009 and April 2010.
differences in price movements have contributed much more. Norwegian producers have benefited from faster-rising product prices\textsuperscript{11}, measured in local currency, and the NOK has also strengthened against the SEK, especially earlier in the period. Thus, the difference in price movements has not been neutralised by the FX market the way it often is. We further note that the price movements we are talking about here concern product prices and not consumer prices\textsuperscript{12}. Thus, when counted in the same currency, producers in mainland Norway have seen their prices improve by 25 percent over the decade compared to their Swedish colleagues. We believe that this must mainly have been caused by the mainland industry’s appropriation of part of the resource rent.

Norwegian and Swedish GDP per capita… …broken down since 2000

Even if mainland industries have appropriated part of the resource rent, researchers at Statistics Norway could still be right about this part having been saved. If so, private-sector savings should have increased during the past decade, whereas large public savings could otherwise justify a somewhat lower private-sector saving rate in Sweden than in Norway. The left graph below confirms the latter point but not the former. The Norwegian private saving rate is generally lower than the Swedish one, but it decreased during the past decade while the Swedish one rose.

Oil expertise without Norwegian oil?
The Norwegian oil supply industry has started to move abroad despite its local competitive advantage. The reason is rising demand for deep-water expertise as exploration and production moves to deeper waters. The experience from the Norwegian continental shelf gives Norwegians a competitive advantage in deep foreign waters as well. The question is how long this advantage will last once the entire oil and gas industry eventually leaves Norway. Furthermore, the advantage is likely to be limited to the supply industry in the most narrowly defined sense, and can hardly be expected to be shared by Norwegian financial institutions, hotels, or restaurants.

We thus see good reason to expect profitability to drop for the Norwegian mainland economy as oil and gas activity winds down. The Norwegian economy will be facing more than

\textsuperscript{11} Part of the increase in product prices is a direct reflection of salary increases in the public sector, which contributes close to a quarter of mainland GDP. The reason is that the national accounts define the price of government services simply as the compensation of the public employees providing them. As mentioned above, public-sector pay has risen significantly over the last decade.

\textsuperscript{12} Consumer price inflation has also been slightly higher on the Norwegian side, but with slightly less than 5 percent over the decade compared to 15 percent for product prices. Furthermore, the divergence in consumer price inflation arose mainly during the recession as Swedish CPI inflation essentially collapsed while Norwegian inflation persisted.
a transition from one industry to another: Norwegian companies must prepare to compete with the rest of the world on an equal footing.

Private sector saving rates

Relative government revenues per capita

Sources: Reuters Ecowin, Eurostat, Statistics Norway, Statistics Sweden

Public sector

These prospects matter for government finances. The current debate surrounding pensions and welfare programmes implicitly assumes that the government can expect current revenues ex oil and gas to persist if tax rates are left unchanged. However, this assumption will not hold if we are right about the current earnings of the mainland economy containing a significant element of resource rent. The presence of this rent means that government’s non-oil revenues have been lifted temporarily. This excess revenue has not been put aside in the oil fund.

Yet another comparison with Sweden confirms this. The right graph above shows Norwegian non-oil government revenues per capita as a percentage of Swedish government revenues per capita, counted in the same currency. From rough parity about a decade ago, Norwegian revenues have risen sharply compared to Swedish revenues. The extreme movement in the latter part of the period can again be explained by the relative shallowness of the Norwegian recession. However, the fact that Norwegian revenues in 2007 exceeded their Swedish counterpart by 35 percent cannot be explained that way.

A proposal has recently surfaced to lower the budget contribution under the fiscal rule from 4 to 3 percent of the fund’s balance. Although this would ease the transition to the post-oil economy, it does not take explicit account of the likelihood that the government’s non-oil revenues have been temporarily elevated by the resource rent. We thus see a need for a comprehensive debate about the future of the Norwegian welfare state.

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NORWEGIAN MACRO OUTLOOK

Brighter outlook

Growth in the Norwegian economy picked up last year. We expect the business cycle upturn to continue ahead, driven by growth in household spending and a marked upswing in investment. The surge in international commodity prices and the European debt crisis represent downside risks to global growth and also to the Norwegian economy.

Household spending growth will hold up well

After pausing briefly in the first half-year, household spending growth picked up markedly in the last two quarters of last year. Spending growth was held up by strong growth in goods consumption, but growth in the consumption of services, which constitutes a little less than half of private consumption, also contributed to overall growth. For the year as a whole, growth in private consumption\(^\text{13}\) was 3.6 per cent, up from 0.2 per cent in 2009 and somewhat higher than we envisaged in our last macro forecast. The household savings rate, which increased sharply in the wake of the international financial crisis, was 7.4 per cent last year, approximately unchanged from the year before.

The upswing in spending last year was supported by growth in real household disposable income. A further pick-up in employment growth and higher real wage growth will contribute to growth in real disposable income in the years ahead as well, although growth will be moderated by higher interest rates. We envisage that real disposable income growth will be in excess of 3 per cent per year in the coming three years. Higher interest rates will encourage higher savings, despite the fact that the interest rate hikes have long been heralded. Our forecast is for the savings rate to remain high in coming years, also due to a desire among households to build financial buffers.

House prices affect household spending through a variety of channels. Firstly, higher house prices imply an increase in the wealth of homeowners. Secondly (and probably more importantly), higher house prices imply that the value of households’ collateral increases, which may lower mortgage rates and/or allow households to increase their mortgages in order to finance other spending. House price growth picked up last autumn, and although the monthly growth rates have come down somewhat over the past few months, house price growth looks set to be strong this year as well. Several factors point to continued strong growth in house prices: high population growth, growth in real disposable income, low real interest rates and a slow adjustment of the housing supply. According to a recent study by the OECD\(^\text{14}\), residential investment responds less and more slowly to house price changes in Norway than in many other countries which, all else equal, implies that increases in demand will be reflected more strongly in house prices, at least in the short run.

According to the quarterly consumer confidence index\(^\text{15}\) Norwegian households became steadily more optimistic last year. In the first quarter of this year, the index was at its highest level since 2007. The improvement has been most marked in the assessment of the outlook for the economy as a whole, while households’ assessment of their own financial position has remained stable. In sum, we think household spending growth will hold up well ahead; more precisely, we forecast private consumption growth a little above 3 per cent in the coming three years. This is slower growth than in the years preceding the financial crisis, so we do not forecast a new “spending boom”. Recent figures for retail sales suggest that spending growth will moderate in the first quarter of this year compared to the previous

\(^{13}\) Final consumption expenditure of households and Non-Profit Institutions Serving Households (NPISH)


\(^{15}\) Produced by TNS Gallup on behalf of Finance Norway (FNO)
two quarters. The slowdown in sales might be related to recent increases in electricity prices which, incidentally, are expected to remain high throughout this year.

The growth in household debt slowed markedly in 2008, but has since remained fairly stable. From October last year to February, year-on-year growth increased modestly, from 6.2 per cent to 6.6 per cent. Our view is that debt growth will pick up further, implying that the household debt burden – the ratio of debt to disposable income – will increase somewhat from its current level of about 200 per cent.

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**Strong rebound in investment**

The decline in total gross real capital formation last year was larger than we envisaged in our previous macro forecast, mainly because of a larger-than-expected drop in petroleum investment\(^ {16} \). Despite strong growth in the fourth quarter, petroleum investment fell by 12.6 per cent in 2010, after having dampened the fall in activity in the Norwegian economy during the recession. According to Statistics Norway (SSB), the drop in petroleum investment last year was mainly due to uncertainty about oil prices in the wake of the financial crisis, which led many companies to postpone planned projects. Information about planned investment from the operators on the Norwegian Continental Shelf points to a strong upswing in investment in oil and gas activity this year. We forecast that the volume of petroleum investment will increase by about 12 per cent this year, with lower growth in the next two years. The sharp rise in oil prices over the past few months supports this view. Our forecast for the average oil price (Brent Blend) this year is USD 110 per barrel.

After falling since autumn 2007, residential investment picked up throughout last year. However, for the year as a whole, residential investment was down 3.5 percent from the year before, broadly in line with our macro forecast from October. We expect the upswing in residential investment to continue in the years ahead; more precisely, we expect growth to be approximately 9 per cent this year and next. Residential construction has recovered well in the past few months, and the improved order situation points to further growth ahead. At the same time, house prices have risen relative to construction costs; and high population growth, low real interest rates and continued income growth are expected to contribute to holding up demand.

Private business investment in the mainland economy also fell last year, but contributed positively to GDP growth in the fourth quarter. We expect the Q4 upturn to be sustained. Investment growth in the electricity supply is expected to remain strong this year. We also expect moderate growth in manufacturing investment. Although manufacturing output has been relatively weak over the past six months, surveys such as Norges Bank’s regional network, Statistics Norway’s business tendency survey and the purchasing managers index

\[^{16}\text{Defined as investment in extraction and transport via pipelines}\]
(PMI) suggest that activity will pick up. According to Statistics Norway’s investment statistics, investment in the manufacturing sector is no longer falling, and the manufacturing enterprises in Norges Bank’s regional network expect to boost investment in the next twelve months. However, capacity utilisation in manufacturing is still relatively low in a historical perspective, and this could limit the need for investment in new production capacity.

According to Norges Bank’s regional network, investment is also expected to increase in the services and retail trade sectors. Our forecasts for growth in private business investment in the mainland economy are for 6 per cent this year and somewhat lower growth for the following two years.

**A challenging environment for exporters**

Despite a marked drop in the exports of traditional goods in the fourth quarter, export growth contributed positively to growth in the Norwegian economy last year. Traditional goods exports were up 5.0 percent compared to the year before, in line with our forecasts from October. The upswing in exports last year is related to the business cycle upturn internationally and growth in world trade. GDP growth among Norway’s trading partners is expected to moderate somewhat in the years ahead, but demand for Norwegian exports will continue to increase. World growth is also expected to increase further. Ample spare production capacity internationally and a high and increasing Norwegian cost level relative to trading partners will nevertheless contribute to dampening export growth in coming years.

The downward trend in oil and natural gas exports (which has lasted since 2004) seems set to continue. Our forecast assumes that exports will decline at about the same rate ahead as in the past six years.

Higher domestic demand growth contributed to imports increasing by 8.7 per cent last year, somewhat more than we had envisaged. Both traditional goods and services imports contributed to the overall growth, although the volume of imports was still lower than the level before the financial crisis. We expect import growth to hold up in the years ahead.

**Higher GDP growth in the mainland economy in the years ahead**

According to preliminary national accounts figures, GDP growth in the mainland economy was 2.2 per cent in 2010 after falling by 1.3 per cent the year before. This was somewhat stronger growth than we had forecast. We expect the business cycle upturn to continue this year and we expect mainland GDP growth to increase to 3 per cent. Our growth forecast is held up by growth in household spending and a sharp upswing in investment. At the same time, we project a neutral fiscal policy stance and moderate growth in public demand. In 2012, we expect growth to pick up further, to 3.3 per cent. Our forecasts are thus revised upwards somewhat compared to our previous macro forecast, but they are still somewhat below the most recent forecasts from Norges Bank and Statistics Norway.

Throughout the forecast period, growth will be higher than our current estimate for trend growth in the Norwegian economy, which implies that capacity utilisation will increase and that, eventually, the output gap will turn positive.

Growth in total GDP was 0.4 per cent last year, somewhat lower than our forecast. A further decline in the production of oil and natural gas will imply that growth in total GDP will be lower than mainland GDP growth, both this year and in the coming two years.
Uncertainty about international developments could affect Norway

The forecasts presented above represent what we perceive to be the most likely outcome for the Norwegian economy in the years ahead. As always, macroeconomic forecasts are highly uncertain. In particular, our forecasts are based on assumptions of strong growth in emerging market economies, moderate growth in Europe and continued growth in the US economy. Our assessment is that the European debt crisis and the surge in international commodity prices represent downside risks to global growth, which could affect demand for Norwegian exports.

The debt crisis in Europe will continue to affect both financial markets and European politics ahead. There is still uncertainty about the recapitalisation needs of European banks and the outcome of the new stress tests, which will be published by the end of June. A deterioration in the crisis in Spain could trigger a new crisis in the tightly interwoven European banking system, and could have ripple effects on both international and Norwegian financial markets.

Further increases in international commodity prices could dampen global growth, both directly and indirectly, by increasing the need for monetary tightening. In particular, we see an increasing risk of a significant slowdown in growth in China and other emerging market economies.

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Sources: Reuters Ecowin and Handelsbanken Capital Markets
NORWEGIAN MACRO OUTLOOK

Gradually higher inflation

So far during the recovery, employment growth has been moderate, but we now expect companies to hire at a faster pace. A rising labour force will dampen the fall in unemployment and the pick-up in wage growth. Underlying inflation is low, but is expected to increase gradually ahead.

Relatively low unemployment

There has been an improvement in the labour market since our last macro report from October. This has been most clearly reflected in a rise in employment. That said, the employment growth has only been moderate, in line with what we predicted in our last report. In fact, employment was unchanged from 2009 to 2010. The labour force has continued to grow at around the same pace as employment, which has slowed the fall in unemployment as measured by the Labour Force Survey. Average unemployment in 2010 was 3.6 per cent of the work force. In December last year and January this year, however, there was a substantial drop in unemployment. According to statistics from the Norwegian Labour and Welfare Organisation, the number of people registered as full-time unemployed or in labour market programmes has also fallen sharply since November.

We expect further growth in employment...

Several factors support further growth in employment ahead. The fundamental reason is sustained economic growth, a view supported, for example, by Norges Bank’s regional network report from February of this year. However, we believe that growth in employment will be moderate this year. This is because Norwegian companies to some extent refrained from laying off workers during the financial crisis in order to be able to quickly increase production once demand picked up, thereby avoiding resource-intensive and costly recruitment processes in better times (so-called labour hoarding). Consequently, we do not expect employment growth to rise substantially until next year, although we have revised our forecast for this year upwards as well. More precisely, we expect employment to grow by 1 per cent this year, by 1.5 per cent in 2012 and by 1.7 per cent in 2013.

High population growth expected to continue...

The Norwegian population grew by as much as 1.3 percent from 2009 to 2010, the highest growth on record. This growth rate was not only significantly higher than Statistics Norway’s main scenario in its population projections from June 2010; it was also higher than its upper alternative forecast. Around two-thirds of this growth was due to record-high net immigration. The main scenario in Statistics Norway’s population projections suggests that the rate of population growth will remain high in the future. We believe that further growth in labour immigration is likely as the labour market continues to improve, especially in cyclical sectors such as construction. This sector employs many Poles, Lithuanians and Romanians. Based on past experience, there is reason to expect higher immigration from these...
groups once job opportunities improve. Figures from the Norwegian Directorate of Immigration show that labour immigration from countries outside of the EEA (so-called third countries) has also risen since the end of last year.

We believe increased labour immigration to be the biggest contributing factor behind the expected increase in the labour force. An additional contribution is likely to come from increased labour force participation among certain population groups, for example from a reversal in the trend of young people choosing to extend their studies during the financial crisis. Other groups that had difficulty entering the labour market during the crisis (and thus refrained from trying) will probably be looking for work on an increasing scale. Beginning in 2011, new, flexible rules have been introduced for retirement pension benefits from the National Insurance Scheme. In the short term, it is unclear how the reform will affect labour force participation in the group aged 62 and over.

**Unemployment rate to fall**

What happens to the unemployment rate will depend on relative developments in employment and the labour force. We believe that employment growth this year will marginally exceed growth in the labour force, giving an unemployment rate (as measured in the Labour Force Survey) of 3.4 per cent, down from our previous forecast of 3.6 per cent. We believe that employment growth will accelerate next year, and that this will bring down the unemployment rate to 3.3 per cent in 2012 and to 3.1 per cent in 2013.

**Wage growth set to rise**

According to the preliminary report from the Norwegian Technical Calculation Committee for Wage Settlements (TBU), wage growth last year was 3.75 percent, down from 4.2 per cent in 2009. The TBU will publish the official figures for all wage earners in its updated report in April. According to the national accounts, wage growth last year was 3.6 per cent. Our forecasts of a further rise in employment growth and a decline in the already relatively low unemployment rate at the beginning of next year are arguments in favour of higher wage growth. This is also supported by our expectations of an increase in business profits, as we believe that the terms of trade will improve further. Moreover, the decline in global markets for Norwegian industrial goods during the financial crisis could have contributed to the implementation of efficiency measures that will continue to deliver productivity benefits to businesses. In addition, the wage carry-over (i.e. the difference between the average wage level and the wage level at the end of the year) into 2011 is higher than in 2010; more precisely, it is 1.75 per cent, up from 1.2 per cent in 2010. These are some of the reasons we increase our estimate of wage growth compared with our last macro report.

The wage negotiations between the social partners, the labour union LO and the employers’ federation NHO, has agreed this year’s wage growth average to be 3.65 percent. Overall, we believe that wage growth this year will be 4.2 per cent, rising to 4.5 per cent next year and maintain that pace into 2013. Wage growth could turn out to be lower if the labour force were to increase by more than we assume. Another factor pointing in the same direction is that the labour market is not necessarily tight, even though unemployment is relatively low. This can be seen from Norges Bank’s regional network report, where only just over 20 per cent of companies are currently reporting that production is being limited by the supply of labour. In comparison, more than half of the companies reported this situation in 2007. Another uncertain factor is future wage growth in the public sector.

**Inflation to rise gradually**

Core inflation, measured as CPI adjusted for taxes and energy (CPI-ATE), has fallen since our latest macro report. This is a continuation of the declining trend since mid-2009. CPI-ATE inflation for 2010 was 1.4 percent, marginally lower than we had expected. It has also surprised on the downside in January and February of this year, where 12-month growth in February was 0.8 percent.
Core inflation, adjusted for changes in taxes and excluding temporary changes in energy prices (CPIXE), also fell during this period. The drop in underlying inflation was driven by prices for imported goods and goods produced in Norway. For the former, prices have not only risen at a slower pace, they have fallen since March of last year. Headline inflation, measured as CPI, rose from September to December of last year, driven by the strong rise in energy prices. However, this rise was reversed in January and February.

We see several reasons why inflation should increase ahead. One important argument is that international energy prices have increased significantly. Fundamentally, energy prices do not have a direct impact on CPI-ATE, but they may affect the prices of other goods and services included in CPI-ATE through second-round effects (i.e. higher transport prices, including air travel). Furthermore, permanent changes in energy prices will increase CPIXE.

We believe that the prices of imported goods will fall at a slower pace, partly due to the recent significant rise in global food prices. Imported food goods have been more affected by changes to global food prices than food produced in Norway. While prices of imported food have a small weight in the CPI, they may still affect the CPI if food prices stay high. The price pressure for items other than energy and food has also increased globally. Overall, we foresee less of a negative contribution from prices of imported consumer goods ahead, although the trend toward imports from low-cost countries may in isolation dampen imported inflation. The import-weighted NOK exchange rate (I44) has strengthened by only around 2 percent since our latest macro report. Looking ahead, we do not expect fluctuations in I44 to significantly contribute to changes in the inflation rate.

We also believe that domestic inflation will rise. This is based on our assumption of a continued rise in capacity utilisation and higher unit labour costs. Higher inflation expectations from households, businesses and Norges Bank’s regional network are also evident. Overall, we believe that CPI-ATE inflation will be 1.1 percent this year, rising to 1.8 percent next year, before increasing to 2.1 percent in 2013.

Macro indicators

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*Percentage change from previous year
**Definition as in Technical Calculation Committee
*** Percentage change from previous year, LFS
†Percent of labour force, LFS

Source: Handelsbanken Capital Markets and Reuters Ecowin

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INTEREST RATE OUTLOOK

Higher interest rates ahead

Low and falling inflation has contributed to keeping the key policy rate low. The next interest rate hike is approaching but, further ahead, we see slight downside risk relative to Norges Bank’s interest rate forecast. Longer-term interest rates are expected to move up further.

Interest rate developments since our last macro forecast

Since our previous forecast, the key policy rate has been kept on hold at 2.0 percent, as expected. In the monetary policy report (MPR) in October, Norges Bank revised the interest rate forecast downwards, broadly in line with our expectations. Whereas before the summer the central bank had envisaged an interest rate hike around the turn of the year, the new forecast implied that the interest rate hike was postponed until the summer 2011. The main factors behind the downward revision of the interest rate path were lower-than-expected inflation and lower interest rate expectations among Norway’s trading partners.

When Norges Bank published a new interest rate forecast in March (MPR 1/2011), inflation had also been lower than expected. Together with a stronger NOK exchange rate and higher premiums in the money market, this pointed to a further downward revision of the rate path. However, these factors were more than offset by higher interest rate expectations abroad, stronger domestic demand and higher estimates of wage growth. According to the new rate path, the interest rate will be raised by 25 basis points in May or June. Thereafter, there will be two more hikes in the fourth quarter, implying that the interest rate at the end of the year will be 2.75 percent. The rate path implies that the key policy rate will be raised by another two percentage points by the end of 2013.

Øystein Olsen emphasised continuity when he took up the position as central bank governor in January. The annual address and other communications provide no evidence that Norges Bank’s reaction pattern when setting interest rates has changed significantly with the new governor.

Having fallen in early autumn, short-term money market rates increased again towards the end of last year. Since December, three-month NIBOR has been close to 2.60 percent. Money market premiums appear to have been a little above 50 basis points since October, somewhat higher than our forecast and higher than the normal level before the financial crisis.

Key policy rate and money market rate

| Source: Reuters Ecowin |

Money market premiums have remained high

No change in direction from the new governor

Low inflation caused Norges Bank to postpone interest rate hikes

17 Defined as the difference between three-month money market rates (NIBOR) and the expected key policy rate
Downside risk relative to Norges Bank’s rate path further ahead

Prior to the publication of MPR 1/2011, our view was that the first interest rate hike would come in June. At the same time, we saw arguments for a May hike, which turned out to be in line with the new forecast from Norges Bank.

The monetary policy report was based on information for the period to March 10, and new information since then has been limited. Although the direct costs of the earthquake in Japan and the fall in output in coming quarters could be larger than initially estimated, we think the effect on global growth will be limited. At the same time, the worsening of the debt crisis following the resignation of the Portuguese government has increased the uncertainty about growth in Europe. Despite this, expectations of an impending interest rate hike from the European Central Bank (ECB) have not diminished in the past couple of weeks, and interest rate expectations in the US have also increased slightly. In Norway, new figures showed an unexpected drop in the LFS unemployment rate in January, which in isolation points to an early interest rate hike. For now, however, we maintain our view that the next interest rate hike will come in June, but new data releases, in particular the March inflation figures, could affect this assessment.

Further ahead, we see slight downside risk relative to Norges Bank’s interest rate forecast. First, money market premiums could remain higher than the central bank’s forecast towards the end of the year, which would point to a lowering of the rate path. This view builds on the assumption that the changes to the system for the management of banks’ borrowing and deposit facilities in Norges Bank will only have limited effects on premiums for three-month money market rates, at least in the short run. Our forecast is that premiums will remain stable at 50 basis points in the next twelve months. Second, we think global growth could turn out lower than envisaged by Norges Bank. Our forecast implies that the key policy rate is raised to 2.50 percent in October and moves up to 2.75 percent by the end of the first quarter in 2012. Our forecast thus implies a less steep rate path than Norges Bank’s forecast.

Interest rate forecasts are uncertain; several factors could cause interest rates to increase faster than we expect:

- Further increases in the oil price and other commodity prices could mean higher inflation and stronger tightening of monetary policy among Norway’s trading partners, in particular if increases in commodity prices are passed through to the prices of other goods and services. Persistently high oil prices could also mean higher petroleum investments. On the other hand, high oil prices could cause global growth to slow and the NOK to appreciate.

- Norges Bank has, for a long time, warned against the risk of financial imbalances arising from strong growth in house prices and debt. So far, financial stability concerns have not been used as a separate argument for raising the interest rate, although the upward adjustment of the new rate path relative to what the Norges Bank’s historical reaction pattern would indicate could perhaps be interpreted this way. A further pick-up in house price growth or debt growth and/or a greater emphasis on financial stability in interest rate setting could cause Norges Bank to increase rates faster than we currently forecast.

- Our forecast builds on the assumption that the household savings rate remains high in coming years and that growth in household spending will be moderate. A faster decline in the savings rate and stronger spending growth could lead to higher growth in the Norwegian economy.
On the other hand, there are factors that could cause interest rates to increase more slowly:

- A worsening of the debt crisis could cause new problems for the European banking sector. This could have ripple effects on the Norwegian economy, transmitted through financial markets and through lower demand from key trading partners in Europe.

- Our forecast implies that inflation, as measured by CPI-ATE, will increase to 1.5 percent towards the end of the year. However, inflation has been lower than both we and Norges Bank expected in the past six months, and the forecasts from Norges Bank’s system for averaging models (SAM) imply lower inflation towards the end of this year than we forecast.

Uptick in long-term interest rates…

The 10-year government bond yield has risen gradually since our last macro report, from 3.2 percent in mid-October 2010 to 3.8 percent at the end of March this year. This has been driven by the rise in corresponding international bond yields and expectations of higher Norwegian real economic growth. International central banks such as the Federal Reserve and the ECB have also signalled that they will phase out the extraordinary liquidity measures that were implemented during the financial crisis. Since February this year, however, the rise in government bond yields has come to a halt and there has been a flattening trend. This may be related to new concerns about the debt-burdened European economies.

Risk aversion in financial markets has risen lately due to the turbulence in the debt-burdened countries in Europe, the war in Libya, the uprisings in the Middle East and North Africa and the earthquake in Japan. On the one hand, increased risk aversion could prompt investors to move their funds to Norwegian government bonds, attracted by strong Norwegian government finances and an oil-rich real economy—in other words, Norwegian government bonds could be seen as something of a safe haven. On the other hand, liquidity in the Norwegian bond market is relatively thin. Low liquidity is often accompanied by high volatility. This may mean that investors do not see Norwegian government bonds as a safe haven when risk aversion increases. It is difficult to say whether one of these two factors applies more than the other. Recently, it seems that the market has mostly focused on the scarce liquidity in the Norwegian market, keeping the 10-year yield high.

We expect bond yields to rise, both in our forecast horizon…

...likely to continue…

We believe that the market’s heightened risk aversion will lift Norwegian yields relative to German yields in the short and medium term. Longer term, fundamental growth prospects among Norway’s trading partners and in Norway will determine the direction to a greater extent. As explained in the chapter on the global economy, we forecast continued moderate growth in the global economy, although we see a raft of serious challenges. Overall, we expect a continued rise in Norwegian bond yields. To be more exact, we forecast the 10-year yield to be at 3.75 percent in three months, 4.15 percent in six months, and 4.40 percent in twelve months.
The spread between swap and government bond rates is an indication of the markets’ long term risk premium, and hence it fluctuates with the degree of risk aversion in the market. Since our previous macro forecast there has been large fluctuations in this spread, but looking at the period as a whole, the spread is about unchanged at approximately 80 basis points. We expect the spread to stay flat near this level throughout our forecast horizon.

...also in really long term

In the really long term, there is reason to believe that structural changes in the global economy will drive long-term real yields upwards on a global basis, as examined by McKinsey in its report “Farewell to cheap capital” \(^{18}\). In the past decade, long-term real yields have fallen due to high savings exceeding real investment in countries in Asia and Latin America. This situation may be reversed in the future. The need for real investment will probably increase markedly once emerging countries in Asia, Latin America and Africa build their economies.

The capital to finance this will come from global savings. However, there is reason to believe that these savings will decline, partly because countries such as China will rebalance their economies so that private consumption rises, but also because the elderly proportion of the world’s population is expected to be at record-high levels by 2030. Before 2020, McKinsey expects the demand for capital to be significantly higher than the supply. Nevertheless, long-term real yields may start to rise within five years, as investors might predict this structural shift.

Rate and yield forecasts

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Source: Handelsbanken Capital Markets

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Shakeb Syed, +47-2239-7007, shhu02@handelsbanken.no

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CURRENCY OUTLOOK

Strong NOK ahead

After NOK strengthening picked up in December, the NOK has experienced a rapid recovery in the wake of a few periods with moderate weakness. This is in contrast to the normal pattern and indicates a strong NOK.

The market acted in practice, not only in theory

We believe that the rise in the NOK, which gained momentum in December, is directly related to the stock market’s positive performance. The fact that the risk premium on the NOK was high prior to the strengthening also indicates a market positive towards the NOK; however, very limited positioning in the NOK took place.

The nominal effective NOK exchange rate in the trade-weighted index (TWI) based on Norway’s most important trading partners has appreciated by 2.8 percent since December. The NOK is unchanged versus the SEK, while it has appreciated by 8.6 percent versus the USD.

In recent months, changes in the interest rate spread have had little impact on the NOK, especially in relation to the EUR. Nonetheless, the Norwegian interest rate is higher than for most other currencies, and this has contributed to a generally strong NOK. It is also striking how quickly the NOK has rebounded after periods of weakness. The NOK usually weakens relatively quickly and takes longer to recover. One possible interpretation of this trend could be that the NOK has less downside than in 2010.

Oil prices and the real economy

In practice, rising oil prices lead to an improvement in the terms of trade with other countries. So far, rising oil and gas prices have not led to major downward revisions to growth estimates for economies that are net importers. The oil price appears to have gained a foothold above USD 100 per barrel, and this should contribute to a strong NOK, even in the medium term. However, sudden movements in the price of oil could increase uncertainty and have a negative impact on the NOK exchange rate. During the next 12 months, we foresee a stronger NOK against the EUR than the current rate of 7.94, which has been the average over the past 12 months.

Falling trend in USD

The USD has been trending downwards. The Federal Reserve, the central bank in the US, has maintained its policy of keeping its key interest rate at record-low levels, and quantitative easing will continue as planned. In the short term, this means that the USD will remain

19 By a positive risk premium, we mean the expected extra return in the form of a positive interest rate differential and the expected strengthening of the NOK.
under pressure as investors more readily invest in other currencies that offer a higher expected return. Looking further ahead, the USD could appreciate relative to both the EUR and NOK as the recovery in the US economy gains traction and short-term USD interest rates increase.

Debt problems in Europe have strengthened the CHF

Uncertainty related to European government finances and rising bond yields has not weakened the EUR in general. On the contrary, the combination of strong key figures from the major EUR countries and prospects of imminent rate increases has supported the EUR. However, uncertainty in Europe has led to a significant appreciation of the CHF, and it increasingly appears to be a safe-haven currency. The demanding economic and political situation in Europe still indicates a high risk of a stronger CHF.

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### Key ratios

#### Macro forecasts

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#### Macro indicators

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<td>2.1</td>
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<tr>
<td>Core inflation CPI-ATE</td>
<td>1.4</td>
<td>1.1</td>
<td>1.8</td>
<td>2.1</td>
</tr>
<tr>
<td>Annual w age*</td>
<td>3.8</td>
<td>4.2</td>
<td>4.5</td>
<td>4.5</td>
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<tr>
<td>Employment**</td>
<td>0.0</td>
<td>1.0</td>
<td>1.5</td>
<td>1.7</td>
</tr>
<tr>
<td>Unemployment***</td>
<td>3.6</td>
<td>3.4</td>
<td>3.3</td>
<td>3.1</td>
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</table>

*Definition as in Technical Calculation Committee

** ILO compatible survey

***Percent of labour force, ILO compatible survey

#### Rate and yield forecasts

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<th>March 30</th>
<th>&lt; 3 m</th>
<th>&lt; 6 m</th>
<th>&lt; 12 m</th>
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<tbody>
<tr>
<td>Norges Banks folio</td>
<td>2.00</td>
<td>2.25</td>
<td>2.25</td>
<td>2.75</td>
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<tr>
<td>3 mnd NIBOR</td>
<td>2.63</td>
<td>2.75</td>
<td>2.95</td>
<td>3.45</td>
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<tr>
<td>10y Norwegian govt. bond</td>
<td>3.81</td>
<td>3.75</td>
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<td>4.40</td>
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<tr>
<td>10y Norwegian swap</td>
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<td>4.95</td>
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<tr>
<td>Swap-govt. bond spread</td>
<td>0.82</td>
<td>0.80</td>
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#### Exchange rate forecasts

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<th>&lt; 3 m</th>
<th>&lt; 6 m</th>
<th>&lt; 12 m</th>
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</thead>
<tbody>
<tr>
<td>EUR/NOK</td>
<td>7.89</td>
<td>7.80</td>
<td>7.80</td>
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<tr>
<td>EUR/USD</td>
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<td>1.44</td>
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<td>USD/NOK</td>
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<td>6.00</td>
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<tr>
<td>CHF/NOK</td>
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<td>5.80</td>
<td>5.45</td>
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<tr>
<td>USD/JPY</td>
<td>81.7</td>
<td>78.0</td>
<td>82.0</td>
<td>85.0</td>
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<td>JPY/NOK</td>
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<td>EUR/SK</td>
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<td>SEK/NOK</td>
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<td>GBP/NOK</td>
<td>8.96</td>
<td>8.85</td>
<td>9.20</td>
<td>9.50</td>
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</table>

Source: Handelsbanken Capital Markets
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