February 2012
IMF Country Report No. 12/25

Norway: 2011 Article IV Consultation—Staff Report; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Norway

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2011 Article IV consultation with Norway, the following documents have been released and are included in this package:

- The staff report for the 2011 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on November 22, 2011, with the officials of Norway on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on January 13, 2012. The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF.

- A Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its January 27, 2012 discussion of the staff report that concluded the Article IV consultation.

- A statement by the Executive Director for Norway.

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

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INTERNATIONAL MONETARY FUND

NORWAY

STAFF REPORT FOR THE 2011 ARTICLE IV CONSULTATION

January 13, 2012

KEY ISSUES

Context: Norway's economy has experienced steady recovery, aided by supportive policies, with low unemployment and the output gap nearly closed. Going forward, moderately paced, domestic demand-led growth is projected to continue. Inflation—currently low due in part to krone appreciation—is expected to rise gradually to the 2½ percent target by 2013. This relatively benign central scenario is subject to significant risks, including from possible intensification of the eurozone crisis. The major domestic risk arises from elevated house prices and high household debt levels.

Financial sector policy: The top near-term macroeconomic priority is to reduce risks arising from high household debt by tightening macroprudential standards for mortgage lending while undertaking tax reforms to gradually reduce incentives for excessive leverage. Creating a stronger institutional framework for macroprudential policy would also assist risk mitigation going forward.

Fiscal policy: With the output gap closing, fiscal tightening is needed over the medium term in the central scenario to rebuild precautionary buffers and ensure the fiscal guidelines are met on average over the cycle. Medium-term tightening will also (i) reduce long-run fiscal challenges, which should be further addressed through entitlement reform, and (ii) allow Norges Bank to keep interest rates low for longer, thus reducing risks of excessive krone appreciation and associated competitiveness problems. For 2012, however, the budget's broadly neutral fiscal stance is appropriate, given heightened global risks and assuming macroprudential tightening.

Monetary policy: With inflation expected to return to target by the end of the policy horizon, the current monetary stance is appropriate for now. However, monetary policy should be the first line of defense if risks materialize.

Approved By
Juha Kähkönen and David Marston

Discussions took place in Oslo during November 10-22, 2011. The staff team comprised Messrs. Fletcher (head), Kannan, Sandri (all EUR), and Favara (RES). Mr. Gronn (OED) participated in the discussions.

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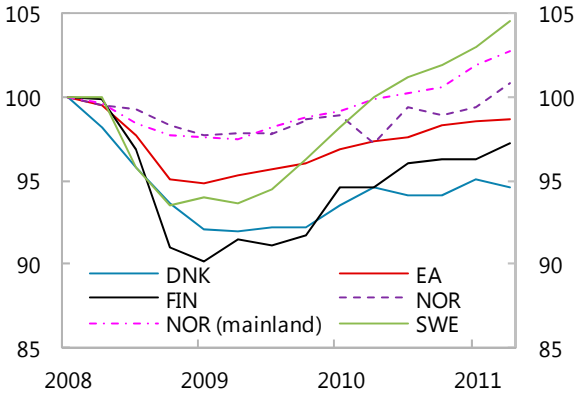
ANNEXES

THE MACROECONOMIC SETTING

A. Supportive Policies Have Facilitated Steady Recovery

1. Norway is experiencing a steady, domestic demand-led recovery (Figures 1 and 2). Relative to its peers, Norway's mainland economy had a relatively mild downturn during the 2008-09 global financial crisis. It then grew by 2.1 percent in 2010 and is estimated to have grown by around 2½ percent in 2011, bringing real mainland GDP nearly 3 percent above its pre-crisis level and nearly closing the output gap (Annex I). Growth has been led by private consumption

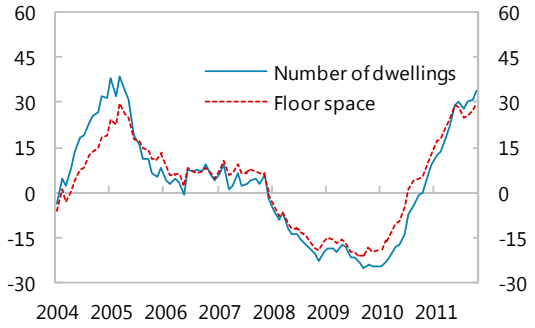
GDP Dynamics Since the Crisis
(Index, 2008Q2=100)



Source: Haver.

on the back of rising house prices and robust wage growth, which in turn have been buoyed by low interest rates and improving terms of trade.[1] The recovery in the housing market has also spurred a strong increase in construction activity. Meanwhile, investment in the oil sector has rebounded following a sharp contraction in 2010.[2]

New Building Starts
(Last 12 months, percent growth over previous 12 months)



Sources: Haver Analytics; and IMF staff calculations.

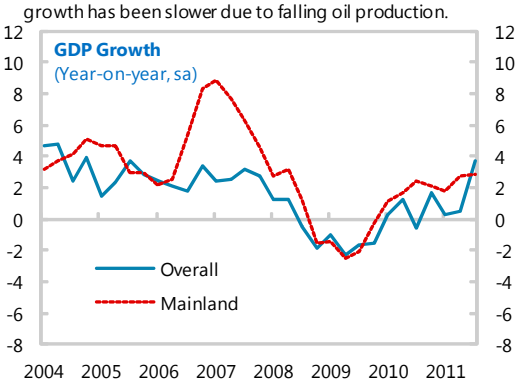
2. Steady growth has kept the labor market strong (Figure 3). Norway entered the recession with its labor market in a robust position, with the unemployment rate reaching a low of 2¼ percent in the first quarter of 2008. Given the relatively shallow recession and high public-sector employment, the unemployment rate increased by only 1¼ percentage points during the downturn. Employment growth in the private sector has since strengthened, with firm surveys pointing to increasing hiring intentions. The gradual tightening of the labor market and the consequent moderation in the unemployment rate—to a low 3¼ percent as of October 2011—has caused real wage growth to accelerate from below 1 percent in late 2009 to 2½ percent by mid-2011.

[1] Of these factors, a fitted consumption function—following Jansen, E. (2010), "Wealth Effects on Consumption in Financial Crises: The Case of Norway", Discussion Paper No. 616, Statistics Norway—suggests that consumption growth during the past year was primarily driven by a rebound in real disposable income, though wealth effects are also significant in Norway.

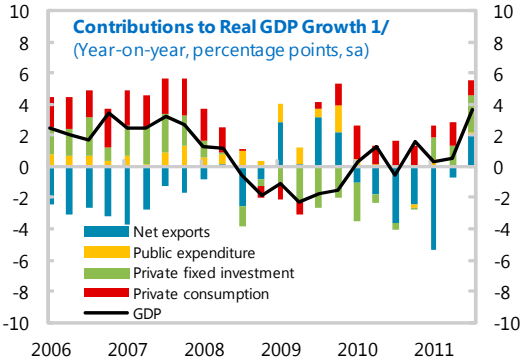
[2] For simplicity, "oil" in this report refers to all of Norway's hydrocarbon resources. For example, "oil revenue" refers to revenue from both oil and gas.

Figure 1. Norway: GDP

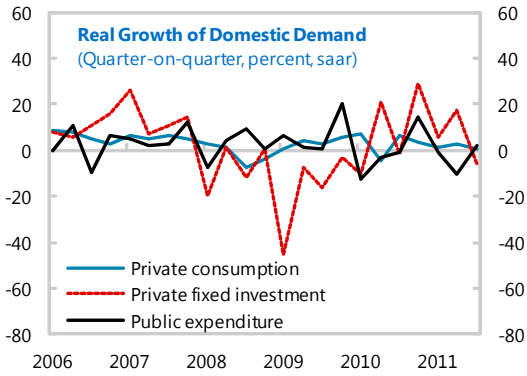
Norway's mainland GDP has grown steadily following a mild recession during the global financial crisis; total GDP growth has been slower due to falling oil production.



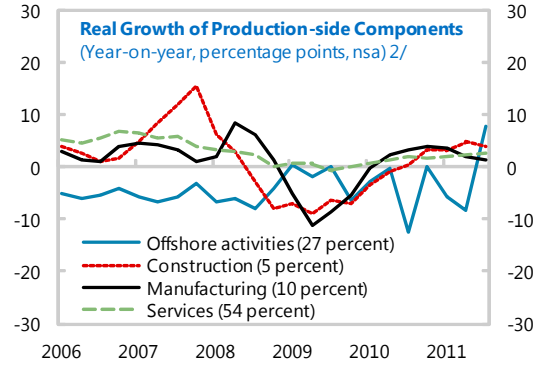
Growth has been driven mainly by private domestic demand ...



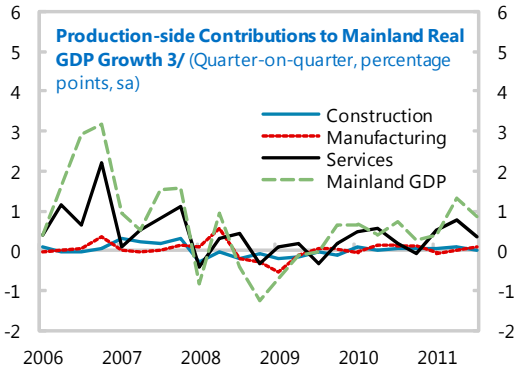
... with private investment being especially strong.



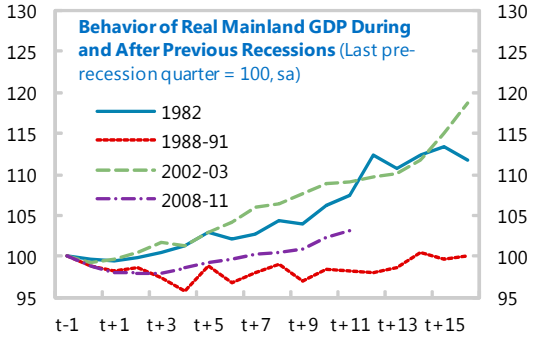
On the production side, mainland growth has been broad-based ...



... with services still accounting for the majority of output.



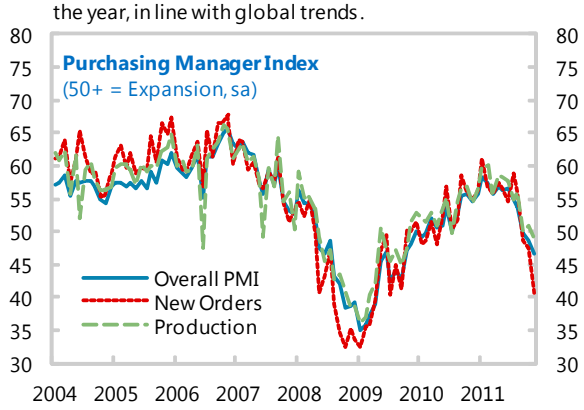
Still, as in most countries, the pace of recovery has lagged most previous episodes, with the notable exception of the protracted financial crisis during 1988–91.



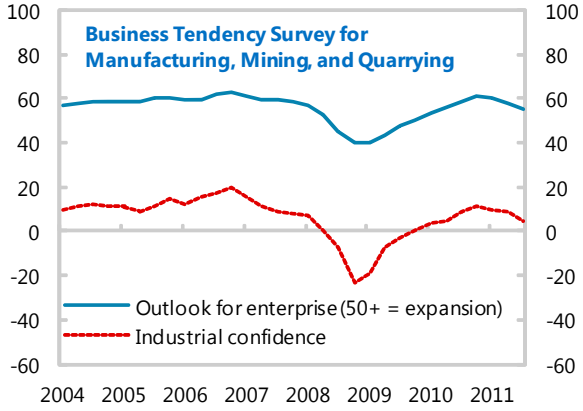
Sources: Statistics Norway; and IMF staff calculations.
1/ Difference between GDP growth and sum of components accounted for by inventory investment and statistical discrepancy.
2/ Parentheses indicate sectoral share in total value added. Remainder accounted for by agriculture, fishing, mining/quarrying, and utilities.
3/ Differences between GDP growth and sum of components account for by agriculture, fishing, mining/quarrying, utilities, and taxes minus subsidies.

Figure 2. Norway: Key Activity Indicators

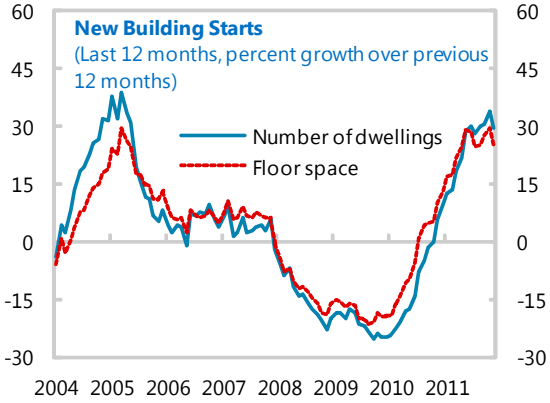
PMI indicators for manufacturing recovered strongly in 2010 and the first half of 2011 before dipping late in the year, in line with global trends.



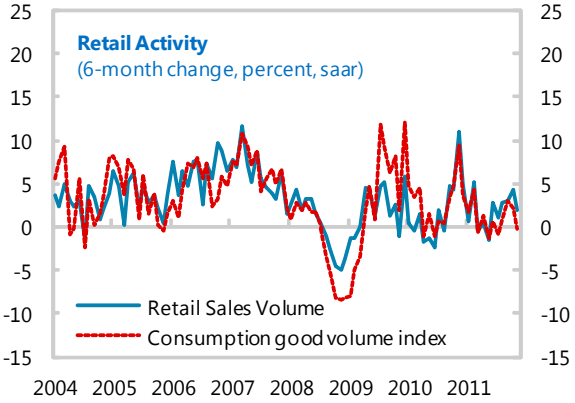
The recovery period reflected improved confidence.



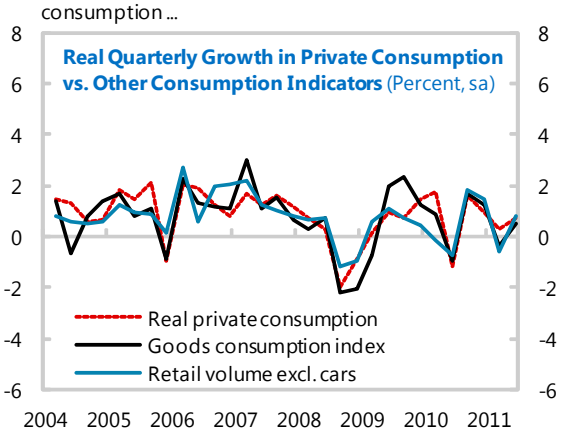
Construction activity has expanded in line with the recovery in house prices...



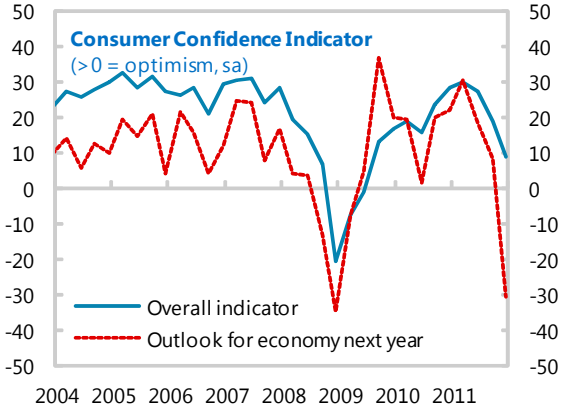
... while retail sales have been positive...



... and matched by a recovery in overall private consumption...



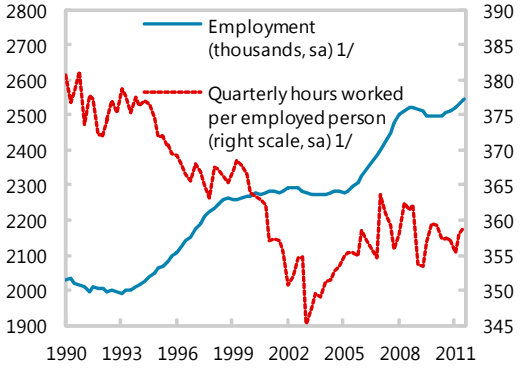
... though confidence has recently dipped.



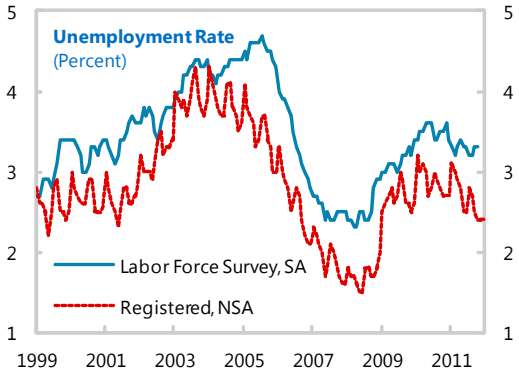
Sources: Haver Analytics; and IMF staff calculations.

Figure 3. Norway: Labor Market

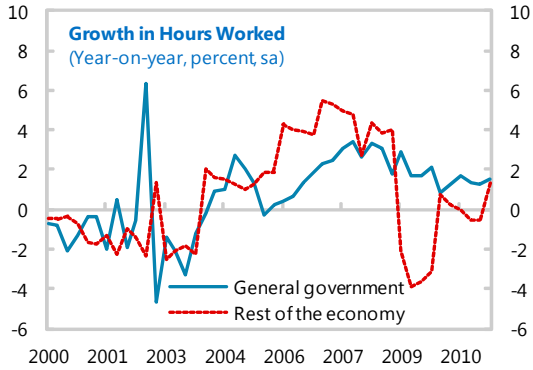
After a moderate reduction in 2009, employment is growing again...



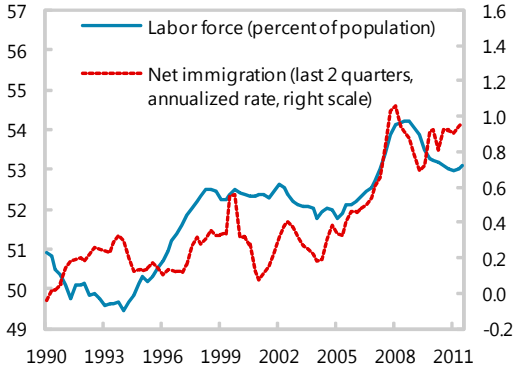
... allowing for a gradual reduction of the unemployment rate.



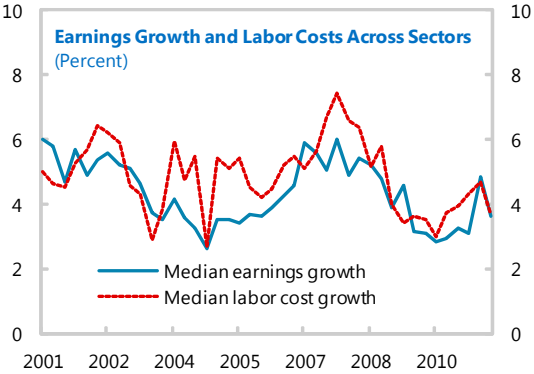
After falling sharply during the recession, working hours in the private sector are now increasing. ..



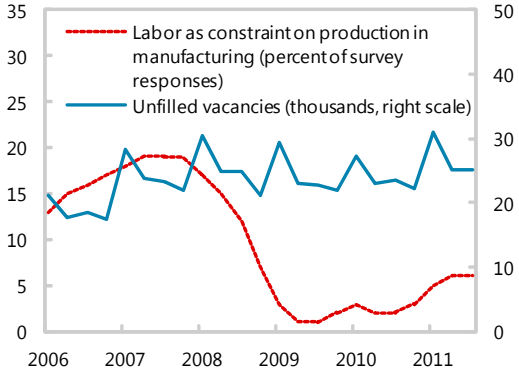
... but the labor force participation rate has not yet recovered.



Lower unemployment and participation rates are putting pressure on wage growth...



... and labor constraints are gradually becoming a more serious concern for manufacturing production.

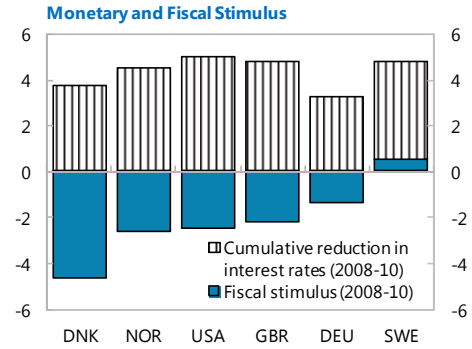


Sources: Haver Analytics; and IMF staff calculations.
1/ Employment numbers are based on the Labor Force Survey; working hours are based on the National Accounts.

3. This recovery partly reflects strong policy stimulus deployed during the crisis, which the authorities have begun to slowly withdraw over the last two years:

- *Fiscal policy*: The government deployed fiscal stimulus (as measured by the change in the structural non-oil budget deficit) of 2 percent of trend mainland GDP in 2009. Fiscal policy then turned broadly neutral in 2010 and 2011. Together with strong returns on Norway's sovereign wealth fund—the Government Pension Fund-Global (GPF-G)—this brought the structural non-oil deficit back below 4 percent of the GPF-G's capital, the benchmark target under Norway's fiscal guidelines, from which the government can deviate temporarily for cyclical reasons.

- *Monetary policy*: The key policy rate was reduced by a total of 4½ percentage points from October 2008 to June 2009, bringing the rate to a historic low of 1¼ percent. As Norway's cyclical position started to improve, a tightening stance was adopted, with quarter-point rate hikes in October 2009, December 2009, May 2010, and May 2011. With the global outlook weakening and the European Central Banking (ECB) lowering rates, Norges Bank then cut the policy rate by 50 basis points in December 2011, bringing it to its current level of 1¾ percent.

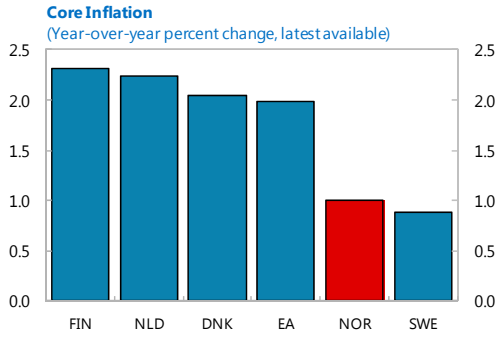


Sources: IMF Fiscal Monitor; and individual central banks' websites.

- *Financial sector policy*: The authorities implemented a series of measures during the recession to bolster financial stability. These included easier collateral requirements for access to central bank liquidity, a program that allowed banks to exchange less-liquid covered bonds for more-liquid government securities, purchases of corporate bonds, and bank capital injections. Reliance on these exceptional measures was gradually reduced as the economy recovered.

B. A Strong Exchange Rate Has Contributed to Low Inflation

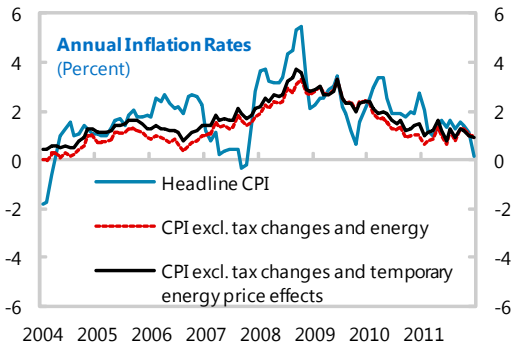
4. Despite buoyant domestic demand, inflation remains muted. Headline CPI inflation is running at 0.2 percent as of December 2011 (Figure 4). This very low rate is partly due to transitory effects from volatile electricity prices. However, inflation excluding energy products and tax changes (CPI-ATE)—a key measure of core inflation in Norway—is also muted at 1 percent. Indeed, this is one of the lowest rates of core inflation amongst



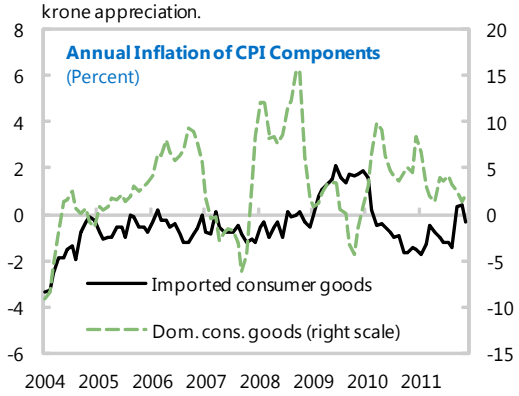
Source: Eurostat and National Statistical Agencies.

Figure 4. Norway: Price Developments

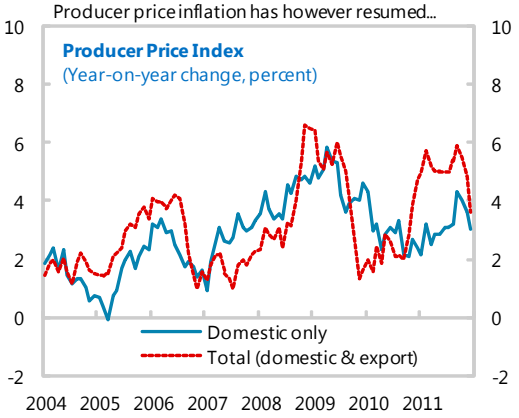
Inflation has fallen considerably below the 2.5 percent target.. This partly reflects volatile electricity prices, but core inflation is also low ...



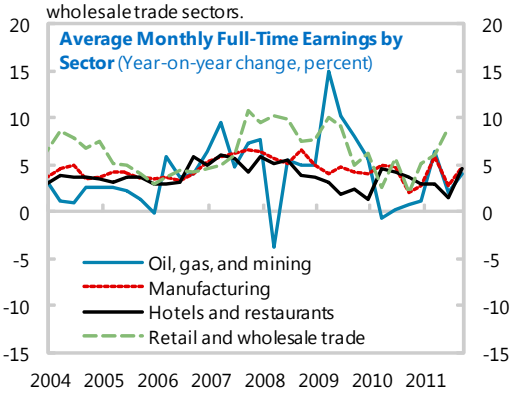
... reflecting in part lower import prices resulting from krone appreciation.



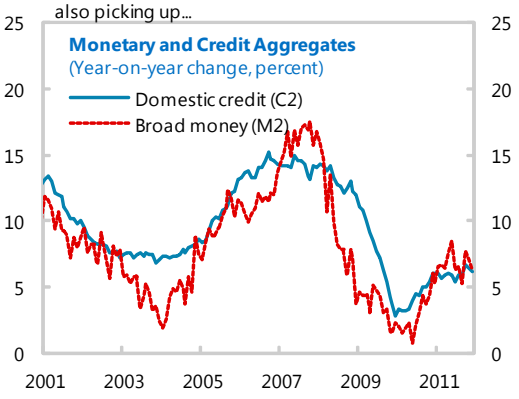
Producer price inflation has however resumed...



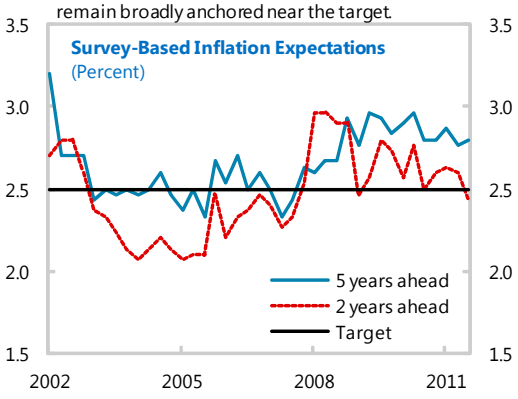
... and wages are rising, especially in the retail and wholesale trade sectors.



The growth of money and credit aggregates is also picking up...



... though medium-term inflation expectations remain broadly anchored near the target.

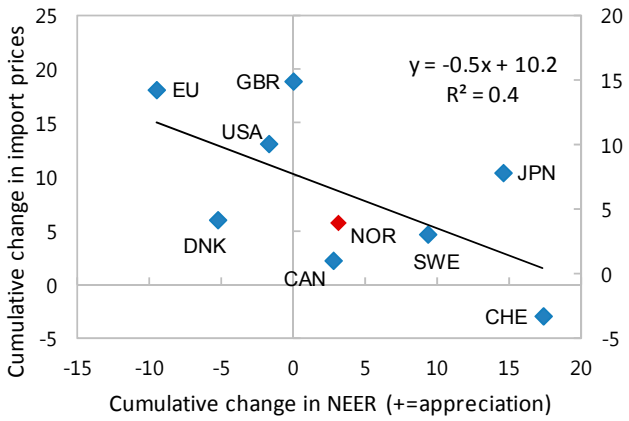


Sources: Haver Analytics; and IMF staff calculations.

advanced economies, which is particularly striking given solid wage growth and a smaller output gap than in other countries.

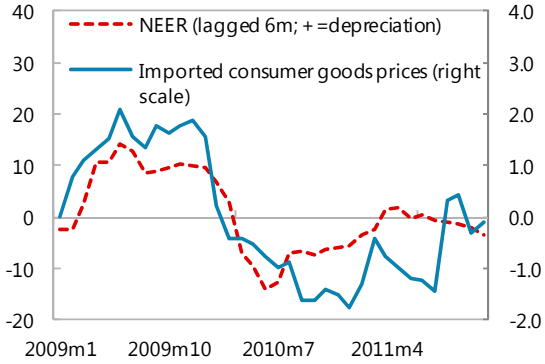
5. Exchange rate appreciation has been a major contributor to recent inflation developments. Following a significant depreciation during the early part of the global financial crisis, the Norwegian krone has since rebounded and is now around its pre-crisis rates (Figure 5). This appreciation and the resulting low growth of import prices (which takes several months to fully pass through) explains much of Norway's low core inflation relative to many advanced economies, as imported goods constitute 30 percent of Norway's consumption basket.

Cumulative Change in Import Prices vs. Cumulative Change in NEER (Latest data compared to end–2009)



Sources: Haver; and IMF staff estimates.

Norway: Imported Inflation and the Exchange Rate
(Annual change, percent)

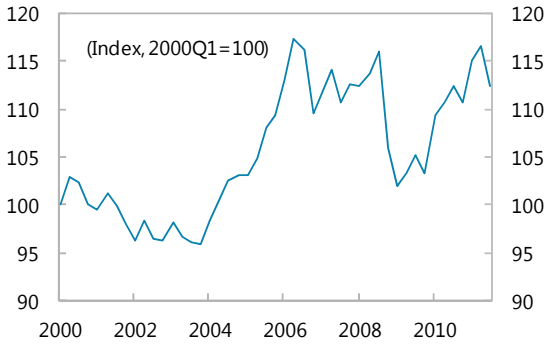


Sources: Statistics Norway and IMF staff estimates.

C. Improved Terms of Trade Have Boosted the External Sector

6. The impact of strong domestic demand and an appreciating krone on the non-oil trade balance has been offset by improving terms of trade. Following the recovery in domestic demand, import volumes have rebounded significantly (Figure 5). Key non-oil exports—such as aluminum and nickel—have also rebounded due to higher demand from rapidly growing emerging markets, though at a slower pace than imports. The fall in non-oil net export volumes, however, has not translated into a deteriorating non-oil trade balance—which has been broadly stable at around -7 percent of mainland GDP—due to improvements in Norway's terms of trade, which rebounded sharply after a brief fall during the recession.

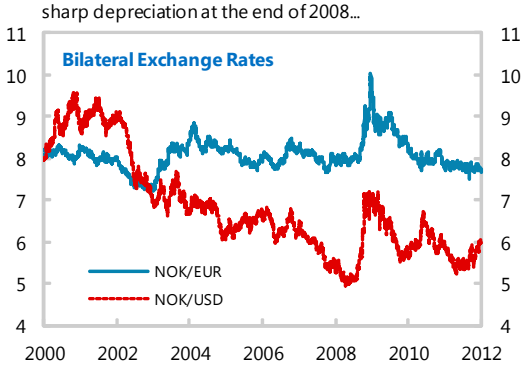
Norway: Terms of Trade
(Excluding export price of crude oil and natural gas)



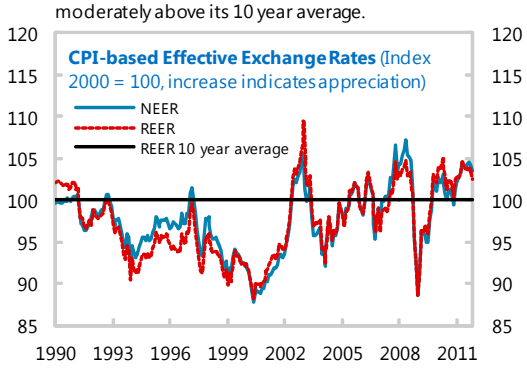
Sources: Statistics Norway; and IMF staff estimates.

Figure 5. Norway: External Developments

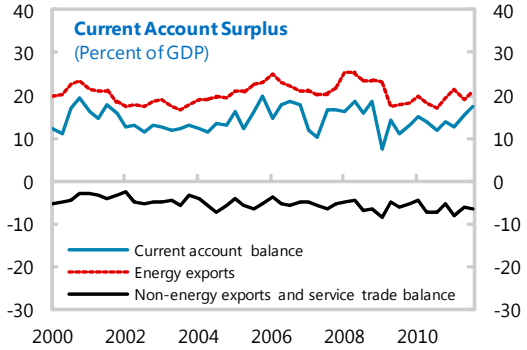
The Norwegian krone has fully recovered after a sharp depreciation at the end of 2008...



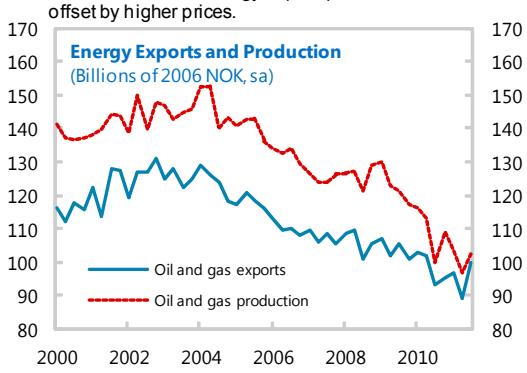
....and the real effective exchange rate is now moderately above its 10 year average.



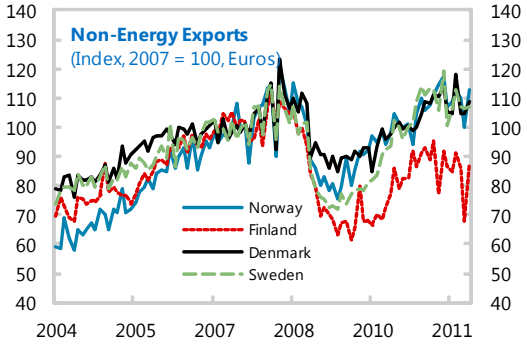
The current account is fairly stable...



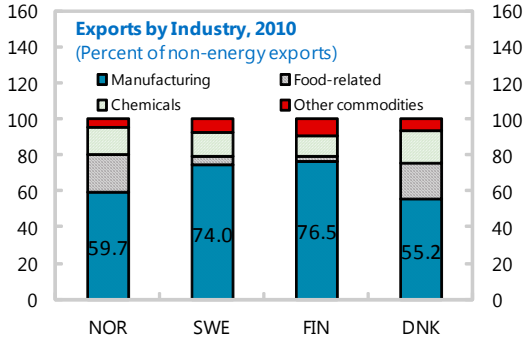
...as the decline in energy export quantities has been offset by higher prices.



Non-energy exports have fully recovered from the recession in real terms...



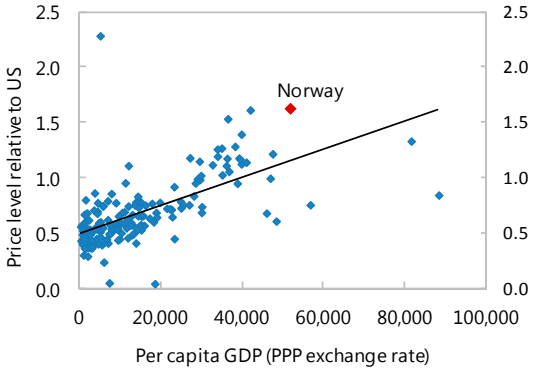
...partly thanks to the good performance of the food industry, which accounts for a large share of total non-energy exports relative to other countries in the region.



Sources: Bloomberg; Haver Analytics; IMF Information Notice System; and IMF staff calculations.

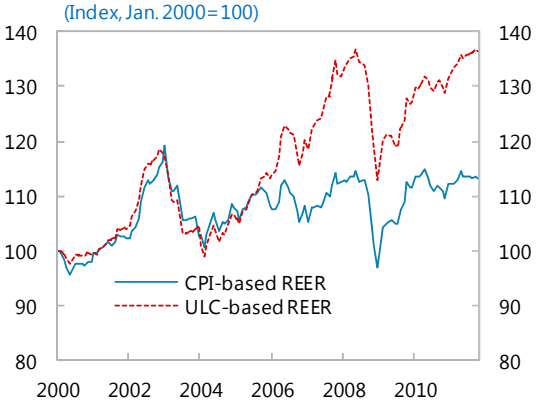
7. Standard metrics suggest the krone is moderately overvalued, though Norway's non-oil exports continue to perform well. Several "rule-of-thumb" measures point to some krone overvaluation: purchasing power parity measures, for example, indicate that Norway's price level is high relative to countries with similar income levels. Similarly, although the CPI-based REER has been relatively stable, rapid wage growth has resulted in strong appreciation of the ULC-based REER, leaving it substantially higher than its historical average. More refined measures of exchange rate valuation—based on current account norms that take into account changes in the value of oil wealth over time—point to overvaluation of around 12 percent (Annex II). Nonetheless, the non-oil sector in Norway appears to remain internationally competitive. Market shares for Norway's main non-oil exports have remained stable, if not slightly increasing, over the last decade. Still, further appreciation of the krone, continued high wage growth, or a turnaround in the terms of trade would likely strain the profitability of the non-oil export and import-competing sectors going forward.

Price Level vs. Per capita GDP
(PPP basis)



Source: IMF.

Norway: REER
(Index, Jan. 2000=100)

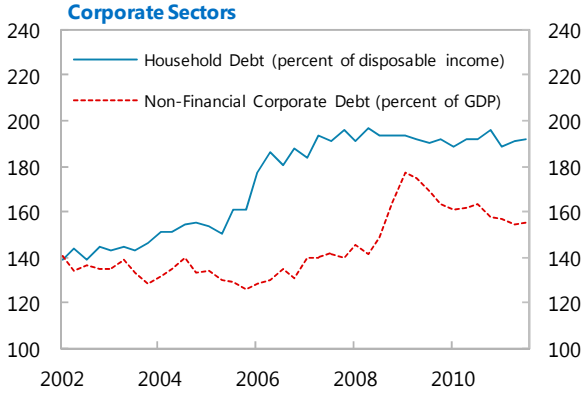


Source: IMF.

D. House Prices and Private-Sector Debt Levels Remain High

8. Despite broadly favorable macroeconomic performance, imbalances built up prior to the downturn persist. In the run-up to the recession, household debt—mainly mortgage debt—increased rapidly, reaching 200 percent of disposable income by early 2008 (Figure 6), twice the euro area average of 102 percent. During the downturn, the impact of falling incomes on households' debt-servicing capacity was mitigated by the drop in interest rates, given that about 95 percent of mortgages are at variable rates.

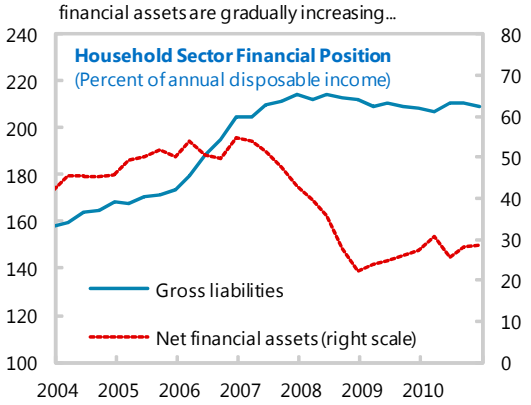
Norway: Debt Ratios of Household and Corporate Sectors



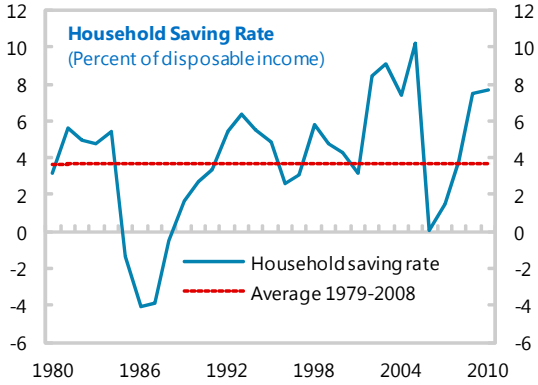
Sources: Haver; and IMF staff estimates.

Figure 6. Norway: Household and Corporate Sector

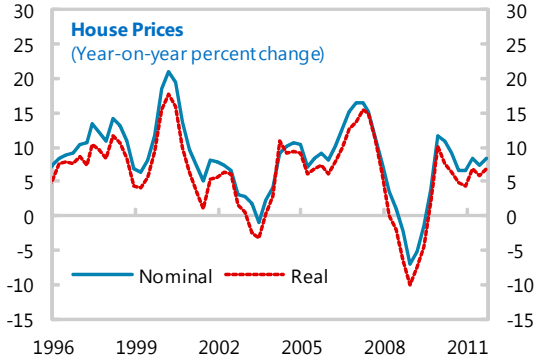
Household debt has stabilized since the crisis and financial assets are gradually increasing...



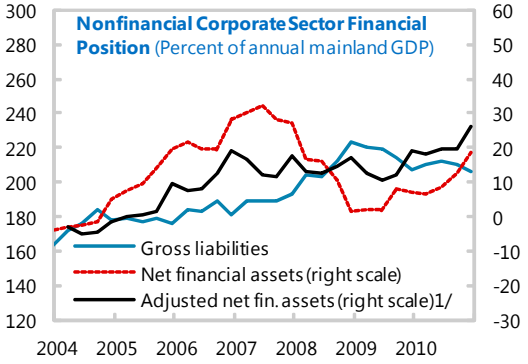
... partly thanks to the strong rebound in the saving rate.



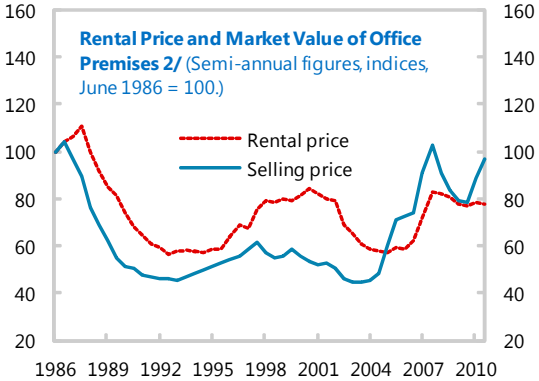
Household balance sheets have also been strengthened by the recovery in house prices.



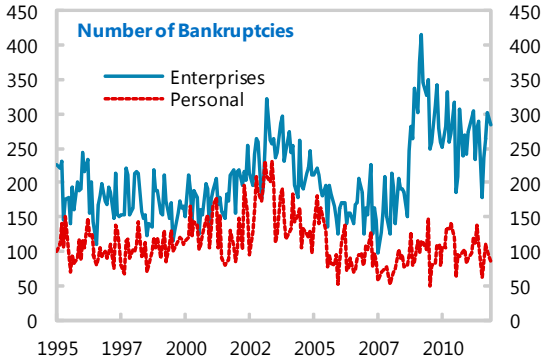
Nonfinancial corporations have moderately reduced liabilities and witnessed a recovery in financial assets' valuations...



... and in commercial real estate prices.

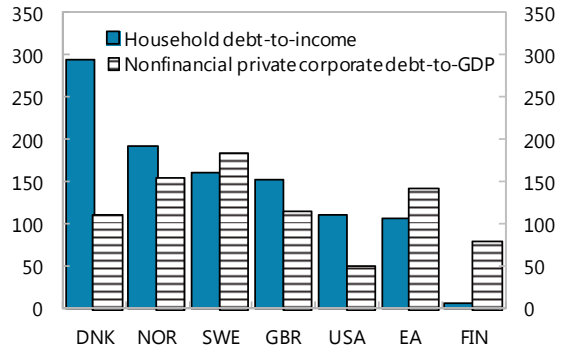


The improvement in household and corporate balance sheets has resulted in fewer bankruptcies.



Sources: Haver Analytics; OPAK, Statistics Norway; Norges Bank; and IMF staff calculations.
1/ Adjusted so as to reflect only the cumulative effect since 2004Q1 of transactions in assets and liabilities, thus stripping out valuation effects.
2/ High-standard offices centrally located in Oslo.

Debt Ratios
(Percent, latest available data)

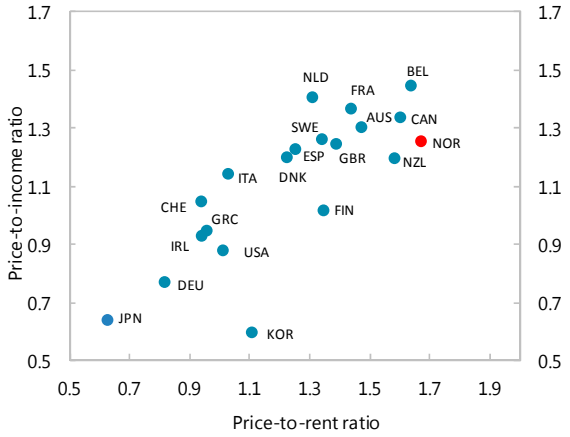


Sources: Haver; and IMF staff estimates.

Since the recession, households' debt-to-income ratio has stabilized, reflecting a somewhat higher saving rate. However, the debt ratio remains high and masks even more concerning developments at the high end of the distribution, where a growing share of households have debt-to-income ratios in excess of 500 percent. The ratio of nonfinancial corporate sector debt to GDP in Norway is also high relative to peers, but nonfinancial corporations have a positive net financial asset position (Figure 6).

9. Housing valuations continue to appear on the high side. House prices grew at an annual rate of 11 percent during the period 2004–07, much higher than the OECD average of 5½ percent. Prices dipped briefly during the recession, but then resumed their upward trend during the recovery, supported by sharp interest rate cuts and rebounding disposable income. House prices are now 20 percent higher than they were at end-2007. Standard metrics, such as price-to-rent and price-to-income ratios, indicate a risk of overvaluation. Indeed, the deviation of Norway's price-to-rent ratio from its historical average is the highest amongst all OECD economies. Model-based estimates that take into account a range of indicators suggest that price overvaluation could be in the range of 15-20 percent, though there is admittedly a high amount of uncertainty around this estimate (Annex III).

Housing: Price-to-rent ratio vs. Price-to-income ratio, 2011Q3
(Relative to historical average 1980–2011)



Sources: OECD; and IMF staff calculations.

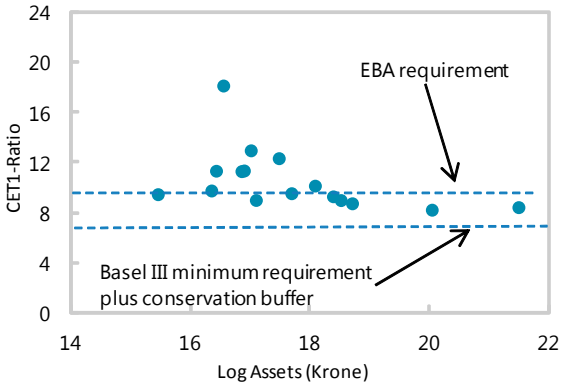
E. Financial Sector Balance Sheets Improving, but Vulnerabilities Remain

10. Credit growth has picked up, driven by demand from both households and corporates (Figures 7 and 8). Following a moderation during the recession due to sharp declines in bank borrowing by the nonfinancial corporate sector, credit growth has begun to accelerate and is currently growing at an annual rate of 6½ percent. Norges Bank's survey of banks points to strong demand for credit, particularly from households, likely driven by the relatively low levels of interest rates, low unemployment, and increases in house prices.

11. The financial sector has made progress in bolstering its balance sheets as it moves toward Basel III compliance (Figures 9 and 10). Tier-1 capital ratios have increased during the recovery due to higher retained profits on the back of strong earnings

growth. Although changes to risk weights through the use of internal models have helped boost the average tier-1 ratio, the ratio of bank capital to total assets has also increased during the recovery. However, the largest bank, DNB, which accounts for about a third of lending, will still have to raise its core tier 1 ratio from 7.9 percent to 9 percent by June 2012 to meet European Banking Authority requirements. DNB has said it will

Norway: Capital Ratios of Selected Banks
(Latest available)



Source: SNL.

achieve this via internal resources. Banks' non-performing loans increased during the recession, but have stabilized at 1½ percent of total loans. The loan loss rate has been particularly high for the shipping sector, which continues to be a source of credit risk in the face of weaker global growth.

Norway: Banks' Financial Soundness Indicators

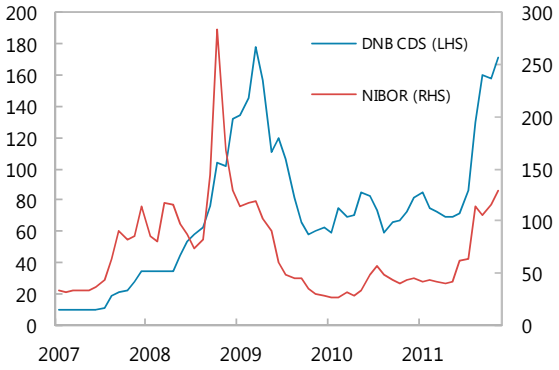
	Dec-06	Dec-07	Dec-08	Dec-09	Dec-10	Mar-11
Regulatory capital to risk-weighted assets	11.2	11.7	11.2	13.0	14.2	13.7
Capital to assets	7.0	6.4	5.9	6.0	6.4	6.3
Nonperforming loans to total loans	0.6	0.5	0.8	1.3	1.5	1.6
Provisions to nonperforming loans	74.2	67.0	53.5	33.3	31.2	33.8
Return on assets	0.9	0.8	0.5	0.8	1.0	…
Return on equity	18.4	17.0	10.7	11.6	13.4	…
Deposits to loans 1/						
Banks	65.4	67.5	71.6	83.2	86.1	90.6
Banks and mortgage companies	63.9	62.6	60.7	60.2	59.0	55.0

Sources: IMF Financial Soundness Indicators, Norges Bank.

1/ Latest observation as of September 2011.

12. Funding remains a key vulnerability. Norwegian banks finance almost 20 percent of their assets with short-term foreign wholesale funds. This funding structure exposes banks to disruptions in global interbank markets, as experienced during the post-Lehman market freeze and more recently due to the euro area crisis. The shortage of adequate liquid assets and the low deposit-to-loan ratio will make it difficult for Norwegian banks to meet the proposed Liquidity Coverage Ratio and Net Stable Funding ratios, as currently tabled by the Basel Committee.

CDS Spreads for DNB and NIBOR Rate
(Basis points)

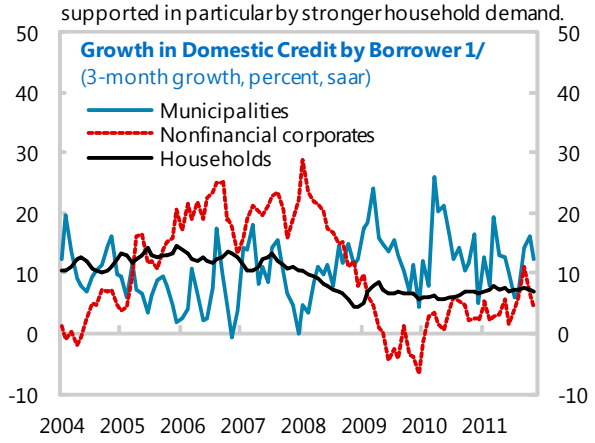


Sources: Norges Bank; and Haver Analytics.

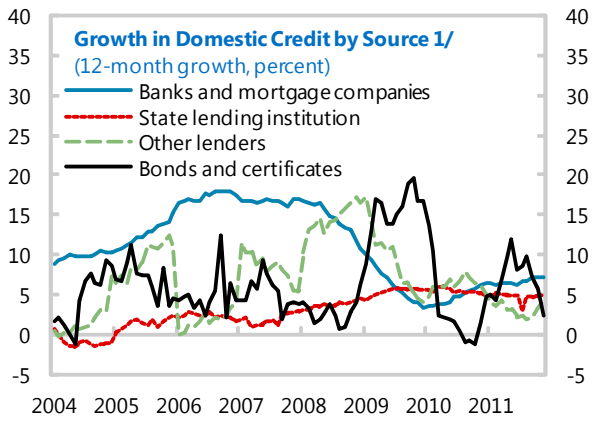
13. The growing importance of mortgage companies continues to affect the structure of Norway's financial sector. Starting in 2007, new legislation allowed specialized mortgage institutions—many of which are owned by banks—to raise funds by issuing covered bonds. This has increased the importance of these institutions, which now account for nearly half of new mortgages, and has been a factor supporting the buoyant housing market. It has also made the financial sector as a whole relatively more reliant on covered bond financing relative to deposits.

Figure 7. Norway: Credit Market Developments

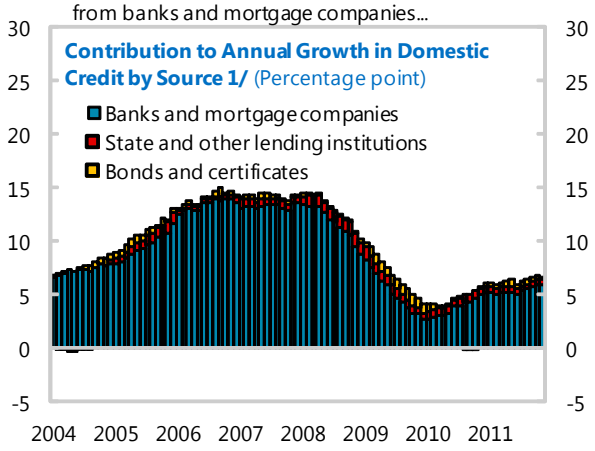
Domestic credit has grown solidly during the recovery, supported in particular by stronger household demand.



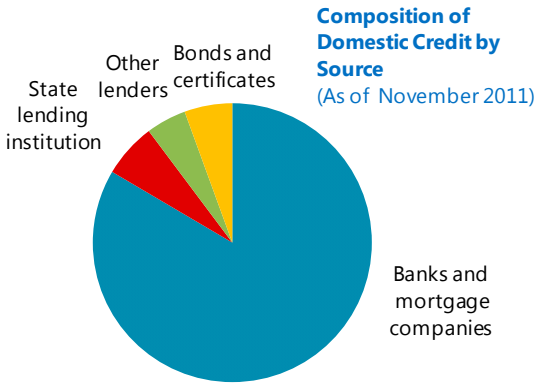
All forms of financing are expanding....



... but credit growth is primarily driven by lending from banks and mortgage companies...



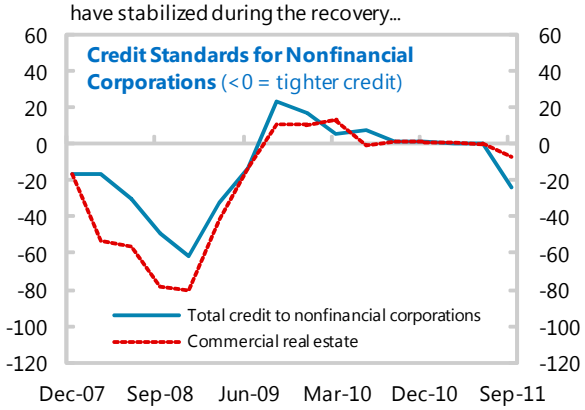
... which still provide about 80 percent of total domestic financing.



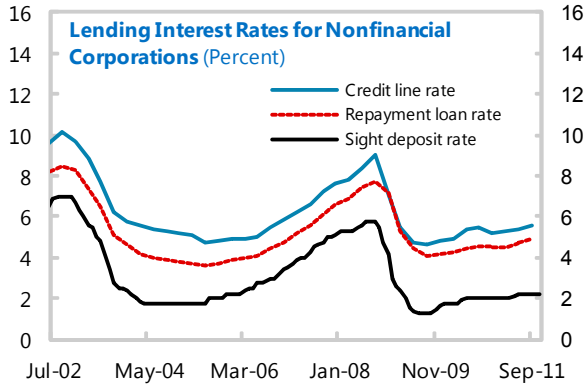
Sources: Statistics Norway; and IMF staff calculations.
1/ Contains foreign exchange denominated debt as well. Growth rate adjusted for exchange rate movements.

Figure 8. Norway: Credit Standards and Lending

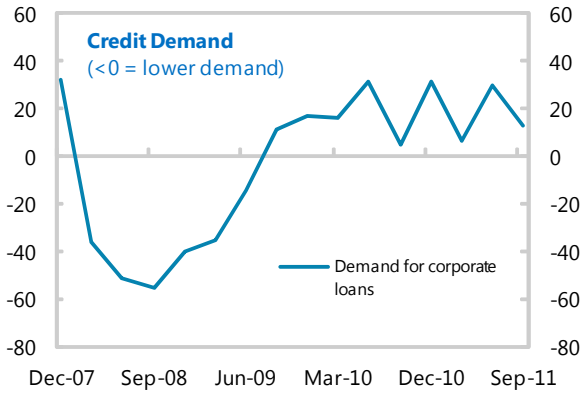
Lending standards to nonfinancial corporations have stabilized during the recovery...



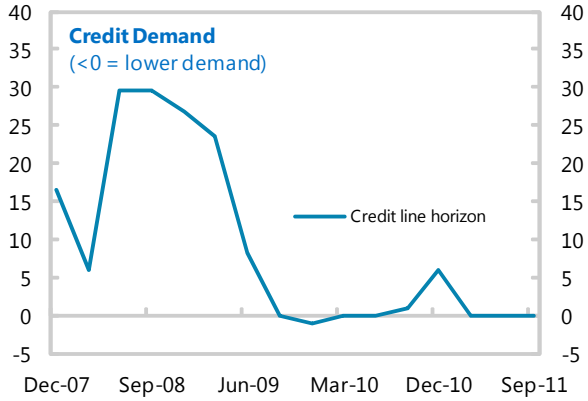
...and lending rates have broadly followed the policy rate.



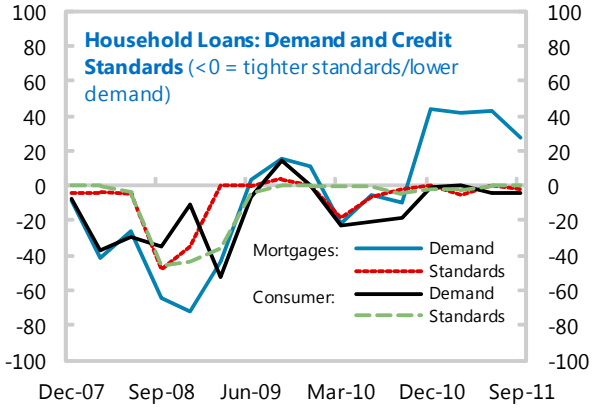
Credit demand for corporate loans is picking up...



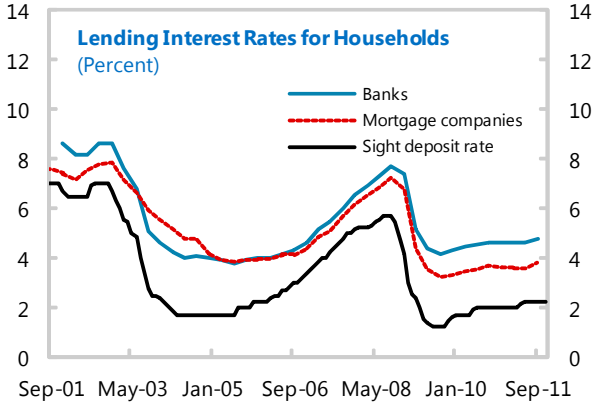
... while drawings on credit lines have stabilized.



Demand for mortgages has been strong during the recovery...



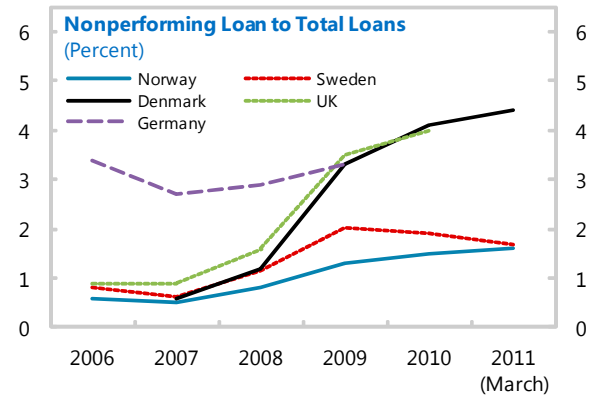
... partly stimulated by lower lending rates.



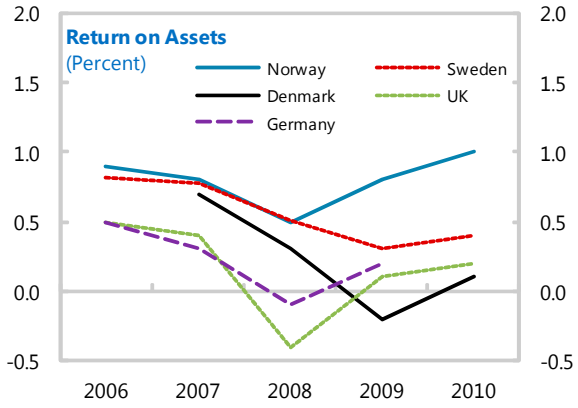
Sources: Haver Analytics; Norges Bank; and IMF staff calculations.

Figure 9. Norway: Nordic Banks' Relative Performance

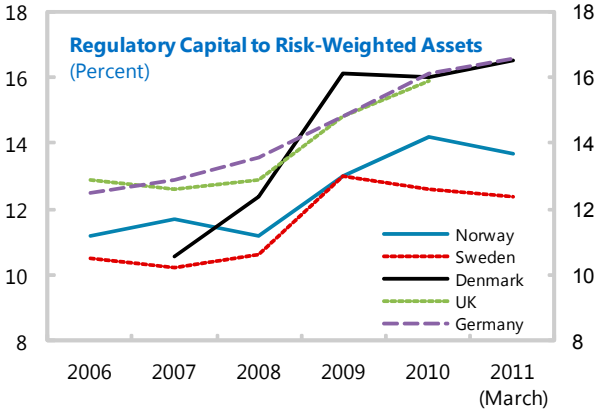
Loan quality has deteriorated at a slower pace than elsewhere in the region...



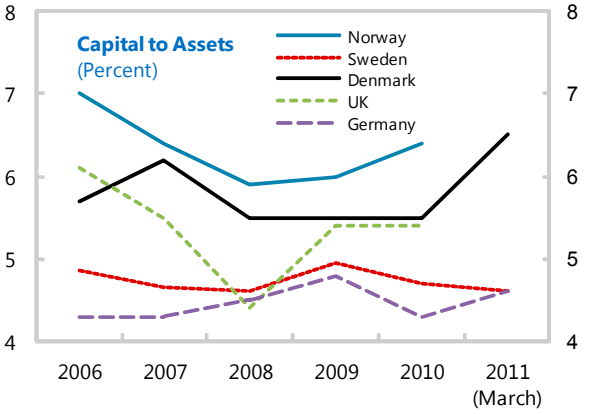
...helping support a recovery toward pre-crisis return on asset levels.



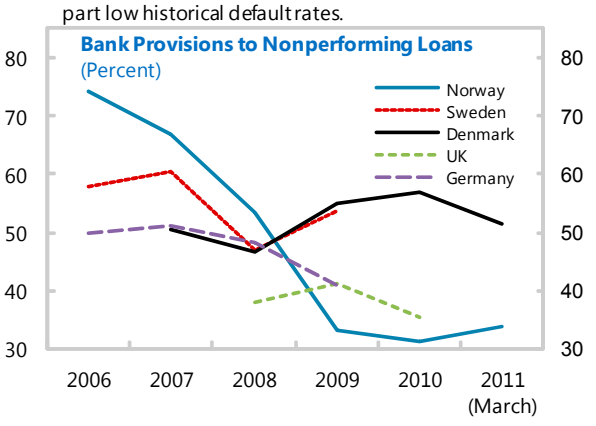
Capital ratios are within the regional range...



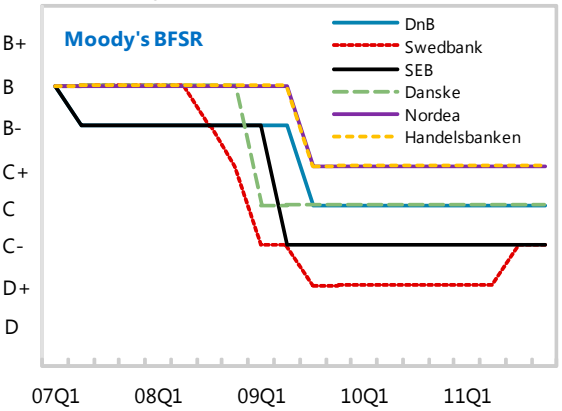
...though Norwegian banks are less levered.



However, provisioning is somewhat low, reflecting in part low historical default rates.



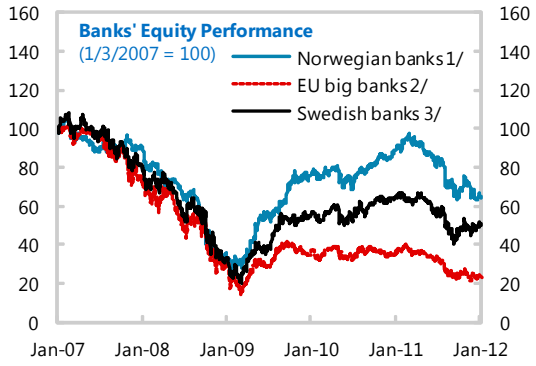
The market rating for DnB fell in line with other regional banks during the crisis.



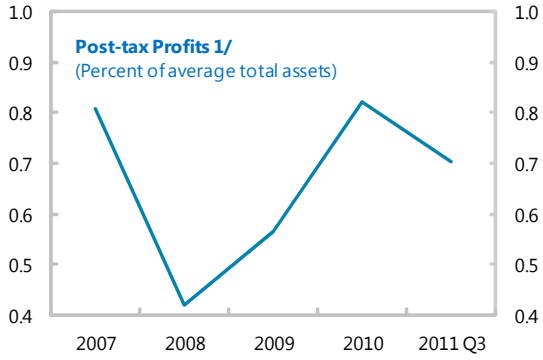
Sources: IMF Financial Soundness Indicators, Danish Financial Supervisory Authority; Moody's; Norges Bank; Sweden Financial Supervisory Authority; and IMF staff calculations.

Figure 10. Norway: Bank Performance

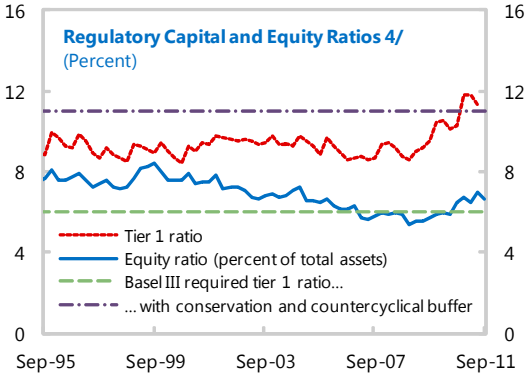
The stock market performance of Norwegian banks has been relatively strong during the recovery ..



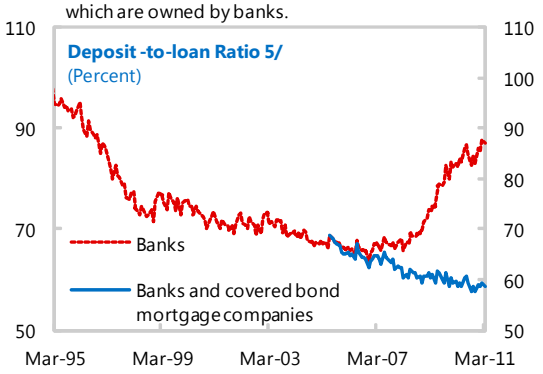
...supported by higher profitability.



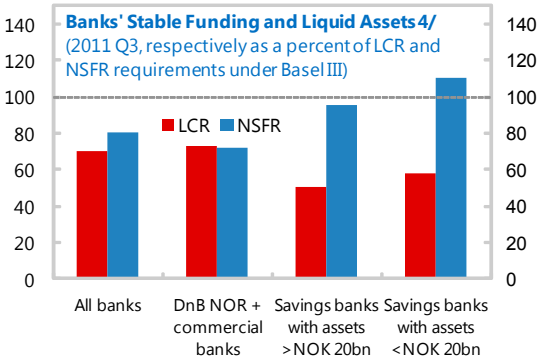
The banking sector has increased its capitalization...



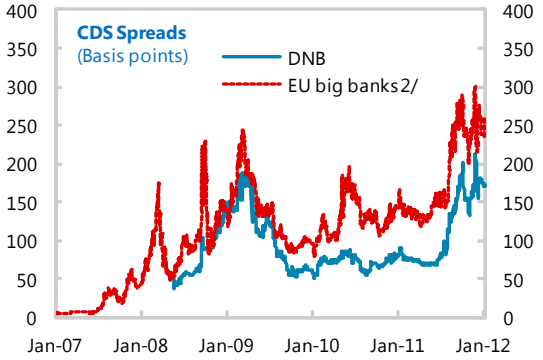
...and the deposit-to-loan ratio by transferring mortgages to mortgage companies, many of which are owned by banks.



Nonetheless, banks still suffer from relatively low liquidity...



...and heavy reliance on wholesale foreign funding that exposes banks to international financial turmoil.



Sources: Bloomberg; Datastream; and Norges Bank.
1/ All banks excluding branches of foreign banks in Norway. The 2011 return is computed over the 2010 Q4 - 2011 Q3 period.
2/ Simple average of RBS, Lloyds, Barclays, HSBC, and UBS.
3/ Simple average of Danske, Swebdank, SEB, and Handelsbanken.
4/ All banks except branches of foreign banks in Norway.
5/ All banks and covered bond mortgage companies excluding branches and subsidiaries of foreign banks.

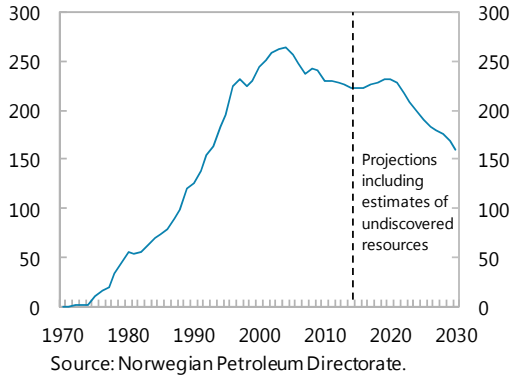
OUTLOOK, RISKS, AND SPILLOVERS

14. In staff's central scenario, growth is projected to continue at a moderate pace. Mainland GDP growth is likely to ease in 2012 to 2.2 percent, reflecting global weakness, which has caused manufacturing and consumer confidence indicators in Norway to recently dip. As this soft patch passes and with the output gap nearly closed, mainland GDP growth should plateau over the medium term near the potential growth rate of 2¾ percent (Table 2). This estimate for potential growth is based on the sum of

- labor productivity growth of 1.6 percent per year—the average growth rate over the last two decades—and
- working-age population growth of 1.1 percent per year; this relatively rapid growth is driven by high rates of net immigration, which are expected to persist in the medium term.

Meanwhile, the growth rate of total GDP is expected to be about ¾ percentage points below mainland growth over the forecast horizon due to declining oil and gas production.

Oil and Gas Production
(Million standard cubic meter oil equivalent per year)



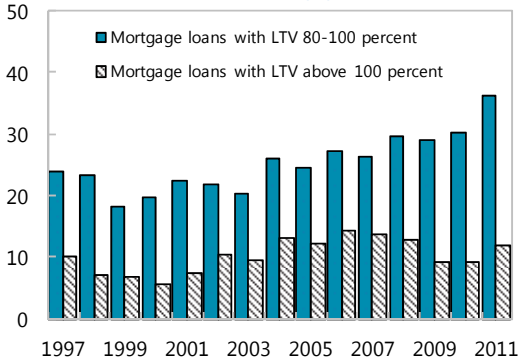
Source: Norwegian Petroleum Directorate.

15. The composition of growth is expected to gradually rebalance toward less reliance on domestic demand. In the near term, growth will remain domestic demand-led, given (i) solid wage growth; (ii) continued near-term momentum in the housing market; and (iii) sluggish growth in major trading partners. As a result, the non-oil trade deficit is expected to deteriorate slightly. Over the medium term, growth is projected to slowly rebalance as macroeconomic policies gradually tighten (see next section), housing valuations slowly return to more normal levels, and external demand gradually improves, resulting in a stabilization of the non-oil trade deficit.

16. However, this "soft landing" in the relatively benign central scenario is subject to large risks, as highlighted in the Risk Assessment Matrix (Annex IV). Two of the most notable risks are the following:

- *Collapse in property markets*: With housing valuations elevated, there is a significant risk of a large price reversal, which would depress residential investment and dampen consumption via wealth effects. High loan-to-value (LTV) ratios also imply

Residential Mortgage Loans by LTV
(Percent of total residential mortgages)



Sources: FSA; and Residential Mortgage Loan Survey.

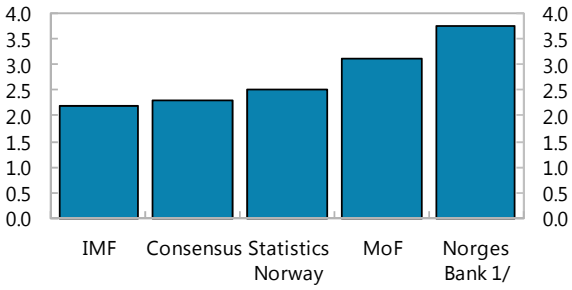
that households do not have a large equity buffer in the event of a fall in house prices, which could lead to higher default rates, placing stress on bank balance sheets. Overall, econometric evidence suggests that a 10 percentage point drop in house prices is associated with lower GDP growth of roughly 1 percentage point in Norway (Annex III). Banks are also vulnerable to a correction in commercial property prices, as lending to this sector accounts for the bulk of corporate lending.

- *Intensification of eurozone crisis*: Direct trade and financial linkages to the most vulnerable eurozone countries are limited (Annex V). However, the deceleration in global growth that would likely accompany an intensification of the eurozone crisis would significantly affect Norway's economy via lower non-oil exports (60 percent of which are to Europe) and shaken consumer confidence. Severe eurozone turmoil could also precipitate other, interrelated risks flagged in the Risk Assessment Matrix. For example, it would likely heighten stress in international interbank markets, hampering Norwegian banks' access to funding and possibly leading to fire sales that threaten bank profitability, though such liquidity stresses could be mitigated by official liquidity support, as during the Lehman crisis. Severe eurozone turmoil could also affect Norway through lower oil prices, especially if these fall below US$70/barrel—roughly the cost of production in Norway's most expensive oil fields—for an extended period, as this would depress oil investment.

Authorities' views

17. The authorities broadly share these views on the central scenario and key risks. The proposed government budget projects 3 percent growth for 2012, somewhat higher than staff's latest projection. However, the budget's forecast was made in early October and thus was not able to reflect the significant deterioration in the international growth outlook since then.

Norway: Forecasts for 2012 Mainland GDP Growth
(Percent)



Sources: Consensus Forecasts; 2012 Budget; Statistics Norway; Norges Bank; and IMF staff estimates.
1/ Norges Bank's forecast is based on the October 2011 *Monetary Policy Report*. Norges Bank indicated in its December monetary policy statement that the outlook has since weakened, but it has not yet published a new point forecast for 2012.

POLICY DISCUSSIONS

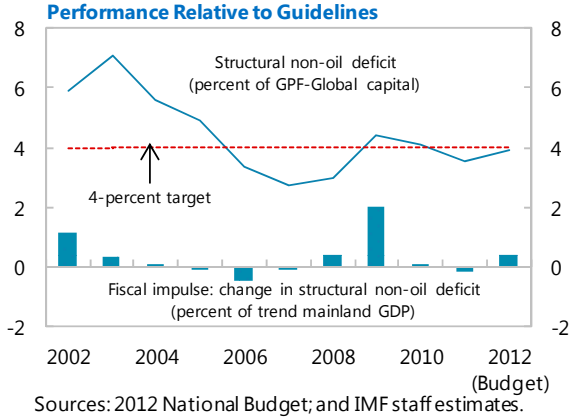
A. The Policy Mix

18. A careful policy mix will help Norway address its multiple policy challenges. Macroprudential tightening is needed to reduce financial stability risks associated with high household debt and elevated house prices and to continue moving to a safer financial system, in line with global and European reforms. Structural fiscal adjustment is also necessary to reduce projected long-run fiscal gaps (see below). However, macroprudential and fiscal tightening should be sequenced carefully to avoid re-opening a negative output gap, especially in light of heightened global risks. Of the two, macroprudential tightening is the more pressing near-term priority. To help balance this, the neutral stance envisaged in the 2012 budget is appropriate, though fiscal tightening should commence starting in 2013 under the central scenario. If macroprudential and fiscal policies tighten over the medium term, monetary policy will be able to stay loose for longer to help ensure that output stays at potential. Such a policy mix will also reduce risks of excessive exchange rate appreciation and associated competitiveness problems. However, policies should adjust from the paths envisaged above if shocks cause substantial deviations from the central scenario.

B. Fiscal Policy

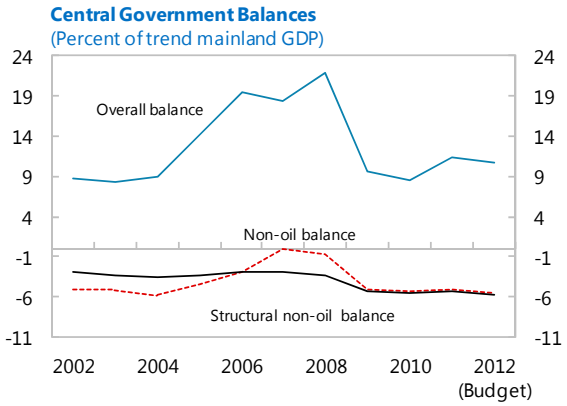
19. The 2012 budget aims for a broadly neutral stance. The budget targets a structural deficit approximately equal to 4 percent of the GPF-G's capital—the target under Norway's fiscal guidelines. With the GPF-G's capital growing, the structural non-oil deficit as a percent of trend mainland GDP will increase, but only by 0.3 percent of mainland GDP—implying a broadly neutral fiscal impulse. No major discretionary policy changes are planned.

Central Government Fiscal Stance and Performance Relative to Guidelines

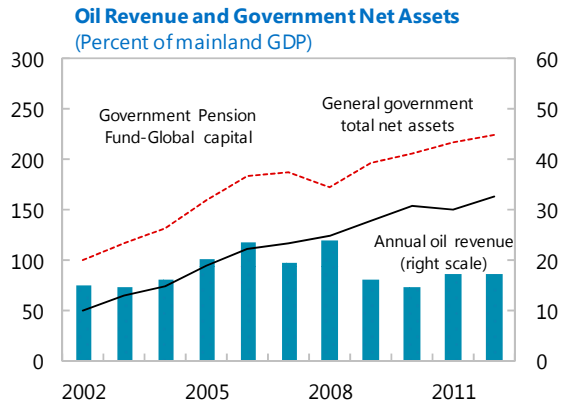


Sources: 2012 National Budget; and IMF staff estimates.

20. Norway's overall fiscal position is currently strong. The central government is expected to register an overall surplus of 10½ percent of trend mainland GDP in 2012. Gross government debt will remain around 60 percent of mainland GDP while the government's net asset position (including the GPF-G) will rise to 225 percent of mainland GDP.

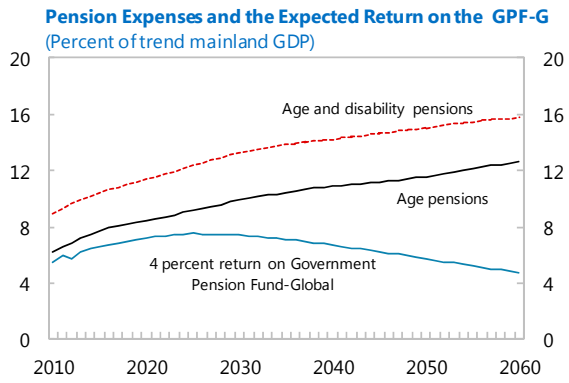


Sources: 2012 National Budget; and IMF staff estimates.



Sources: 2012 National Budget; and IMF staff estimates.

21. However, the government faces large fiscal challenges over the long run. The GPF-G will eventually start declining as a share of mainland GDP as new oil revenues slow and as its real return is spent each year. Returns on the GPF-G available for budgetary use will thus also fall as a percent of mainland GDP, starting in the mid-2020s. At the same time, spending on age and disability pensions will rise steadily as a percent of mainland GDP due to population aging. Healthcare spending will also rise due both to population aging and technological change. Non-oil revenue that is indirectly dependent on the oil sector (e.g., VAT on consumption out of oil-related wages and profits) will also decline with this sector. The net result is a substantial long-run fiscal gap.



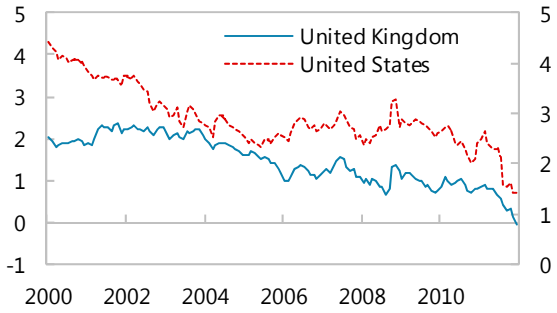
Source: 2012 National Budget.

22. In this context, there is a good case for aiming to gradually spend less than 4 percent of GPF-G capital over the medium term. The following considerations support this approach:

- With the output gap closing, some overperformance against the 4 percent rule will be necessary during the expansion phase of the cycle to re-build a buffer to use for discretionary stimulus during the next downturn, thereby ensuring that the 4 percent target is at least met on average over the cycle;
- Real yields on long-term government bonds in major advanced countries have fallen sharply over the last decade, suggesting that maintaining a 4 percent real return on the GPF-G's assets may be challenging for the foreseeable future; this implies that spending out of GPF-G assets

may need to be less than 4 percent if the goal of limiting spending to the real return is to be met;[3] and

Real Yield on 20-Year Inflation-Indexed Government Bonds 1/
(Percent)



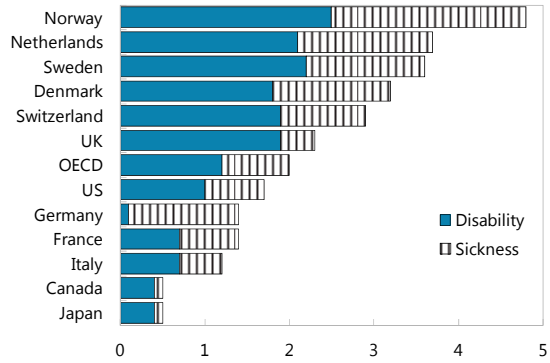
Source: Haver Analytics.
1/ GBR: 20-year real rate on zero-coupon bonds. USA: real yield on 20-year TIPS.

- Given the looming long-run fiscal gap, gradual tightening now will help smooth the path of eventual adjustment.

23. Further entitlement reform is also key to reducing long-run fiscal pressures. Options for such reform include the following:

• Requiring employers to contribute to longer-term sick leave benefits (currently they contribute only for the first 16 days) to improve their incentives to accept returning workers and to monitor use of longer-term sick leave, which is very high by international standards; this would need to be offset by cuts in employer payroll taxes or a reduction in the days for which employers pay 100 percent of benefits in order to keep overall employment costs unchanged.

Public Spending on Disability and Sickness Benefits
(2007, percent of GDP)



Source: OECD.

• Increasing the use of social security physicians in assessing eligibility for disability benefits in order to promote more uniform assessments and limit abuse.

• Reforming public sector pensions in line with recent reforms of the National Insurance Scheme in order to increase incentives to remain in the labor force.

• Changing the annual increase in pensions from wage growth minus 0.75 percent to the more internationally common practice of CPI inflation. This would yield fiscal savings while preserving the real value of pensions during retirement.

24. Tax reform would also help reduce macroeconomic vulnerabilities.

- *Reducing tax subsidies for owner-occupied housing*. One structural factor behind high mortgage debt in Norway is the very favorable tax treatment provided to owner-occupied housing: mortgage interest is tax-deductible, the tax on imputed rent was abolished in 2005, and effective rates of property taxation are amongst the lowest in the OECD. Gradually reducing the implicit tax subsidy for owner-occupied housing—perhaps by introducing a fixed nominal cap on the

[3] The fiscal guidelines, which have served Norway well, call for spending only the real long-run return on the GPF-G, whatever that return is deemed to be (i.e., the 4 percent assumption should be changed if the expected real long-run return is deemed to have fallen).

amount of a mortgage that is eligible for interest deduction and by bringing property tax valuations closer to market valuations—could free resources for productivity-enhancing tax cuts, improve progressivity, and bolster financial stability by reducing risks associated with excessive mortgage debt.

- *Promoting increased use of equity finance.* The corporate tax creates a bias against equity finance and promotes excessive leverage because interest on debt is tax-deductible while equity finance is not. This bias could be reduced by introducing an Allowance for Corporate Equity (ACE)—an explicit deduction for the cost of equity finance, as in Belgium (among other countries) and as proposed by the IMF Staff Discussion Note *Tax Biases to Debt Finance: Assessing the Problem, Finding Solutions*. Such a reform could improve incentives for both financial and nonfinancial corporates to reduce leverage, thereby promoting financial stability. Fiscal space for such a reform could be created by the housing tax reforms noted above, other reforms to corporate and personal income taxes, or restraint on spending growth.

Authorities' views

25. The authorities reiterated their commitment to fiscal discipline and to adhering to the fiscal guidelines. They concurred with staff's recommendation for a somewhat tighter structural deficit over the medium term to ensure that the guidelines are met on average over the cycle, though they considered 4 percent to remain an appropriate estimate of the likely real return on the GPF-G over time. The authorities acknowledged the long-run fiscal challenges, including the need to address high enrollment rates in sickness and disability benefits. In this regard, they noted that recent reforms had been undertaken to require employers and physicians to monitor use of sick leave benefits earlier and more closely (Box 1). Regarding the introduction of an ACE, the authorities expressed concerns about possible fiscal losses and prefer to further observe other countries' experiences before adopting it.

C. Monetary Policy

26. Inflation is expected to rise back to the 2½ percent target only gradually. Solid wage growth, the closing of the output gap, and stabilization of exchange rate appreciation are expected to increase inflation going forward. On the other hand, the recent moderation of global commodity prices should be disinflationary. On balance, headline inflation (currently 0.2 percent) is expected to slowly rise to the 2½ percent target by 2013. Consistent with this view, survey respondents expect inflation of 2.4 percent two years hence (Figure 5).

27. Given this outlook, the current monetary stance remains appropriate. The current policy rate is broadly in line with both calibrated and estimated Taylor rules, as below-target inflation and a closed output gap imply that the current policy rate should remain below its steady state level, which is estimated to be 4½ percent.[4] Moreover, the

[4] The calibrated Taylor rule uses standard coefficients (those used by Taylor) of 1.5 on the deviation of inflation from target and 0.5 on the output gap.

Box 1. Authorities' Response to Past IMF Policy Recommendations

The authorities' macroeconomic policies over the last two years have been broadly in line with past Fund advice. They have also adopted some structural reforms recommended by the Fund at the time of the last Article IV consultation, though deeper reform is still needed in some areas.

Monetary and financial sector policies

Norges Bank gradually reduced monetary stimulus during 2010 and early 2011, as recommended by Directors at the time of the last Article IV consultation. Given Norway's relatively favorable cyclical position, Norges Bank embarked on a tightening cycle in 2009, raising the policy rate from a low of 1¼ percent to 2¼ percent by May 2011. The pace of tightening was gradual to avoid deflation and undermining the nascent recovery while, at the same time, addressing macrofinancial risks associated with high house prices and household debt. Norges Bank appropriately eased rates by 50 basis points in December 2011, given heightened global risks and ECB rate cuts.

The government has made efforts to bolster banks' capital and liquidity buffers, though vulnerabilities remain. Capital ratios have generally improved over the last 2 years (Figures 9 and 10), as the FSA continues to encourage banks to bolster capital through retained earnings by limiting dividends. However, progress on reducing liquidity risks has been mixed: the average maturity of wholesale liabilities has been lengthened, but the financial sector-wide (banks plus mortgage companies) deposit-to-loan ratio remains low and falling.

The authorities have adopted targeted prudential measures, but stronger measures are necessary. Following the recommendations made in the 2009 Article IV consultation, the FSA introduced guidelines in March 2010 that introduced recommended limits on LTV and LTI ratios for mortgages. The FSA further lowered these limits in December 2011. However, the recommendations are not hard caps, and the percentage of loans exceeding these limits has actually risen since they were initially introduced. More binding and strongly enforced limits are thus necessary to contain risks.

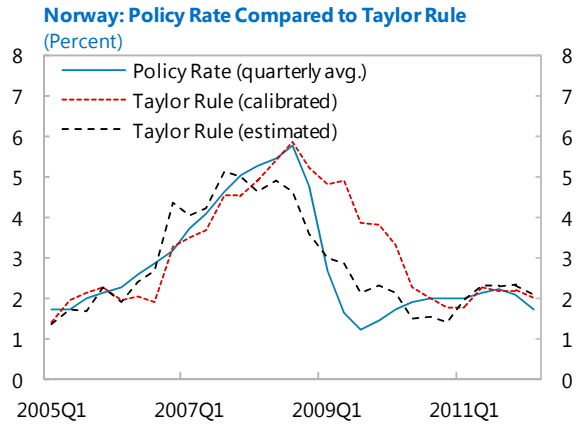
Fiscal and structural policies

The authorities have reduced the structural nonoil deficit back below the 4 percent target. The 2009 Article IV consultation recommended that the deficit be brought back below 4 percent of GPF-G capital—the target under Norway's fiscal guidelines—by the end of the current parliament (2013) in order to reverse the stimulus employed during the recession and ensure the target is met on average over the cycle, as called for by the guidelines. Large positive surprises in structural revenue in 2010 made it possible to return below the target in 2011.

There has been some progress on recommendations to reform sickness and disability benefit schemes, which are critical to contain expenditure growth in the long run. In the summer of 2011, reforms were introduced to enable closer monitoring of sick leave with the aim of facilitating a more rapid return to work. These reforms are in line with past Fund and OECD advice. However, further efforts (as outlined in the Policy Discussion section) are necessary to reduce the persistently high enrollment rates in sick leave and disability benefits.

Gradually reducing tax subsidies for housing—a long-standing Fund recommendation—remains challenging. Modest measures were taken in 2010 to move housing valuation assessments closer to market values. However, the tax code still features a strong bias toward owner-occupied housing and accumulation of mortgage debt.

slight gap between the Taylor rule and the current policy rate can be explained by the standard Taylor rule's failure to take into account financial sector stress conditions, which are currently elevated and thus justify a policy rate slightly below the standard Taylor rule level. Similarly, severe financial stress in early 2009 justified some loosening relative to the Taylor rule during this period, while the buoyant financial conditions (i.e., low risk aversion and easy credit conditions) during the 2004-07 boom period suggest that the policy may have been somewhat loose during this period after taking this factor into account.



Sources: Statistics Norway; and IMF staff estimates.

28. Norges Bank should be prepared to respond nimbly if the outlook changes. In particular, if macroprudential tightening does not occur or is not sufficiently rapid to arrest rising risks associated with elevated house prices and household debt, monetary policy may need to tighten. Conversely, a sharper-than-expected deterioration in external conditions (e.g., due to intensified eurozone turmoil) could necessitate monetary easing.

Authorities' views

29. The authorities agreed that monetary policy should be the first line of defense if risks materialize. If conditions warrant, measures could include not only policy rate changes, but also liquidity measures, as during the Lehman crisis. However, the authorities noted that monetary policy faces a delicate task of balancing the need to address risks associated with a worsening global outlook against the need to curb robust domestic credit growth. In this regard, they concurred with staff's recommendation for tighter macroprudential policy, which should allow monetary policy to stay accommodative longer. However, they also noted that there is much uncertainty regarding the effectiveness of macroprudential policies.

D. Financial Sector Issues

Institutional Framework

30. Responsibility for financial stability and macroprudential policy is somewhat fragmented in Norway. Norges Bank, the Ministry of Finance, and the Financial Supervisory Authority (FSA), which is an independent agency reporting to the Ministry of Finance, all produce regular assessments of financial stability risks. Although cooperation between these agencies was relatively good during the 2008-09 global financial crisis, coordination and accountability could be enhanced by a clearer assignment of responsibilities aligned with institutional strengths.

31. The Norwegian government recognizes these issues and—like a number of other governments—is reviewing its institutional framework. Specifically, the Norwegian authorities have set up a working group that is expected to make recommendations on a new macroprudential framework in early 2012.

32. Recent IMF staff analysis suggests several guiding principles for strong macroprudential frameworks.[5] These include

- promoting operational independence to shield macroprudential policy from political cycles, as with monetary policy;
- establishing clear lines of accountability;
- facilitating information-sharing across policymaking institutions; and
- bolstering the role of the central bank to harness its macroeconomic expertise and promote coordination with liquidity management, payment systems oversight, and monetary policy.

33. A recent proposal by the Financial Crisis Commission (FCC) achieves many of these objectives. The FCC was set up to review Norwegian financial sector regulation in the aftermath of the crisis. The FCC has recommended that Norges Bank be given the main responsibility for assessing macroprudential risks, given its macroeconomic expertise. Under this proposal, Norges Bank would have primary responsibility for assessing macroprudential risks and recommending changes in macroprudential policies. The FSA would then be required to either implement Norges Bank's recommendations or publicly explain why it has chosen not to do so. This proposal does well in promoting operational independence, creating clear lines of accountability, and harnessing central bank expertise. In addition, the "comply or explain" rule provides a useful mechanism for institutions to challenge each other's views. One drawback with this approach is that the institutional separation could inhibit information-sharing and timely risk identification, though this concern could be mitigated through the establishment of appropriate fora and protocols. Proposals for other institutional frameworks have also been made, including giving a key role to the Ministry of Finance. However, this approach would be less successful in shielding macroprudential policy from the political cycle.

[5] See "Towards Effective Macroprudential Policy Frameworks: An Assessment of Stylized Institutional Models" (IMF, Monetary and Capital Markets Department, 2011).

Financial Sector Policies

34. The authorities are taking steps to reduce financial stability risks related to high levels of household debt and house prices. In March 2010, the Financial Supervisory Authority (FSA) instituted new guidelines for residential mortgage lending. These guidelines recommended that

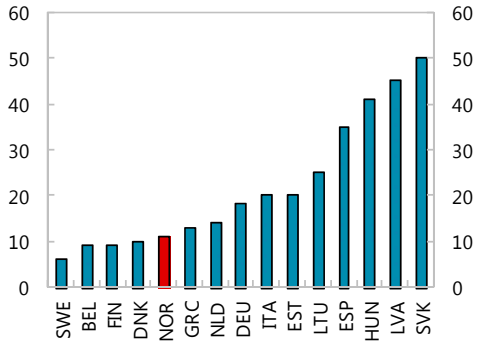
- LTV ratios on mortgages should generally not exceed 90 percent;
- LTVs on home equity loans should generally not exceed 75 percent; and
- loan-to-income (LTI) ratios on mortgages should generally not exceed 300 percent.

In December 2011, the FSA tightened these guidelines further, including by lowering the maximum LTV on mortgages to 85 percent, lowering the maximum LTV on home equity loans to 70 percent, and recommending that banks allow for an interest rate increase of 5 percentage points when assessing a borrower's debt-service ability.

35. These actions are welcome, but need to be more tightly enforced to be sufficiently effective. The LTV and LTI maximums are not hard caps—they can be exceeded if, for example, banks undertake a special prudential assessment. Indeed, an FSA survey in Autumn 2011 found that loans with LTVs exceeding the recommended 90 percent accounted for 38 percent of mortgages for home purchases and 26 percent of all new mortgages—both higher numbers than before the FSA issued its guidelines recommending that LTVs do not exceed 90 percent. More binding guidelines are thus necessary to achieve the desired reduction in high-risk loans.

36. Regulatory risk weights on residential mortgages could also be raised, as these are relatively low. One risk with such action is that it could be undermined by increased lending by Norwegian branches of banks based elsewhere in the European Economic Area (EEA), since Norwegian regulation does not apply to these branches under EEA rules. To prevent such regulatory

Mortgage Risk Weights 1/
(Percent)



Source: Speech by Riksbank Gov. Stefan Ingves, March 2011.
1/ As of March 2011.

arbitrage, the Norwegian authorities may need to seek agreement from foreign regulators to apply Norwegian risk weights on mortgage loans extended by foreign banks to Norwegian households (i.e., jurisdictional reciprocity). An alternative approach would be for all Nordic countries to raise risk weights on mortgages in a coordinated manner. Such cooperation should be feasible, given that almost all major foreign banks operating in Norway are based in a few nearby Nordic countries. Indeed, the recently established Nordic-Baltic Stability Group (see below) should help facilitate such cooperation.

37. Continued build-up of liquidity and capital buffers would further reduce risks. As noted earlier, meeting the new liquidity requirements under Basel III will be challenging for Norwegian banks, given their

dependence on short-term wholesale funding and the limited amount of Norwegian sovereign bonds that can serve as liquid assets. To reduce this challenge, banks should be encouraged to gradually extend the term of their wholesale funding. Norwegian banks are better positioned in regard to capital, with an average tier 1 capital ratio over 11 percent. Nonetheless, continued efforts to encourage banks to restrain dividend payments and remuneration are appropriate, given the recent spike in global risks and ongoing risks associated with elevated real estate prices and high levels of private-sector debt in Norway.

38. Progress has been made in improving mechanisms for cross-border resolution since the last Article IV consultation. Norway's financial system is closely interlinked with neighboring countries: the largest bank, DNB, has significant operations in other Nordic countries while foreign-owned banks account for about a third of lending in Norway. Mechanisms to ensure an orderly resolution of cross-border institutions in the event of a crisis are thus critical to promoting financial stability. Significant progress toward this goal occurred in August 2010 with the creation of the Nordic-Baltic Stability Group, which included a preliminary ex ante burden-sharing formula and the establishment of a regional forum to discuss financial stability issues. However, the formula is not legally binding and therefore could be re-opened in the heat of a crisis.

Authorities' views

39. The authorities reiterated their commitment to financial stability, especially in light of growing external risks. In this regard, they agreed with staff on the need to continue efforts to bolster capital levels, especially for the largest Norwegian banks. However, the authorities expressed concern that the upcoming European Union Capital Requirements Directive could unduly impede flexibility with regards to exceeding Basel III regulatory minima. The authorities also agreed in principle on the need to tighten macroprudential policies in the current environment while also indicating a need to move cautiously, given uncertainties regarding the appropriate objectives, targets, institutional structure, and tools for macroprudential policies. The authorities concurred with staff on the need to consider increasing risk weights for mortgages in coordination with regional partners, but noted that the transition rules to Basel III, wherein 80 percent of Basel I limits serve as a transitional floor and which the authorities decided on December 20, 2011, to keep in force until further notice, also indirectly raise the risk weights for mortgages. They also considered the FSA's recent establishment and tightening of recommended limits on LTV and LTI ratios to be suitable tools for reducing risks associated with high household debt.

STAFF APPRAISAL

40. Norway's economy continues to perform well amidst considerable global turbulence. Economic recovery has been assisted by robust consumer spending, improving terms of trade, a rebounding housing market, and supportive policies, including low interest rates and temporary fiscal stimulus employed during the recession.

41. Going forward, moderately paced growth is expected to continue. Mainland GDP is projected to grow by around 2¼ percent in 2012. Expansion will be mostly propelled by domestic demand, given solid wage growth, continued momentum in the housing market, and sluggish growth amongst major trading partners. The closing of the output gap, solid wage growth, and stabilization of exchange rate appreciation should slowly push up inflation from its current low rates toward the 2½ percent target over the next two years. Over the medium term, growth is expected to stay near its potential rate of 2¾ percent, but gradually become more balanced as external demand slowly improves and as domestic demand eases due to tighter macroeconomic policies and eventual cooling of the housing market.

42. This relatively benign central scenario is subject to significant risks. One important risk is intensified turmoil in the eurozone. Although Norway's economy is better placed than many in Europe to weather such stress, Norway would undoubtedly be affected via shaken consumer confidence, lower non-oil exports and oil prices, and strains in international interbank markets. A key domestic risk is that buoyant house prices may eventually reverse, with adverse consequences for consumption, residential investment, and financial stability, especially given very high levels of household debt.

43. A careful policy mix will help reduce risks while supporting growth. Tighter macroprudential policies are needed to reduce risks associated with high household debt and elevated house prices. Over the medium term, fiscal adjustment is also necessary (i) to rebuild precautionary fiscal buffers and ensure that the fiscal guidelines—which have served Norway well—are met on average over the cycle and (ii) given that the real return on the GPF-G may well fall short of the assumed 4 percent for an extended period. Fiscal adjustment will also help reduce the large long-run fiscal gap. However, macroprudential and fiscal tightening should be sequenced carefully to avoid excessively contractionary policy in the near term, especially given heightened global risks. Of the two, macroprudential tightening is the more pressing near-term priority and should proceed first. Fiscal tightening would be appropriate starting in 2013 under the central scenario. The contractionary effects from macroprudential and medium-term fiscal tightening can be largely offset by keeping monetary policy looser than it would be otherwise. Such a mix of relatively tight fiscal and loose monetary policy will also reduce risks of excessive exchange rate appreciation and associated competitiveness problems.

44. Monetary policy should be the first line of defense if shocks cause deviations from the central scenario. In particular, a sharper-than-expected deterioration of external conditions could necessitate monetary easing. Conversely, if macroprudential

tightening does not occur or is ineffective in arresting financial stability risks, monetary tightening may be necessary.

45. On macroprudential tightening, a number of specific measures could help reduce financial stability risks. The authorities have already taken some welcome actions in this regard, such as the introduction of recommended limits on LTV and LTI ratios for mortgages. Further actions could include making these limits more binding, with less scope for banks to exceed them based on subjective judgment; raising minimum risk weights on mortgages, in coordination with other Nordic countries to limit the scope for cross-border regulatory arbitrage; and reducing the degree to which the tax code provides incentives for households and corporations to leverage themselves. The phasing in of these measures should be gradual and take into account their joint effect to avoid excessive disruptions to housing markets.

46. Ongoing efforts to bolster capital and liquidity buffers are also welcome. Although capital ratios have strengthened in recent years, some banks (especially large banks) need to build further capital to ensure that Basel III core tier 1 equity requirements are safely met, given heightened risks both domestically and abroad. The encouragement of banks to achieve these goals via restraint of dividends and remuneration is thus welcome. It will also be important to lower liquidity risks—which remain an important vulnerability—by reducing banks' reliance on short-term wholesale funding.

47. Financial stability may further benefit from establishing a more formal framework for countercyclical macroprudential policy. Good guiding principles for such a framework include to establish clear lines of accountability; to shield macroprudential policy from the political cycle; to facilitate information-sharing across policymaking institutions; and to bolster the role of the central bank to harness its macroeconomic expertise and promote coordination with liquidity management, payment systems oversight, and monetary policy. Several institutional arrangements could achieve these objectives, including the one recently proposed by Norway's FCC, especially if mechanisms are included to ensure robust collaboration between the FSA and the central bank in regard to risk identification and information sharing.

48. Recent progress on entitlement reform is welcome, but further efforts are needed to address Norway's long-run fiscal challenges. With oil revenue expected to decline and pension and healthcare spending rising, Norway faces a large long-run fiscal gap. To address it, it will be crucial to build broad public consensus for further entitlement reforms aimed at reducing costs, increasing efficiency, and bolstering employment, while maintaining a strong safety net for those in need. In this regard, recent reforms to enhance monitoring of sick leave benefits are welcome. However, further entitlement reforms are needed to reduce the growth of spending on sick leave and disability benefits, for which enrollment rates are very high by international standards; improve incentives for longer working lives in public-service old-age pension schemes; and contain the growth of old-age pensions by indexing them to CPI inflation.

49. It is recommended that the next Article IV consultation with Norway be held on the usual 24-month cycle.

Table 1. Norway: Selected Economic and Social Indicators, 2004–12

	2004	2005	2006	2007	2008	2009	2010	Projections 2011	2012
Real economy (change in percent)									
Real GDP	4.0	2.6	2.4	2.7	0.0	-1.6	0.7	1.7	1.7
Real mainland GDP	4.1	3.8	4.6	6.8	1.4	-1.6	1.8	2.6	2.2
Domestic demand	7.1	5.4	6.4	5.9	1.3	-4.1	3.2	3.0	2.9
Private consumption	5.2	4.9	5.1	5.4	1.7	0.0	3.6	3.1	3.0
Private mainland fixed investment	12.7	15.1	10.7	14.6	-2.4	-18.4	-1.0	6.1	5.4
Government consumption	0.7	1.9	1.9	2.7	2.6	4.3	1.7	2.5	2.5
Unemployment rate (percent of labor force)	4.5	4.6	3.4	2.5	2.6	3.2	3.6	3.6	3.6
Output gap (mainland economy, - implies output below potential)	-0.9	-0.6	0.7	2.4	1.5	-0.7	-1.0	0.0	-0.2
CPI (average)	0.5	1.5	2.3	0.7	3.8	2.2	2.4	1.4	2.0
CPI (end of period)	1.1	1.8	2.2	2.8	2.1	2.0	2.8	1.6	2.2
Gross national saving (percent of GDP)	32.5	37.2	38.9	37.2	39.0	31.5	33.9	35.8	35.2
Gross domestic investment (percent of GDP)	20.3	21.5	23.0	25.8	24.5	22.5	22.4	22.1	22.8
Public finance									
Central government (fiscal accounts basis)									
Overall balance (percent of mainland GDP) 1/	9.2	14.5	19.7	18.3	22.3	10.0	8.9	11.5	10.8
Structural nonoil balance (percent of mainland trend GDP) 2/	-3.4	-3.4	-2.9	-2.8	-3.3	-5.3	-5.4	-5.2	-5.5
in percent of Pension Fund Global capital 3/	-5.6	-4.9	-3.4	-2.7	-3.0	-4.4	-4.1	-3.5	-3.9
General government (national accounts basis, percent of GDP)									
Overall balance	11.1	15.0	18.2	17.2	18.8	10.6	10.5	13.2	11.6
Net financial assets	103.7	120.6	133.8	139.2	123.8	157.0	164.0	168.1	175.1
of which: capital of Government Pension Fund Global	57.9	71.4	81.7	87.4	88.8	111.9	121.8	128.6	137.0
Money and credit (end of period, 12-month percent change)									
Broad money, M2	7.5	11.7	13.7	16.7	3.8	2.3	5.4	...	...
Domestic credit, C2	8.6	13.2	14.3	14.0	12.0	2.9	6.1	...	...
Interest rates (year average, in percent)									
Three-month interbank rate	2.0	2.2	3.1	5.0	6.2	2.5	2.5	2.8	...
Ten-year government bond yield	4.4	3.7	4.1	4.8	4.5	4.0	3.5	3.8	...
Balance of payments (percent of mainland GDP)									
Current account balance	16.2	21.6	23.2	18.2	23.8	14.7	14.6	17.8	15.9
Balance of goods and services	17.2	21.7	23.4	17.9	23.7	14.3	15.7	18.3	16.2
Mainland trade balance of goods	-8.0	-7.9	-8.1	-8.4	-8.0	-6.9	-6.7	-6.5	-6.8
Offshore trade balance of goods	24.1	28.5	30.5	26.2	31.6	20.8	22.2	24.5	22.8
Exports of goods and services (volume change in percent)	1.1	0.4	-0.9	1.4	0.7	-4.6	1.1	0.4	0.3
Imports of goods and services (volume change in percent)	9.7	7.8	9.2	10.1	4.1	-12.7	9.3	4.0	3.7
Terms of trade (change in percent)	7.7	15.6	11.9	-2.5	13.1	-13.9	6.2	...	...
International reserves (end of period, in billions of US dollars)	44.3	47.0	56.8	60.8	50.9	48.9	52.9	...	...
Fund position									
Holdings of currency (percent of quota)	66.5	87.4	91.8	93.3	88.4	80.6	76.6	...	...
Holdings of SDR (percent of allocation)	138.5	128.1	179.5	138.6	169.0	102.4	102.0	...	...
Quota (SDR millions)	1,672	1,672	1,672	1,672	1,672	1,672	1,672	...	...
Exchange rates (end of period)									
Exchange rate regime	Free float								
Bilateral rate (NOK/USD), end-of-period	6.0	6.8	6.3	5.4	7.0	6.2	5.8	6.0	...
Nominal effective rate (2005=100)	99.0	99.5	99.0	103.4	88.7	101.2	101.3	...	...
Real effective rate (2005=100)	98.8	99.3	98.9	102.7	88.7	102.0	102.5	...	...

Sources: Ministry of Finance; Norges Bank; Statistics Norway; International Financial Statistics; and IMF staff estimates and projections.

1/ Projections based on authorities' 2012 budget.

2/ Authorities' key fiscal policy variable; excludes oil-related revenue and expenditure, GPF-G income, as well as cyclical effects.

3/ Over-the-cycle deficit target: 4 percent.

Table 2. Norway: Medium-Term Indicators, 2008–16
(Annual percent change, unless otherwise noted)

				Projections					
	2008	2009	2010	2011	2012	2013	2014	2015	2016
Real GDP	0.0	-1.6	0.7	1.7	1.7	2.0	2.1	2.2	2.2
Real mainland GDP	1.4	-1.6	1.8	2.6	2.2	2.5	2.7	2.8	2.8
Real Domestic Demand	1.3	-4.1	3.2	3.0	2.9	2.8	2.7	2.7	2.7
Public consumption	2.6	4.3	1.7	2.5	2.5	2.1	2.1	2.1	2.1
Private consumption	1.7	0.0	3.6	3.1	3.0	2.9	2.8	2.7	2.7
Gross fixed investment	0.1	-7.4	-5.2	3.8	3.6	3.8	3.5	3.6	3.4
Public	4.6	6.9	-7.4	1.5	1.5	2.5	2.5	2.5	2.5
Private mainland	-2.4	-18.4	-1.0	6.1	5.4	5.4	5.1	5.1	4.8
Private offshore	4.1	8.1	-10.8	1.0	1.5	1.5	1.0	1.0	1.0
Final domestic demand	0.7	-0.9	0.9	3.1	3.0	2.9	2.8	2.8	2.7
Stockbuilding (contribution to growth)	0.6	-2.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0
Trade balance of goods and services (contribution to growth)	-1.0	2.1	-2.2	-1.1	-1.0	-0.6	-0.4	-0.3	-0.3
Exports of goods and services	0.7	-4.6	1.1	0.4	0.3	1.0	1.2	1.5	1.6
Mainland good exports	3.7	-7.5	1.1	3.3	1.0	2.5	2.8	3.3	3.4
Offshore good exports	-0.4	-2.8	-5.5	-2.6	-1.3	-0.9	-0.9	-0.9	-0.9
Imports of goods and services	4.1	-12.7	9.3	4.0	3.7	3.2	2.8	2.8	2.8
Potential GDP	0.9	0.5	1.0	0.6	1.9	2.0	2.1	2.1	2.2
Potential mainland GDP	2.3	0.6	2.2	1.5	2.4	2.5	2.7	2.7	2.7
Output Gap (percent of potential)	1.5	-0.7	-1.0	0.0	-0.2	-0.2	-0.2	-0.1	0.0
Labor Market									
Employment	3.3	-0.6	0.0	0.6	0.6	0.7	1.1	1.1	1.1
Unemployment rate (percent)	2.6	3.2	3.6	3.6	3.6	3.5	3.5	3.5	3.5
Prices and Wages									
GDP deflator	11.0	-6.4	6.4	4.9	1.9	1.9	2.1	2.7	2.8
Consumer prices (avg)	3.8	2.2	2.4	1.4	2.0	2.5	2.5	2.5	2.5
Consumer prices (eop)	2.1	2.0	2.8	1.6	2.2	2.5	2.5	2.5	2.5
Manufacturing									
Hourly compensation	5.9	5.6	4.0	...	...	...	...	...	...
Productivity	6.8	3.0	2.8	...	...	...	...	...	...
Unit labor costs	-0.8	2.5	1.2	...	...	...	...	...	...
Fiscal Indicators									
General government fiscal balance (percent of GDP)	18.8	10.6	10.5	13.2	11.6	10.6	9.6	8.8	8.1
of which: nonoil balance (percent of mainland GDP)	-2.4	-5.6	-6.1	-6.0	-5.8	-5.7	-5.7	-5.7	-5.7
External Sector									
Current account balance (percent of GDP)	17.3	11.7	11.5	13.7	12.4	11.2	10.2	9.7	9.2
Balance of goods and services (percent of GDP)	17.3	11.4	12.4	14.1	12.7	11.2	10.2	9.6	9.1
Mainland balance of goods 1/	-8.0	-6.9	-6.7	-6.5	-6.8	-7.0	-6.8	-6.6	-6.2

Sources: Statistics Norway, Ministry of Finance, and IMF staff estimates.

1/ Percent of mainland GDP.

Table 3. Norway: External Indicators, 2008–16

	2008	2009	2010	Projections 1/ 2011	2012	2013	2014	2015	2016
				(Billions of USD)					
Current account balance	78.6	43.8	48.0	66.0	59.4	54.6	51.0	49.7	48.8
Balance of goods and services	78.3	42.7	51.7	68.0	60.7	54.9	50.7	49.2	48.2
Balance of goods	78.2	41.5	51.0	67.0	59.8	54.5	50.5	48.9	47.6
Mainland balance of goods	-26.3	-20.5	-21.9	-24.1	-25.6	-26.9	-27.2	-27.1	-26.5
Balance of services	0.1	1.2	0.7	1.1	0.9	0.4	0.2	0.3	0.6
Exports	212.3	147.8	171.8	203.6	198.4	198.3	199.6	203.6	208.5
Goods	169.5	112.1	128.9	155.2	149.5	147.9	147.2	149.0	151.2
of which: oil and natural gas	109.9	65.9	71.7	90.0	84.4	80.6	76.9	75.4	73.6
Services	42.8	35.6	42.9	48.4	48.8	50.4	52.4	54.6	57.3
Imports	133.9	105.0	120.0	135.6	137.7	143.4	148.8	154.5	160.3
Goods	91.3	70.6	77.9	88.2	89.7	93.4	96.7	100.1	103.6
Services	42.7	34.4	42.2	47.4	48.0	50.0	52.1	54.4	56.7
Balance of factor payments	-5.9	-6.5	-3.7	-2.0	-1.3	-0.3	0.3	0.5	0.6
Capital account balance	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Financial account balance	-81.9	-53.6	-46.5	-65.8	-59.2	-54.4	-50.8	-49.5	-48.6
Change in reserves (- implies an increase)	-7.6	19.5	-4.0	-4.4	-4.2	-4.1	-4.0	-4.0	-3.9
Net errors and omissions	3.5	10.0	-1.3	0.0	0.0	0.0	0.0	0.0	0.0
				(Percent of Mainland GDP)					
Current account balance	23.8	14.7	14.6	17.8	15.9	14.2	12.8	12.0	11.3
Balance of goods and services	23.7	14.3	15.7	18.3	16.2	14.2	12.7	11.9	11.2
Balance of goods	23.7	13.9	15.5	18.0	16.0	14.1	12.7	11.8	11.1
Mainland balance of goods	-8.0	-6.9	-6.7	-6.5	-6.8	-7.0	-6.8	-6.6	-6.2
Services balance	0.0	0.4	0.2	0.3	0.2	0.1	0.1	0.1	0.1
Exports	64.3	49.5	52.3	54.8	53.0	51.4	50.0	49.2	48.4
Goods	51.3	37.6	39.2	41.7	40.0	38.4	36.9	36.0	35.1
of which: oil and natural gas	33.3	22.1	21.8	24.2	22.6	20.9	19.3	18.2	17.1
Services	13.0	11.9	13.1	13.0	13.1	13.1	13.1	13.2	13.3
Imports	40.5	35.2	36.6	36.5	36.8	37.2	37.3	37.3	37.2
Goods	27.6	23.7	23.7	23.7	24.0	24.2	24.2	24.2	24.1
Services	12.9	11.5	12.8	12.7	12.8	13.0	13.1	13.1	13.2
Balance of factor payments	-1.8	-2.2	-1.1	-0.5	-0.3	-0.1	0.1	0.1	0.1
Capital account balance	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	0.0	0.0
Financial account balance	-24.8	-18.0	-14.2	-17.7	-15.8	-14.1	-12.7	-11.9	-11.3
Change in reserves (- implies an increase)	-2.3	6.5	-1.2	-1.2	-1.1	-1.1	-1.0	-1.0	-0.9
Net errors and omissions	1.1	3.3	-0.4	0.0	0.0	0.0	0.0	0.0	0.0
Stock of net foreign assets (IIP)	66.3	108.6	...	...	...	...	...	...	...
Direct investment	8.0	6.9	...	...	...	...	...	...	...
Portolio investment	83.9	117.6	...	...	...	...	...	...	...
Other investment	-43.5	-32.3	...	...	...	...	...	...	...
Official reserves	18.0	16.4							
Government Pension Fund Global 2/	122.4	140.8	155.2	149.8	162.6	...	...	...	...

Sources: Statistics Norway; Ministry of Finance; and IMF staff estimates.

1/ IMF staff projections as of December 2011.
2/ Projections from the 2012 National Budget.

Table 4. Norway: Key Fiscal Indicators, 2004–12
(Percent of mainland GDP, unless otherwise indicated)

	2004	2005	2006	2007	2008	2009	2010	Projections 2011	2012
Central Government 1/									
Revenue	54.7	58.8	62.1	58.6	63.5	56.1	53.6	57.3	56.8
Oil revenue	16.3	20.3	23.5	19.2	23.5	16.2	14.9	17.5	17.3
Nonoil revenue	38.4	38.5	38.6	39.4	40.0	39.8	38.7	39.9	39.5
Expenditure	45.6	44.4	42.6	40.7	41.8	46.3	45.0	46.0	46.2
Oil Expenditures	1.4	1.5	1.3	1.2	1.2	1.3	1.0	1.1	1.1
Nonoil expenditures	44.2	42.9	41.3	39.5	40.6	45.0	44.0	45.0	45.0
Balance	9.1	14.4	19.4	17.9	21.7	9.8	8.7	11.3	10.6
Nonoil balance	-5.8	-4.4	-2.7	-0.1	-0.6	-5.1	-5.2	-5.1	-5.5
Structural nonoil balance 2/	-3.5	-3.4	-2.9	-2.8	-3.2	-5.3	-5.5	-5.2	-5.5
In percent of Pension Fund Global capital 3/	-5.6	-4.9	-3.4	-2.7	-3.0	-4.4	-4.1	-3.5	-3.9
In percent of trend mainland GDP 4/	-3.4	-3.4	-2.9	-2.8	-3.3	-5.3	-5.4	-5.2	-5.5
Fiscal impulse 5/	3.4	-0.1	-0.4	-0.1	0.4	2.0	0.1	-0.2	0.3
General Government 6/									
Revenue	71.8	75.6	79.1	75.6	80.4	71.9	71.1	74.6	72.3
Oil revenue	19.0	23.3	26.5	22.6	28.3	19.0	19.5	23.1	20.7
Nonoil revenue	52.8	52.3	52.7	53.1	52.1	52.9	51.6	51.5	51.6
Expenditure	57.6	55.6	54.3	53.0	54.6	58.6	57.7	57.5	57.4
Oil expenditures 7/	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Nonoil expenditures	57.5	55.6	54.3	52.9	54.5	58.5	57.7	57.5	57.4
Balance	14.2	20.0	24.8	22.6	25.8	13.3	13.4	17.1	14.9
Nonoil balance	-4.7	-3.2	-1.6	0.1	-2.4	-5.6	-6.1	-6.0	-5.8

Sources: Statistics Norway, Ministry of Finance and IMF staff estimates.

1/ Budget definition; excludes Pension Fund Global. Projections are based on the draft 2012 budget, published October 6, 2011.
2/ Estimated by the Ministry of Finance.
3/ Key policy indicator under Norway's fiscal guidelines, which set an over-the-cycle target for the structural nonoil deficit of 4 percent.
4/ Trend output as estimated by the Ministry of Finance.
5/ Annual change in the structural balance as a percentage of trend mainland GDP.
6/ National accounts definition. In addition to central government, includes also Government Pension Fund, other social security and central government accounts, state enterprises, and local government.
7/ Differently from the budget definition, investments in State Direct Financial Interest are considered as net lending, and not as expenditures.

Table 5. Norway. General Government Accounts, 2004–10
(Percent of mainland GDP)

	2004	2005	2006	2007	2008	2009	2010
Revenue	71.8	75.8	79.3	75.9	80.7	71.1	71.1
Taxes	43.3	46.1	47.5	44.9	46.0	40.0	41.6
Social contributions	12.0	11.9	11.8	11.8	12.2	12.5	12.3
Other	16.5	17.9	20.0	19.2	22.5	18.5	17.3
Expense	56.5	54.7	53.0	51.4	53.0	56.7	56.3
Compensation of employees	16.9	16.5	16.0	15.9	16.4	17.4	17.3
Use of goods and services	8.6	8.2	8.0	7.8	8.0	8.6	8.6
Consumption of fixed capital	2.4	2.3	2.3	2.3	2.4	2.6	2.5
Interest	1.8	1.6	2.1	1.7	2.0	1.8	1.7
Subsidies	2.8	2.7	2.6	2.5	2.6	2.7	2.8
Grants	1.0	1.2	1.2	1.3	1.3	1.5	1.5
Social benefits	21.3	20.4	19.3	18.4	18.7	20.4	20.3
Other	1.6	1.6	1.6	1.5	1.6	1.7	1.7
Gross operating balance	17.7	23.5	28.6	26.8	30.2	16.9	17.4
Net operating balance	15.4	21.2	26.3	24.5	27.7	14.4	14.8
Net acquisition of nonfinancial assets	1.1	1.0	1.4	1.6	1.7	1.9	1.5
Net financing							
Net lending/borrowing	14.2	20.2	24.9	22.9	26.0	12.5	13.4
Net acquisition of financial assets	22.1	21.7	46.9	27.4	15.2	3.8	17.5
Currency and deposits	-1.8	1.9	3.5	0.2	-0.7	-0.9	0.5
Securities other than shares	10.1	3.7	33.3	3.3	11.2	-17.8	9.7
Loans	6.8	12.1	4.0	7.8	-27.5	5.8	3.6
Shares and other equity	2.0	2.2	3.9	14.7	30.0	17.9	4.0
Insurance technical reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts receivable	4.9	1.8	2.1	1.3	2.2	-1.2	-0.3
Monetary gold and SDRs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net incurrence of liabilities	8.6	2.3	22.7	4.7	-10.6	-9.7	4.4
Currency and deposits	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securities other than shares	-2.5	0.4	1.3	-0.8	3.7	11.1	1.2
Loans	9.0	3.3	19.9	4.0	-15.2	-19.6	2.3
Shares and other equity	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Insurance technical reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts receivable	2.1	-1.5	1.5	1.6	0.9	-1.2	0.9
Balance sheet							
Net financial worth	110.5	132.3	184.2	184.3	170.5	196.7	209.1
Financial assets	175.0	194.7	265.7	260.0	247.1	259.9	271.2
Currency and deposits	13.3	14.4	16.0	15.0	13.9	12.9	11.0
Securities other than shares	48.8	49.2	76.2	67.0	90.0	62.7	68.4
Loans	47.6	56.5	55.3	53.5	32.5	37.5	38.9
Shares and other equity	49.0	57.6	99.4	106.6	95.5	131.8	140.3
Insurance technical reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts receivable	16.3	16.9	18.8	18.0	15.3	15.2	12.6
Monetary gold and SDRs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial liabilites	64.5	62.4	81.5	75.7	76.6	63.2	62.1
Currency and deposits	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Securities other than shares	15.7	15.0	15.5	13.4	16.8	27.5	27.3
Loans	42.6	43.0	59.0	54.3	51.3	28.5	28.2
Shares and other equity	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Insurance technical reserves	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other accounts receivable	6.3	4.4	7.0	8.0	8.5	7.2	6.6

Source: IMF *Government Finance Statistics.*

Table 6. Norway: Financial System Structure, 2006–11
(Percent of assets, unless otherwise noted)

	2006	2007	2008	2009	2010	2011Q3
Assets of all financial institutions (billions of NOK)	4,236	5,004	6,112	6,174	6,424	6,391
Share of assets owned by						
Banks	62.0	62.4	62.5	59.9	56.7	60.2
Mortgage companies	10.7	12.4	16.4	18.2	21.5	18.0
Finance companies	3.1	2.8	2.5	2.3	1.7	1.8
State lending institutions	4.8	4.2	3.7	3.8	3.8	4.0
Life insurance companies	16.0	14.9	12.1	12.8	13.4	13.9
Non-life insurance companies	3.4	3.3	2.9	2.9	2.9	2.1
Balance sheet structure						
Banks excluding foreign subsidiaries						
Assets						
Cash and deposits	5.9	8.0	11.6	9.9	8.5	12.0
Securities (current assets)	11.2	10.8	11.6	19.3	19.7	17.9
Lending to households, municip. and non-finan. firms	72.9	68.6	59.5	53.7	53.7	52.0
Other lending	7.3	9.8	11.3	10.0	10.7	10.8
Loan loss provisions	-0.4	-0.3	-0.3	-0.4	-0.5	-0.4
Fixed assets and other assets	3.1	3.0	6.4	7.5	7.8	7.8
Equity and liabilities						
Customer deposits	44.2	43.2	43.4	43.1	46.6	47.1
Deposits/loans from domestic credit institutions	3.6	4.7	2.9	3.1	3.0	2.9
Deposits/loans from foreign credit institutions	11.9	11.0	12.9	15.2	12.2	14.5
Deposits/loans from Norges Bank	0.9	1.2	1.8	1.6	1.3	0.7
Other deposits/loans	2.7	2.9	1.2	6.3	6.1	4.4
Notes and short-term paper debt	3.1	5.1	5.4	3.1	3.4	4.0
Bond debt	20.7	18.3	19.0	15.5	14.7	13.1
Other liabilities	4.1	5.3	5.5	3.9	3.9	4.8
Subordinated loan capital	2.5	2.2	2.5	2.3	2.2	1.8
Equity	6.3	6.0	5.4	5.9	6.7	6.6
Covered bond companies 1/						
Assets						
Cash and deposits	...	3.7	3.6	3.2	1.6	1.4
Securities (current assets)	...	1.4	8.4	2.4	3.2	3.3
Gross lending	...	94.7	87.5	93.6	94.7	94.6
Loan loss provisions	...	0.0	0.0	0.0	0.0	0.0
Fixed assets and other assets	...	0.3	0.5	0.7	0.4	0.6
Equity and liabilities						
Notes and short-term paper debt	...	2.6	0.2	0.1	0.1	0.6
Bond debt	...	44.7	59.0	66.6	70.0	73.0
Loans	...	46.2	37.0	27.1	22.2	19.9
Other liabilities	...	1.6	0.1	1.1	2.7	2.0
Subordinated loan capital	...	1.0	0.7	0.6	0.5	0.4
Equity	...	4.0	2.9	4.5	4.5	4.1

Sources: Norges Bank and Statistics Norway.

1/ Mortgage companies with the right to issue covered bonds in accordance with the regulation that came into force on 1 June 2007.

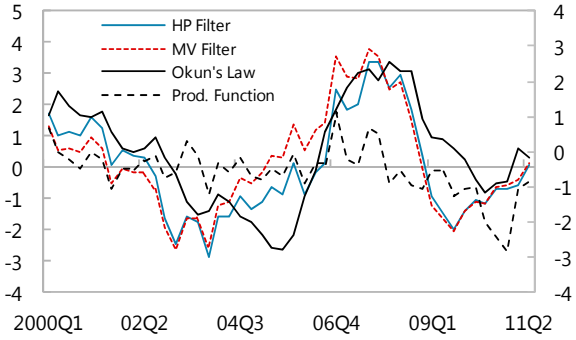
ANNEX I. ESTIMATING THE SIZE OF NORWAY'S OUTPUT GAP

Norway experienced a relatively mild recession during the recent global financial crisis, suggesting minimal impact on potential output. Substantial macroeconomic stimulus, high public sector employment, and limited dependence on the hardest-hit segments of global manufacturing resulted in a relatively shallow recession compared to its regional peers. The quick rebound in output, along with low unemployment, suggests that the output gap has narrowed substantially.

This annex estimates the size of Norway's output gap. Given the uncertainty associated with any individual approach to estimating the output gap, several approaches are considered. These approaches range from methods that focus only on one key macroeconomic variable, such as output or unemployment, to methods that consider the behavior of a variety of indicators simultaneously.

All approaches point to an output gap that has nearly closed. The average across all measures indicates that the output gap reached a trough of -1¼ percent in the second quarter of 2010 and has since returned very close to zero. There is surprisingly little variation across the estimates towards the end of the sample, though there are substantial differences regarding the gap during the recession. Several of the measures point to a substantial boom in the period leading up to the recent recession, which could potentially be related to the surge in net immigration during this period, as discussed later in this annex.

Recent estimates of the output gap for Norway
(percent)



Source: IMF Staff estimates.

A. Hodrick-Prescott Filter Approach

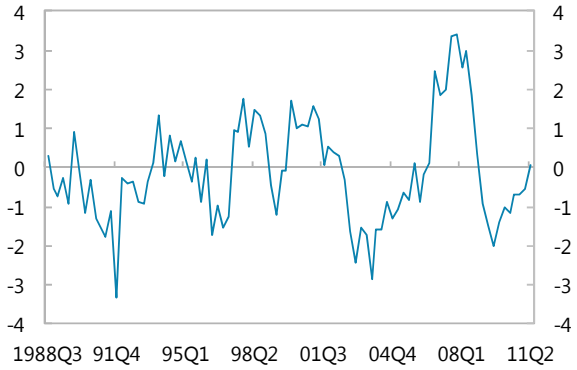
The Hodrick-Prescott (HP) filter is a commonly used approach to estimate output gaps. The HP filter estimates trend output by minimizing the variation of the cyclical component of output, while attaching a penalty for making the growth rate of trend output too volatile.[1] The filter is computationally easy to implement and serves as a good first approximation to decomposing output into its trend and cyclical components. However, the approach is not without shortcomings. In particular, the approach does not incorporate information from other macroeconomic variables, such as inflation or unemployment, which may be informative regarding the size of the output gap. Furthermore, the filter runs into estimation issues at the end-points of samples due to the two-sided nature of the filter.[2]

[1] The penalty is governed by a single parameter, λ. In the exercise carried out in this annex, λ is set equal to 1600.

[2] End-point problems are mitigated somewhat in this annex by adding output forecasts to the end of the sample.

The HP-filter approach estimates Norway's output gap to be about zero as of 2011Q2. The output gap during the recent recession is estimated to be smaller than that experienced during the previous recession in the early 2000s. The filter also marks the period leading up to the recent recession as being associated with a substantial cyclical boom, a point which will be addressed later in this annex.

Output gap using HP Filter
(percent)



Source: IMF staff estimates.

B. Estimating the output gap using Okun's law

While the HP filter estimates the output gap using solely data on output, Okun's law yields additional insight by looking instead at the unemployment rate. Okun's law is a statistical relationship between unemployment and output that has received strong empirical support for a broad cross-section of countries (see Knotek, 2007; Moosa, 1997; and Okun, 1962). One formulation of Okun's law is as follows:

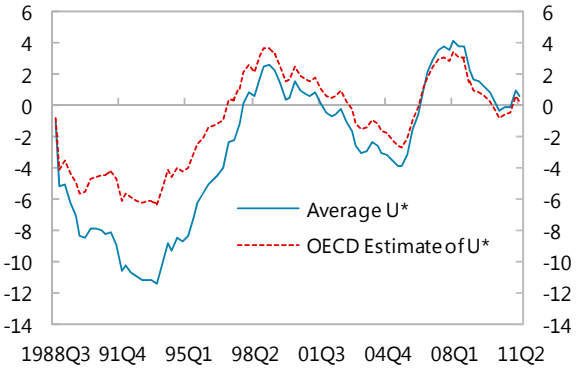
$$(U\text{-}U^*) = \beta(Y\text{-}Y^*)$$

where U is the unemployment rate, Y is output, and U^* and Y^* are measures of the steady-state levels of unemployment and output, respectively. The equation above thus relates the size of the "unemployment gap"—the distance between the unemployment rate and its steady-state level—to the size of the output gap. Estimates of the coefficient β are typically negative, indicating that positive unemployment gaps are associated with negative output gaps.

One difficulty in employing Okun's law is estimating the steady-state level of unemployment, *U**. In the exercise carried out in this annex, two estimates of U^* are used. The first is the average unemployment rate over the last 15 years, which covers two business cycles in the post-crisis period. The idea behind this measure is that, while unemployment is typically high during recessions and low during expansions, on average, it should be equal to its steady-state level. This approach yields a U^* of 3.5 percent. The second measure of U^* uses the OECD's estimate of the NAIRU for Norway. The advantage of this measure relative to the first is that it allows the steady-state unemployment rate to change over time. The coefficient β is estimated using a dynamic specification of Okun's law similar to that used in Balakrishnan, Das, and Kannan (2010).

Estimates of the output gap based on Okun's law indicate that the output gap was slightly positive in 2011Q2. Given that the unemployment rate only increased slightly during the past recession, the Okun's law estimates show the output gap reaching a trough of only -1 percent during the recession compared to a gap of more than -2 percent based on the HP filter approach. The level of output is estimated to be ½ percent above trend as at 2011Q2. Like the HP-filter approach, the Okun's law estimates point to a substantial boom in the run-up to the last recession.

Output gap estimates based on Okun's Law
(percent)



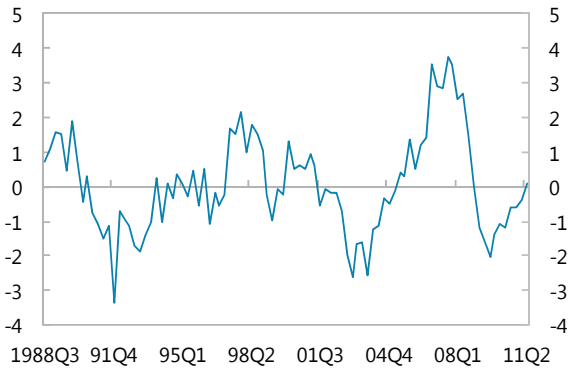
Source: IMF staff estimates.

C. Multivariate Filter Approach

To complement the two approaches above, the output gap is also estimated using a multivariate filter on a small macroeconomic model. The model is built around three "gaps": an output gap, an unemployment gap, and a capacity utilization gap. These gaps are pinned down by three identifying relationships: a Phillips-curve relationship that relates the output gap to inflation; a dynamic version of the Okun's law relationship shown in the previous section; and a capacity utilization equation that links capacity utilization rates to the output gap. These identifying equations are supplemented by laws of motion for the equilibrium values of the variables (see Appendix for further details). Bayesian methods are used to estimate the model while a multivariate Kalman filter is applied to obtain the paths for the equilibrium values of the variables. Details on the variables used, as well as the values chosen for some key priors, are described in the Appendix.

The multivariate-filter approach yields output gap estimates that are similar to that obtained using the HP filter. In particular, both approaches point to a significant boom prior to the recent recession and to an output gap that is essentially closed as of 2011Q2. While the Okun's law relationship embedded in the model places upward pressure on the estimate of the output gap (as was shown in the last section), the low inflation rate points instead to a negative output gap.

Output gap using multivariate filter
(percent)



Source: IMF staff estimates.

D. Production Function Approach

The final approach used to measure the output gap is based on an aggregate production function that estimates the productive capacity of the economy. The production function that is typically used is a two-factor Cobb-Douglas production function. Apart from capital and labor, the production function also includes a measure of total factor productivity (TFP), which measures the efficiency with which existing inputs can be converted to output. In practice, TFP is calculated as a residual determinant of output that is not explained by labor and capital. As such, any mis-measurement or omission of inputs will also be captured by this variable. Another issue with this approach is that the estimation relies on the total capital stock, not the flow of services actually provided by the stock at any point in time. In reality, however, capacity utilization varies considerably over the business cycle. Any changes in the flow of capital services due to changes in demand conditions are thus captured by the TFP

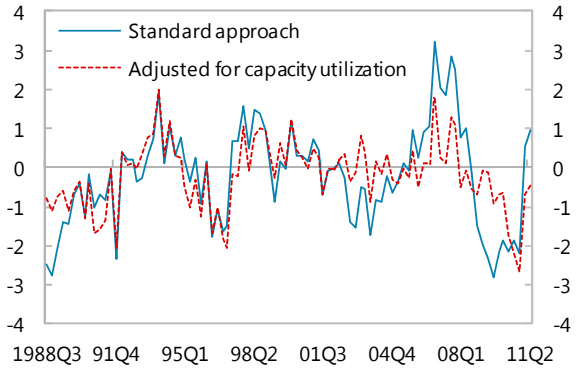
residual. To better control for the effect of varying capacity utilization, a modified version of the production function is used:

$$\ln(Y) = \alpha \cdot \ln(P \cdot PR \cdot (1-u) \cdot H) + (1-\alpha) \cdot \ln(cu \cdot K) + \varepsilon$$

where *Y* is output, *P* is the working age population, *PR* is labor participation rate, *u* is the unemployment rate, *H* is the number of hours worked per working, *cu* is the capacity utilization rate, *K* is the capital stock, and ε is the estimated TFP. The parameter α is the average labor share over the sample period, which is assumed to be 55 percent for Norway.

Accounting for varying capacity utilization, the production function approach indicates that the output gap was -0.4 percent in 2011Q2. The negative output gap is primarily due to a less-than-full utilization of the existing stock of labor. In particular, labor force participation rates continue to remain below trend. Total hours are also estimated to be below trend, though the gap has been shrinking of late. Meanwhile, the capacity utilization rate has been increasing since 2009, but still remains below the pre-recession average.

Output gap measures using a production function
(percent)

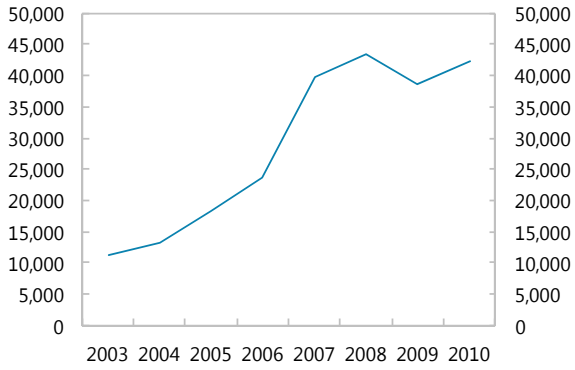


Source: IMF staff estimates.

E. Impact of immigration on potential output

In the last decade, Norway has experienced a surge in net immigration, which could affect estimates of potential output and the output gap. The arrival of immigrants has boosted the labor force, thereby increasing potential output in Norway.

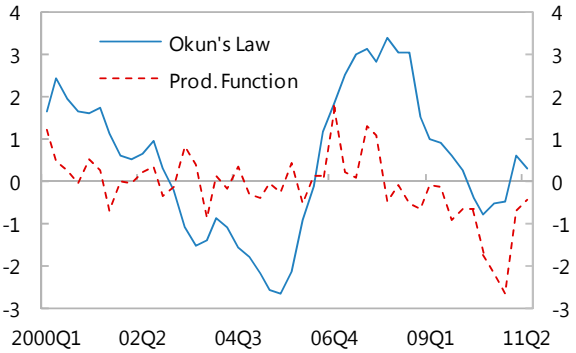
Norway: Net Immigration



Source: IMF staff estimates.

Of the approaches used to estimate the output gap, only the production function approach directly takes changes in the size of the labor force into account. This may help explain why the production function approach (taking into account the variation in capacity utilization) does not show a large positive output gap in the run-up to the recent recession.

Estimates of the output gap for Norway
(percent)



Source: IMF staff estimates.

F. Appendix[3]

This appendix briefly summarizes the key features of the model. A more detailed description is provided in Benes et al. (2010). The model is built around three gaps—the output gap (*y*), the unemployment gap (*u*), and the capacity utilization gap (*c*)—and three identifying equations:

The inflation equation relates the level and the change of the output gap to core inflation:

$$\pi_t = \pi_{t-1} + \beta y_t + \Omega\left(y_t - y_{t-1}\right) + \varepsilon_t^{\pi}$$

The dynamic Okun's law defines the relationship between the current unemployment rate and the output gap. Based on Okun's law, an unemployment equation links the unemployment gap to the output gap:

$$u_t = \phi_1 u_{t-1} + \phi_2 y_t + \varepsilon_t^{u}$$

Finally, the model also relies on a capacity utilization equation, on the assumption that capacity utilization contains important information that can help improve the potential output and output gap estimates. The equation takes the following form:

$$c_t = \kappa_1 c_{t-1} + \kappa_2 y_t + \varepsilon_t^{c}$$

Given the three identifying equations, the equilibrium variables are assumed to evolve dynamically as follows. A stochastic process including transitory (level) shocks and more persistent shocks guides the evolution of equilibrium unemployment, $\overline{U}$ (the NAIRU equation):

$$\overline{U}_t = \overline{U}_{t-1} + G_t^{\overline{U}} - \left(\omega/100\right) y_{t-1}$$

$$-\left(\lambda/100\right)\cdot\left(\overline{U}_{t-1} - U^{SS}\right) + \varepsilon_t^{\overline{U}}$$

Persistent shocks to the NAIRU ($G_t^{\overline{U}}$) follow an autoregressive process:

$$G_t^{\overline{U}} = (1-\alpha) G_{t-1}^{\overline{U}} + \varepsilon_t^{G^{\overline{U}}}$$

And potential output (Y_t) is modeled to be a function of the underlying trend growth rate of potential output (G_t^{Y}) and changes in the NAIRU. Specifically:

$$Y_t = Y_{t-1} - \theta\left(\overline{U}_t - \overline{U}_{t-1}\right) - \left(1-\theta\right)\left(\overline{U}_t - \overline{U}_{t-20}\right)/19$$

$$+ G_t^{\overline{Y}}/4 + \varepsilon_t^{\overline{Y}}$$

where θ is the labor share in a Cobb-Douglas production function. This specification allows for short- and medium-term growth of potential to differ from trend growth. Note that G_t^{Y} is not constant, but follows serially correlated deviations (long waves) from the steady-state growth rate G_{SS}^{Y}. Similar dynamic equations are specified for equilibrium capacity utilization.

The full model is estimated by regularized maximum likelihood, a Bayesian methodology. This method requires the user to define prior distributions of the parameters. While this can improve the estimation procedure by preventing parameters from wandering into nonsensical regions, the choice of priors has also non-negligible implications for the final estimates as the data are uninformative about some parameters.

In addition to the prior distributions of parameters, the analyst has to provide values for θ and the steady-state (long-run) unemployment rate (U^{SS}) and potential GDP growth rates (G_{SS}^{Y}), which were set to 0.55, 4

[3] This Appendix is based on a summary of Benes et al. (2010).

percent, and 2.7 percent, respectively. While values especially for U^{SS} and $G_{SS}{}^{Y}$ matter conceptually, as the (endogenous) estimates converge to these (exogenously given) values in the long term, from a practical point of view, the dynamics over the time horizon of interest are relatively little affected by the choice of the steady-state values.

G. References

Balakrishnan, Ravi, Mitali Das, and Prakash Kannan (2010), "Unemployment Dynamics During Recessions and Recoveries: Okun's Law and Beyond", *World Economic Outlook*, April 2010.

Benes, Jaromir, Kevin Clinton, Roberto Garcia-Saltos, Marianne Johnson, Douglas Laxton, Petar Manchev, and Troy Matheson (2010), "Estimating Potential Output with a Multivariate Filter", IMF Working Paper 10/285.

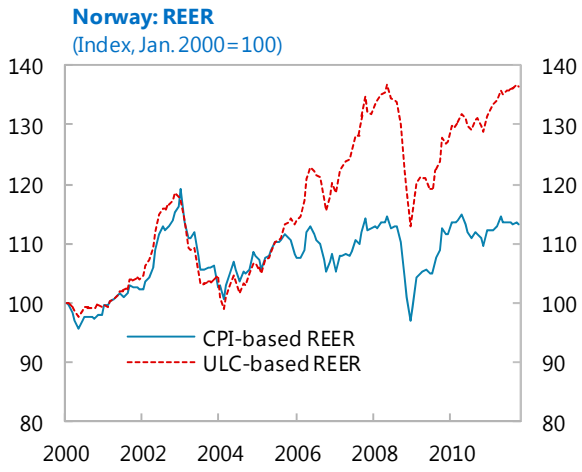
Knotek, Edward S. (2007), "How Useful Is Okun's law?" Federal Reserve Bank of Kansas City *Economic Review* (Fourth Quarter), pp. 73–103.

Moosa, Imad A. (1997), "A Cross-Country Comparison of Okun's Coefficient," *Journal of Comparative Economics*, Vol. 24, pp. 335-56.

Okun, Arthur M. (1962), "Potential GNP: Its Measurement and Significance," American Statistical Association, proceedings of the Business and Economics Statistics Section (Alexandria, Virginia: American Statistical Association).

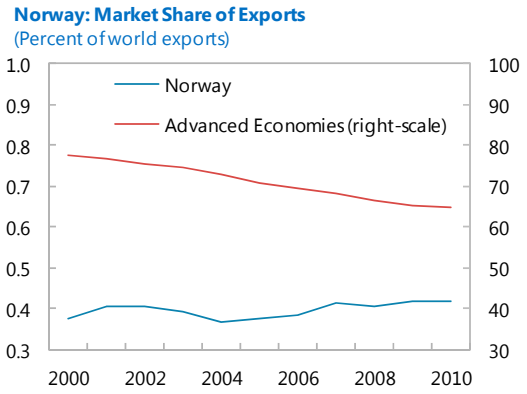
ANNEX II. DOES NORWAY HAVE A COMPETITIVENESS PROBLEM?

Strong wage growth has resulted in an appreciation of Norway's ULC-based real effective exchange rate (REER), raising concerns about competitiveness. Norway's ULC-based REER appreciated by 35 percent over the last decade, leaving it significantly above its 30-year average. The higher cost of producing goods raises concerns of Dutch Disease effects, wherein higher incomes brought about by the resource boom place upward pressure on the price of nontradables, thus threatening the competitiveness of non-oil tradeables.



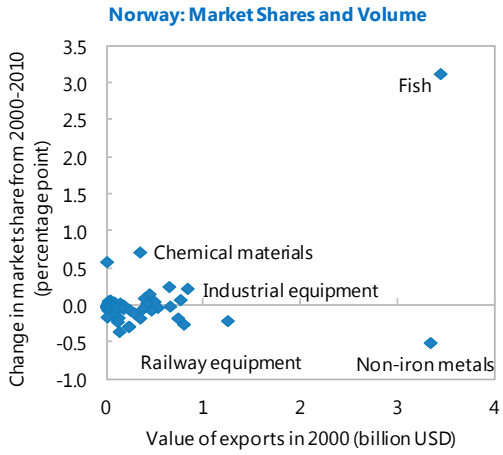
Source: IMF.

However, Norway's non-oil exports have maintained a relatively constant market share over the last decade. Norway's stable share of global non-oil exports is particularly striking when compared to the trend decline in the share of advanced economies in overall world trade due to the rise of emerging market economies. The ratio of non-oil exports to GDP in Norway has also remained constant over the past decade at roughly 30 percent.



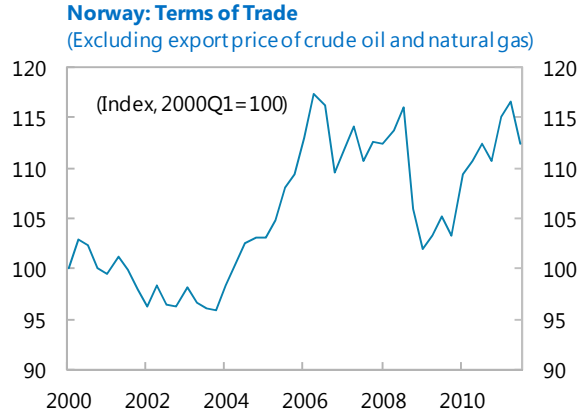
Sources: UN Comtrade; and IMF staff estimates.

Market shares have held up across a broad range of products, with a particularly strong performance of the Norwegian fish industry. Exports of fish—Norway's largest non-oil export—have been especially robust over the past few years, with global market shares increasing following the collapse in Chilean salmon production in 2007–09. However, gains in market share have also been experienced in the chemical materials, industrial equipment, and scientific instrument industries. Still, there have been a fair number of industries that have seen falling market shares over the past decade, though the magnitudes have not been particularly alarming, especially in the context of the general decline in the share of advanced economies' exports in world trade.



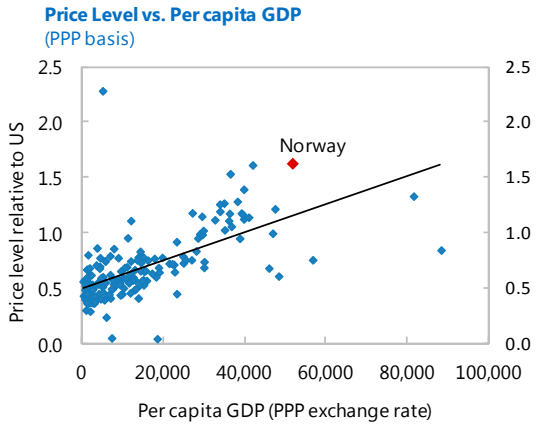
Sources: UN Comtrade; and IMF staff estimates.

Norway's exports have been supported by strong global demand, as reflected in the increase of its non-oil terms of trade. The improvement in the terms of trade and the preservation of market shares in the face of increasing domestic costs point to an increase in external demand for Norway's exports. Much of this increase comes from emerging economies in East Asia, which have also contributed to the improvement in Norway's terms of trade through lower import prices.



Sources: Statistics Norway; and IMF staff estimates.

At the same time, the higher terms of trade and higher relative price of nontradables have resulted in a real exchange rate that is more appreciated than what would be implied by Norway's income level. In its starkest form, the theory of purchasing power parity states that a bundle of goods measured in the same currency should cost the same across countries. Differences in productivity and factor endowments, however, can lead to higher price levels for countries that have higher income levels. Even after accounting for this effect, Norway's price level vis-à-vis the U.S. is 46 percent higher than what would be implied by the empirical fit of the relationship between relative price levels and income per capita.



Source: IMF.

Estimates of exchange rate valuation that take into account Norway's oil wealth also imply a moderate overvaluation of the Norwegian krone of about 12 percent. In order to account for the transitory nature of oil revenue, the exchange rate assessment is conducted using adjusted versions of the macroeconomic balance (MB) and external sustainability (ES) approaches that are part of the CGER toolkit.[1] Based on the empirical

[1] The methodology for adjusting the MB and ES approaches for temporary oil revenue is described in IMF WP/09/281, "Exchange Rate Assessments: Methodologies for Oil-Exporting Countries," by R. Bems and I. de Carvalho Filho. The standard Equilibrium Real Exchange Rate (ERER) method is not well-suited to assessing the krone, as it does not take into account the temporary nature of hydrocarbon revenue.

analysis of the determinants of the current account, the MB methodology predicts a current account norm of 13.5 percent of GDP, which when compared to staff's medium-term projection of 9.2 percent, implies a real exchange rate overvaluation of 12.6 percent. The ES methodology for oil-exporting countries instead pins down the current account norm by imposing a preferred path of consumption of the revenues from oil and gas extraction. Under a rule that ensures constant per capita real consumption of oil revenues, the implied overvaluation is 11.6 percent.

Norway: Assessment Based on CGER Methodologies for Oil-Exporting Countries

	(percent)		
	CA/GDP		REER[1]
	Norm	Projection[2]	Misalignment
MB approach	13.5	9.2	12.6
ES approach, to keep consumption of hydrocarbon revenues			
constant in real terms	11.3	9.2	6.0
constant real per capita terms	13.2	9.2	11.6
constant as share of mainland GDP	20.5	9.2	33.3

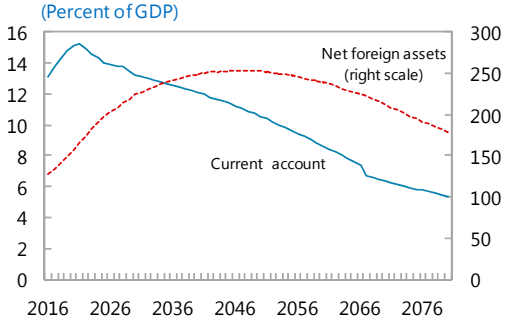
Source: IMF staff estimates.

[1] Assessment relative to December 2011. A positive number denotes overvaluation. Based on semi-elasticity of the CA/GDP with respect to REER of -0.34, which reflects standard CGER import and export elasticities, adjusted for the openness of the Norwegian economy.

[2] Staff projection of the current account surplus in 2016.

The exchange rate assessment based on the external sustainability approach is sensitive to the desired path of consumption of oil revenues. A first option is to keep a constant real consumption level of oil revenues that implies a current account norm of 11.3 percent and a mild 6 percent overvaluation. Given the projected population growth, a somewhat higher current account surplus is required if Norway wants to maintain a constant per capita real consumption of oil revenues. The resulting optimal paths for the current account and net foreign assets are shown in the figure below. Finally, a much larger overvaluation, slightly above 30 percent, is implied if Norway were to target a constant share of consumption of oil revenues relative to mainland GDP.

Adjusted ES approach: equilibrium CA and NFA paths to keep constant real per capita consumption of hydrocarbon revenues
(Percent of GDP)



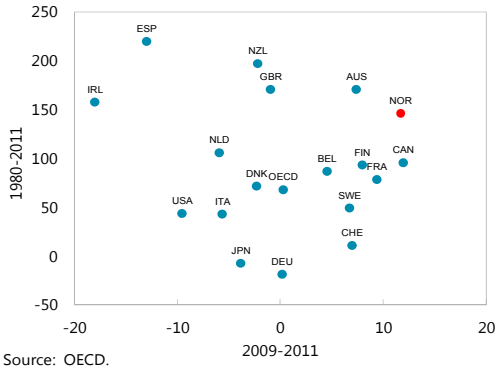
Source: IMF staff calculations.

The ES results are also significantly affected by assumptions on the real interest rate and size of oil reserves. Consistent with the fiscal rule, the calculations presented above are based on a 4 percent real return on foreign assets. A reduction in the rate of return by one percentage point would increase the overvaluation assessment by about 7 percent. Conversely, new oil and gas discoveries would allow for more spending and bring the exchange rate closer to equilibrium. For every 1 billion increase in standard cubic meters of oil equivalent, the assessed overvaluation would be reduced by about 3.5 percent.

ANNEX III. HOUSE PRICES IN NORWAY

Norwegian house prices are in the midst of a long boom. As in many other OECD countries, house prices in Norway grew rapidly between the mid-1990s and late 2000s, before dipping during the global financial crisis. Unlike elsewhere, however, house prices in Norway quickly resumed their upward trend in 2010. Indeed, over the last two years Norway has seen one of the most rapid paces of real house price appreciation in the OECD.

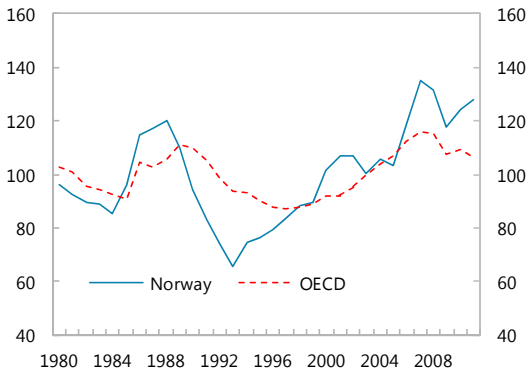
Percentage Change in Real House Prices



Source: OECD.

Solid income growth explains only part of this boom: the house price-to-income ratio has also been rising. This ratio is now 28 percent above its historical average—higher than the peak reached before the last major house price bust in Norway two decades ago.

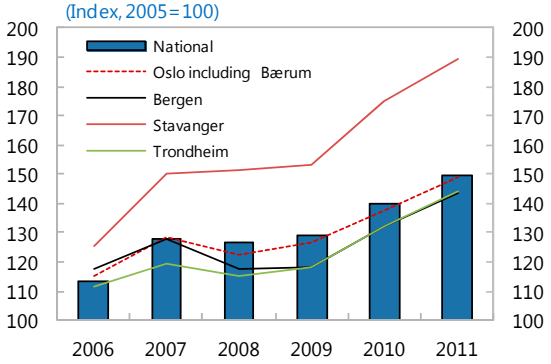
Price-to-Income Ratio in Norway and OECD average
(Index, historical average over 1980-2011=100)



Source: OECD.

The boom has been broad-based. While there has been some variation in the boom within Norway—for example, with higher price appreciation in Stavanger, where the oil-related boom is most prevalent—house prices in most major cities have grown broadly in line with the national average. This suggests that the boom is driven largely by common national factors.

National and Local House Prices
(Index, 2005=100)



Source: Statistics Norway.

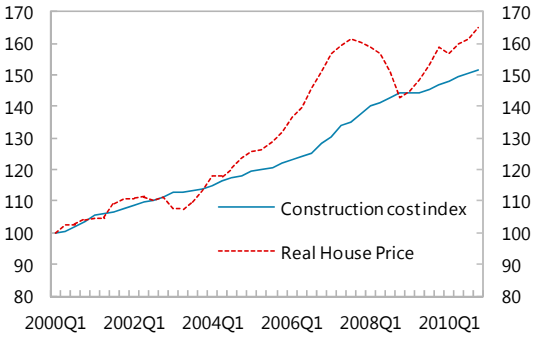
This annex examines the main factors behind this house price boom, as well as consequences of a possible price reversal. The annex finds that, while fundamentals explain part of the boom, signs also point to risks of overvaluation. A house price bust would likely be associated with depressed economic activity and increased financial sector stress, especially given high levels of mortgage debt.

A. Factors Behind the Boom

Housing Supply and Population Growth

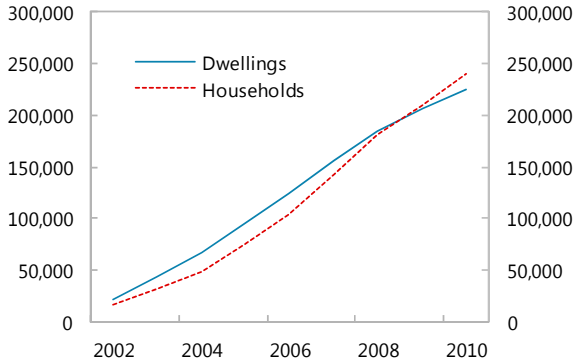
Supply constraints are a contributing factor to the boom. Real house price growth has persistently exceeded the growth of construction costs over the last decade. This indicates that land availability and/or regulatory constraints may limit the degree to which housing supply can respond quickly and elastically to rising demand.

House Prices and Construction Cost Index
(Index, 2000=100)



Indicators suggest that housing supply has indeed lagged demand from population growth, though this gap does not appear large. Over the last decade, Norway has experienced solid population growth, in part due to robust net immigration. As a result, the total increase in households since 2001 has exceeded the increase in dwellings, but only slightly. Moreover, the growth of dwellings exceeded the growth of households during 2002-2007 when prices grew most rapidly.

Increase in the Number of Dwellings and Households
(Cumulative increase since 2001)

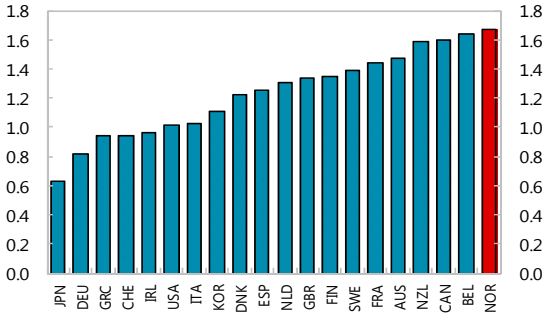


Source: Norges Bank.

Hence, a mismatch between housing supply and population growth does not appear to fully explain the house price boom.

The sharp rise in the price-to-rent ratio also indicates that much of the boom reflects other factors. If house price appreciation were purely due to a fundamental mismatch between population growth and housing supply, one would expect rents, which are relatively liberalized in Norway, to also be rising rapidly. Instead, the ratio of house prices to rents has risen sharply during the boom and is now nearly 70 percent above its historical average—the highest such deviation in any OECD country. This indicates that factors other than the mismatch between population growth and housing supply—such as lower interest rates, looser credit conditions, and/or changes in investor sentiment and taxation—are needed to explain the large increase in the demand for owner-occupied housing relative to rental units.

Price-to-Rent Ratio
(2011Q3 relative to historical average 1980–2011)



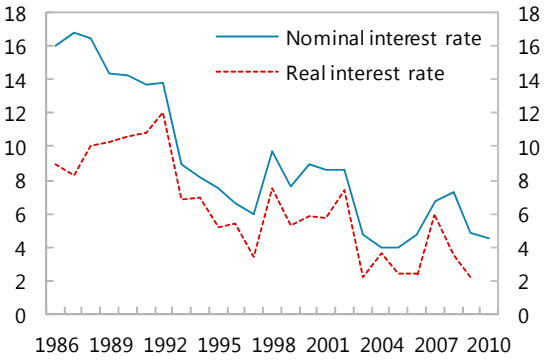
Source: OECD.

Interest Rates and Credit Conditions

Interest rates have come down considerably in the last decade, both in nominal and real terms. As a result of this decline, rates on mortgage loans have fallen, reflecting also a generalized trend of increased competition

among mortgage lenders. In Norway, where about 95 percent of mortgages loans are adjustable-rate and interest payments are front-loaded, low interest rates have made mortgages cheaper and homes significantly more affordable.

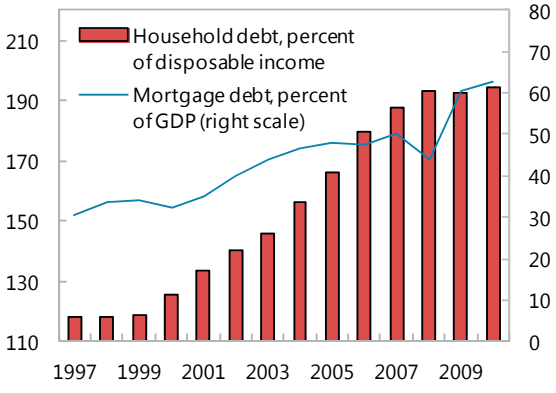
Nominal and Real Interest Rates on Loans
(Percent)



Source: Statistics Norway.

Lower interest rates have allowed households to carry greater debt. Mortgages rose from 30 percent of GDP in 2000 to 60 percent in 2010. Meanwhile, total household mortgage debt as a fraction of disposable income has increased to 195 percent by end-2010, considerably higher than the previous peak in 1990. Norges Bank estimates that this ratio will continue to rise over the next four years.

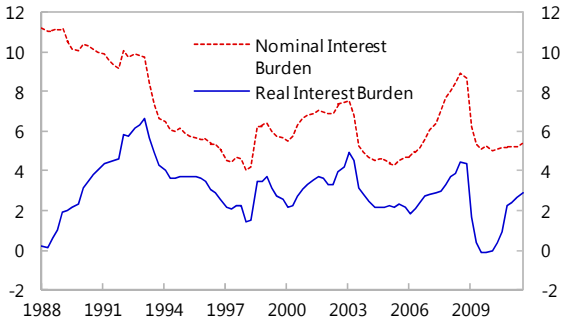
Household Debt Condition



Source: Statistics Norway.

Despite this sharp rise in household debt, lower interest rates have allowed households' interest burden to remain broadly constant as a percent of disposable income.

Household Interest Burden
(Interest expenses after tax as a percentage of disposable income) 1/

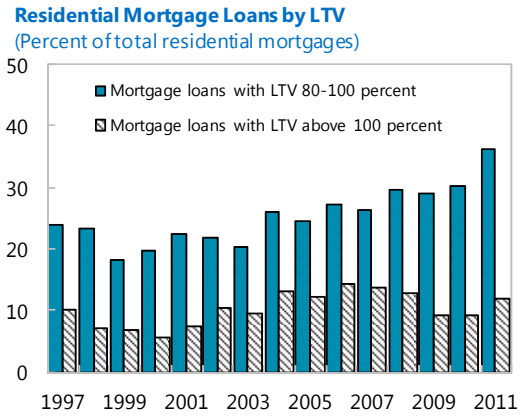


Sources: Norges Bank; and Statistics Norway.
1/ Disposable income is adjusted for estimated reinvested share dividends in 2000–05, redemption/reduction of equity capital for 2006–11, and interest expenses.

However, lower interest rates do not explain the full story. Lower real interest rates lower the user cost of owner-occupied housing and hence could explain the rise in Norway's price-to-rent ratio. However, lower interest rates do not explain why Norway's ratio has risen so much faster than in other countries, as interest rates in many other countries have fallen by as much or more than in Norway over the last decade.

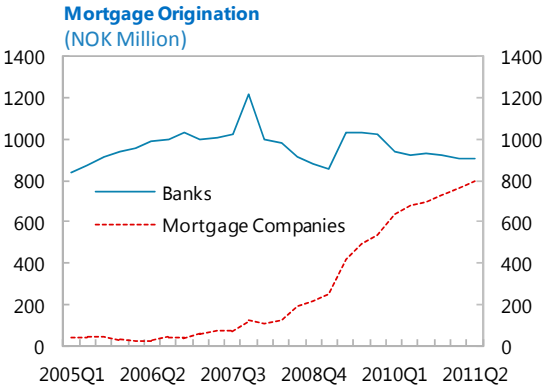
Another candidate for explaining the boom is loose credit conditions. Loan-to-value (LTV) ratios are somewhat high in Norway: as of Autumn 2011, 38 percent of mortgages for home purchase and 26 percent of all new mortgages (including refinancing) have LTVs exceeding 90 percent. It is difficult to know how much these credit conditions account for the boom, since the share of mortgages with LTVs over 90 percent has been high since data were first collected in the late 1990s, after the boom was already underway. However, it is somewhat worrisome that the share of mortgages with LTVs over 90 percent has increased since 2010, despite the issuance of FSA guidelines recommending against

allowing LTVs to exceed this level, other than in exceptional circumstances.



Sources: FSA; and Residential Mortgage Loan Survey.

A considerable increase in mortgage origination comes also from the role played by non-bank mortgage lenders. In recent years, Norwegian banks' funding has changed. Market funding has assumed a more important role, especially since 2007 when new legislation on covered bonds allowed specialized mortgage credit institutions to raise loans by issuing covered bonds. Covered bonds (backed by high-quality mortgages) have enabled credit institutions to borrow on more favorable terms. As a result, the volume of secured loans issued by mortgage companies has picked up considerably since 2008. In 2011, loans from mortgage companies represented nearly 50 percent of new mortgages.

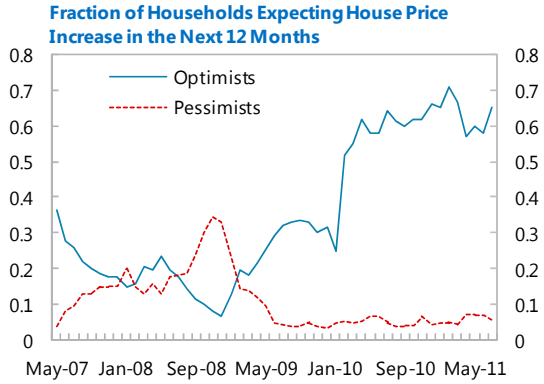


Source: Statistics Norway.

Expectations of Price Increases

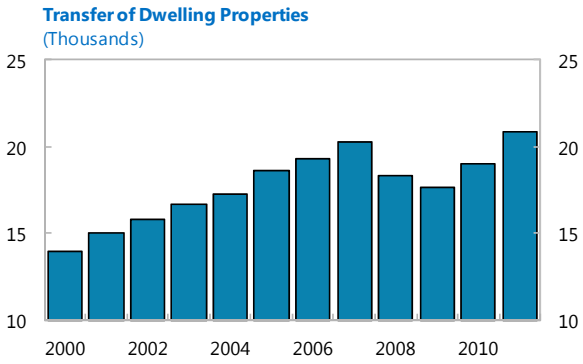
Expectations of increasing prices may lead agents to buy for speculative motives. Optimistic expectations may cause house prices to deviate from long-run trends, especially if the supply of housing is inelastic in the short run.

Survey data indicate that expectations of future house price increases may indeed play a role in the current boom. According to a recent FSA survey, an increasing number of households believe that property prices will continue to appreciate. The percent of households expecting high house price appreciation was as low as 10 percent in 2008. Today, 70 percent of the survey respondents expect prices to increase over the next 12 months.



Source: Financial Supervisory Authority.

The rising velocity at which real estate changes hands is another indication of speculative motives in the housing market. Aside from the sale drop in 2008, sales have remained at all-time highs throughout the last 2 years.



Source: Statistics Norway.

Taxation

Owner-occupied housing receives quite generous tax treatment in Norway:

- Income tax on imputed rents (the rental services that owners receive from the house they live in) was abolished in 2005, whereas rents paid on rental units continue to be taxed as income. This discrepancy creates a large implicit tax subsidy for owner-occupied housing, which disproportionately benefits high-income households and creates excessive demand for such housing relative to its social costs.

- In some countries, this distortion is offset by limiting the tax deductibility of mortgage interest payments, but in Norway mortgage interest payments are fully tax-deductible.

- Property taxes in Norway are also relatively low (1.2 percent of GDP in 2008 against 1.8 percent of GDP in the average OECD country), in part because valuations of dwellings for wealth tax purposes are only about a quarter of their true market value. In contrast, both financial assets and financial debts (including mortgages) are valued at their true value for wealth tax purposes, which is a tax on net wealth. This creates incentives for households to (i) hold wealth in housing assets rather than financial assets and (ii) leverage their balance sheets by taking on both more mortgage debt (valued at its true value for tax purposes) and more housing assets (valued well below their true value for tax purposes) until their wealth tax liability is extinguished. Moreover, capital gains on owner-occupied houses and second homes are tax-free, provided the property is held by the owner for a minimum of one and five years, respectively.

This generous tax treatment may have contributed to the boom in several ways:

- The abolition of the tax on imputed rents in 2005 likely increased substantially the demand for housing. Although the authorities have made efforts in recent years to reduce the implicit tax subsidies for owner-occupied housing—including by taking steps in 2010 to raise property valuations for tax purposes—these changes are likely swamped by the 2005 change in terms of magnitude.

- Though not an original cause of the boom, the tax system's promotion of high household leverage—due to the deductibility of mortgage interest and the asymmetric valuation of housing assets and mortgages for wealth tax purposes—may have amplified the effect of the boom on household balance sheets.

Summing up

Overall, fundamentals appear to explain part, but not all, of the house price boom in Norway. In particular, fundamentals such as higher income, population growth, and tax

changes have all boosted demand. Additional pressures on prices have come from the slow adjustment of supply. However, non-fundamental factors such as optimistic price expectations—which are unlikely to be sustainable and could change quickly—have also played a role. Low interest rates and favorable financing conditions may also not be sustainable indefinitely. On balance, model-based estimates from the IMF's Early Warning Exercise (EWE), which take into account the key determinants of house prices, suggest that Norwegian residential property prices may be misaligned by 15-20 percent. However, there is admittedly a high amount of uncertainty around this estimate in both directions.

B. Consequences of a House Price Decline: How Vulnerable is Norway?

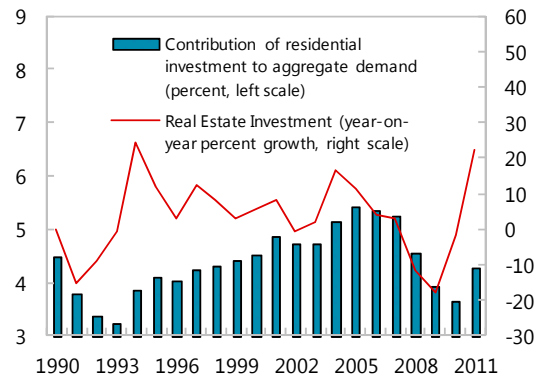
Regardless of whether housing prices are fundamentally sound or not, there are concerns that the housing boom and households' growing indebtedness make the Norwegian economy vulnerable to an interest rates hike, slowing income growth, or a house price burst.

Experience shows that once a housing boom develops, fueled by a sustained expansion in credit, a brisk correction may have major consequences. The Nordic crisis of the early 1990s and the recent 2007-09 global crisis are just two examples of how changes in property prices generate major disruptions to both the financial sector and the economy as a whole. During the boom, homeowners borrow heavily against the rise in home equity, reduce saving rates, and increase consumption. During the bust, the house price decline—in combination with high household debt levels—has a serious drag on the economy. There are three main channels through which the housing market affects the real economy: residential investment, private consumption, and the financial sector.

Residential Investment

Although residential investment is a relatively small share of GDP, it has an outsized impact on Norwegian growth dynamics due to its volatility.

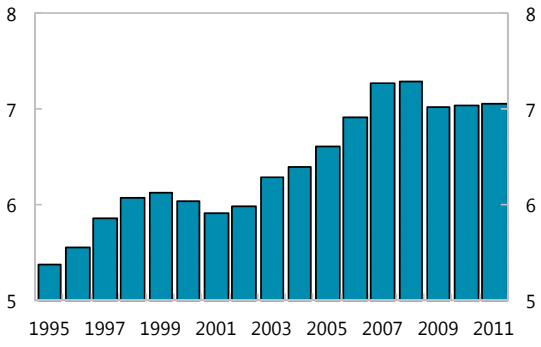
Aggregate Demand and Real Estate Investment



Source: Statistics Norway.

Housing construction is also a labor intensive industry. Fluctuations in housing markets may thus entail a large reallocation of labor, with first-order effects on employment. During the last expansion until 2007, the contribution of housing investment to employment growth was sizeable.

Employment in the Construction Sector
(As a percent of total employment)

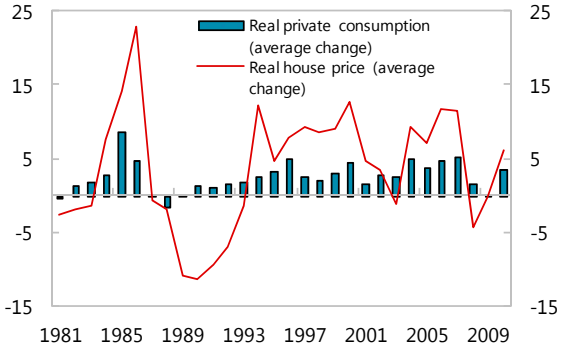


Source: Statistics Norway.

Private Consumption

Private consumption is affected by the housing market through wealth and liquidity effects. A decline in house prices weakens aggregate consumption through a negative wealth effect. Falling prices also impair homeowners' ability to borrow, and hence to consume, if housing is used as collateral to finance consumption. In Norway, there is a strong correlation between private consumption and house prices.

Changes in Real Private Consumption and House Prices
(Year-on-year percent change)



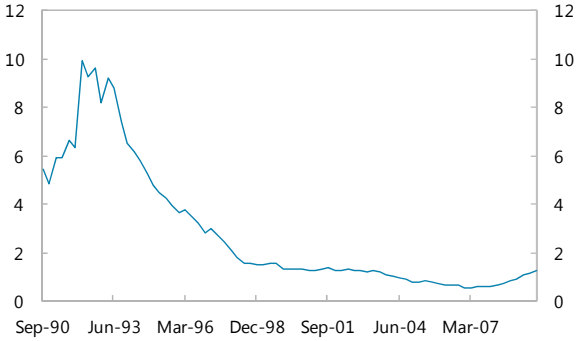
Sources: Statistics Norway; and OECD.

Financial Sector

The financial sector is highly exposed to the housing market. When house prices decline, households' equity also declines, impairing their debt-servicing capacity. Lower house prices also increase banks' loss-given-default in the event of foreclosure. Such effects on banks' balance sheets could be significant, as mortgages account for 40 percent of banks' assets (including mortgage companies). This in turn could lead to a vicious circle of tighter credit and further drops in housing demand and prices, economic growth, and employment.

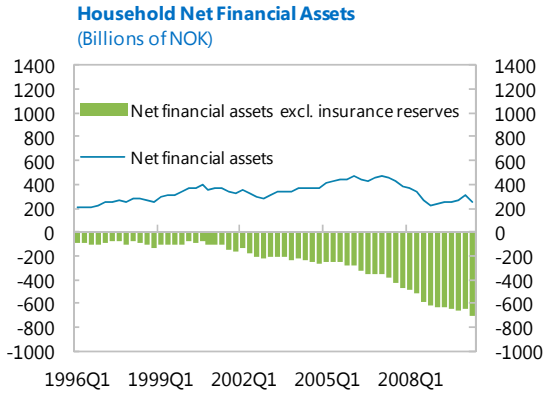
Loan losses on household lending rose significantly during the last house price bust in early 1990s. At that time, the NPL ratio on household lending reached 10 percent. Though not as high as levels reached during crises in some countries, such losses could nonetheless seriously weaken banks' balance sheets

Banks' non-performing loans to households
(Percentage of gross lending to the sector: 1990 Q3 – 2009 Q3)



Sources: Norges Bank

In addition, there is no guarantee that loan losses would not exceed this level in the future. Mortgages are full recourse in Norway, giving households a strong incentive to avoid default. However, this is mitigated somewhat by the Debt Settlement Act introduced in the early 90s, which gives persons with serious debt problems an opportunity to regain control of their financial affairs. More generally, the historically high levels of household debt, the large fraction of loans with high LTVs, the predominance of mortgage loans with adjustable interest rates, and the high percentage of financial assets held in illiquid forms (e.g., insurance reserves account for over a third of gross financial wealth) all suggest that households' balance sheets are vulnerable to adverse shocks.



Sources: Statistics Norway; and Norges Banks.

Lower consumption due to a house price bust would also adversely affect the financial sector indirectly. During the early 1990s house price bust, households cut back sharply on consumption to avoid default. This lower demand in turn caused commercial real estate and other loans to businesses to go bad, contributing to the financial crisis. In this way, high household debt and falling house prices were an important factor behind the crisis. Given past experience, this indirect effect may again be a key channel through which a house price bust would affect the financial sector.

Econometric evidence

Econometric estimates can help quantify the aggregate effect of house prices on GDP growth. Vulnerability to real estate price developments is assessed through a panel regression model (see text table below). For each country, real GDP growth is modeled as a function of the change in real house prices and its interaction with two country-specific variables: the ratio of residential investment to GDP and the ratio of mortgage debt to GDP. Underlying this specification is the assumption that changes in residential property prices have more pronounced effects in countries with a larger real and financial exposure to the housing sector. In the regression, country and year fixed effects are also included to control for unobserved country-specific and time-varying factors common to all countries. The table below reports the results for a sample of 20 OECD countries during the period 1980-2011.

The estimates suggest that a 10 per cent drop in real house prices in Norway is associated with roughly 1 percentage point lower GDP growth than otherwise. This effect is comparable in magnitude to that for the average country in the sample, and it suggests the Norwegian economy is not better insulated than other countries from variations in the housing market, as reduced vulnerability from Norway's relatively small residential investment sector is offset by higher vulnerability from the high levels of mortgage debt.[1] A correction of 30 percent in house prices—as occurred during the crisis in the 90s—would exert a non-negligible effect to the real economy. Although these estimates do not establish a causal link, they do provide correlations for the typical association between house prices and GDP growth.

[1] At the end of 2009 (the last available data point for Norway), the residential investment to GDP ratio is 3 percent and the mortgage debt to GDP ratio is 70 percent. For the mean country in the sample, the same ratios are 5 and 40 percent, respectively.

Real GDP and House Prices: Panel Regression Analysis

	GDP growth
House price growth	-0.018
	(0.058)
House price growth*	2.515**
residential INV/GDP	(0.978)
House price growth*	0.024
Mortgage credit/GDP	(0.048)
Constant	0.017***
	(0.006)
Observations	427
Countries	20
R-squared	0.753
F-test (p-values)	0.000
Total effect in Norway	0.0786***
	(0.0269)

Notes: Pooled OLS regression with country and year fixed effects. Robust standard errors in brackets. ***, **, * denote significance at the 1, 5, and 10 percent levels, respectively.

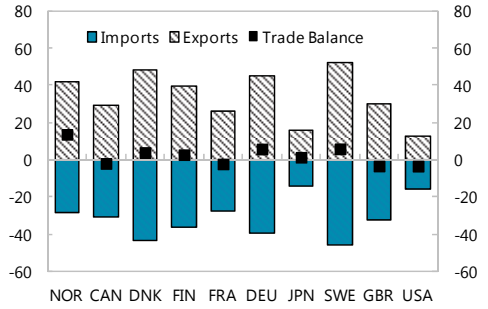
ANNEX IV. NORWAY: RISK ASSESSMENT MATRIX

Nature/Source of Main Threats	Overall Level of Concern	
	Likelihood of Severe Realization of Threat in the Next 1-3 Years (high, medium, or low)	**Expected Impact if Threat is Realized** (high, medium, or low)
1. Significant reduction in house prices.	**Medium** • Norway has the highest house price-to-rent ratio relative to its historical average amongst all OECD economies. • Although this can be partly explained by fundamentals, there is a risk of significant overvaluation. Nonetheless, prices may not necessarily adjust within the next 3 years.	**High** • A fall in house prices would dampen private consumption and reduce residential investment. A 10 percent fall in real house prices is estimated to lower GDP growth by 1 percentage point in Norway (Annex III). • Furthermore, the high level of household debt may imply a considerable increase in default rates that would severely hurt banks' balance sheets.
2. Intensification of the eurozone crisis and global double-dip.	**Medium** • The eurozone sovereign debt crisis remains a key global risk, and its intensification could precipitate a global double-dip recession.	**High** • Norwegian banks have little direct exposure to the most vulnerable eurozone countries. • Nonetheless, severe eurozone stress and an associated global recession would significantly affect Norway via shaken consumer confidence, lower non-oil exports, falling oil prices, and strains in international interbank markets.
3. Inability of banks to meet refinancing needs on foreign wholesale markets.	**High** • Due to the recent tensions in the international financial markets, Norwegian banks are facing increasing borrowing costs on foreign wholesale markets.	**Medium** • Norwegian banks finance almost 20 percent of their assets with short-term foreign wholesale funds. • Without prompt support by public authorities, the freezing of foreign wholesale markets could compromise financial stability by triggering rapid deleveraging.
4. Substantial and prolonged reduction in oil prices.	**Low** • The deteriorating outlook in advanced economies could put some mild downward pressure on oil prices. • However, a considerable and prolonged reduction in oil prices could occur if downside risks to the global growth outlook were to materialize.	**High** • A mild and temporary decline in oil prices would mainly result only in smaller inflows into the Government Pension Fund. • However, a substantial and prolonged reduction in oil prices would have a much more severe impact by weakening the offshore sector's investment demand.
5. Safe-haven inflows cause rapid appreciation.	**Low** • Given its strong sovereign position, Norway could achieve safe-haven status and attract large capital inflows. • This possibility is, however, unlikely, as the small outstanding stock of government bonds limits liquidity and Norway's attractiveness as a safe-haven destination.	**Medium** • Exchange rate appreciation would hurt the export sector, which already faces relatively high labor costs. • Large inflows would also reduce lending rates, which could stimulate even larger household and corporate borrowing, leading to an unsustainable private-sector credit boom that would ultimately burst.

ANNEX V. EXPOSURE TO THE EUROZONE AND OTHER INTERNATIONAL LINKAGES

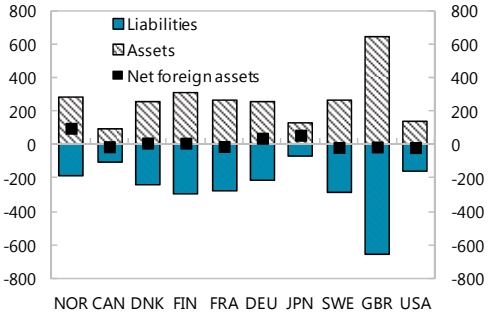
Like other Scandinavian countries, Norway is considerably integrated internationally. In 2010, Norway's gross exports exceeded 40 percent of GDP (oil and natural gas constituted 64 percent of these), and imports were around 25 percent of GDP. Norway is also highly interconnected financially, with gross foreign assets and liabilities equal to 284 and 186 percent of GDP, respectively.

Trade Integration, 2010
(Percent of GDP)



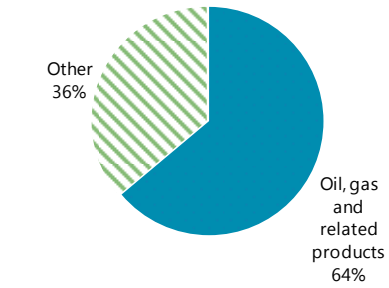
Source: IMF, Balance of Payment Statistics.

Financial Integration, 2010
(Percent of GDP)



Source: IMF, Balance of Payment Statistics.

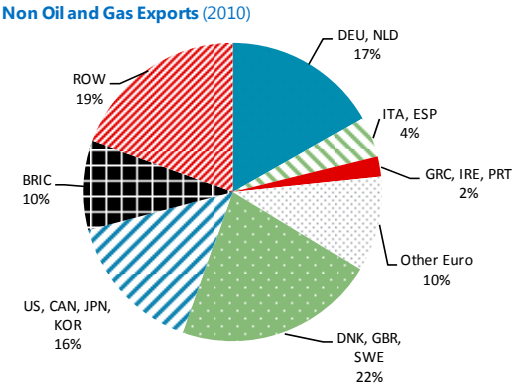
Exports of Goods (2010)



Sources: COMTRADE; and IMF staff calculations.

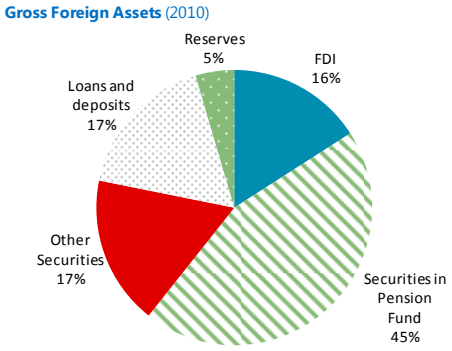
Norwegian exporters are unlikely to be heavily affected by further eurozone turmoil as long as it is limited mainly to the periphery. Oil and gas exports are imported mainly by non-euro countries (Denmark, UK, and Sweden) or by core eurozone countries, and oil could anyway be reallocated on the international market. Regarding the exposure through non-fuel goods, the export share to Greece, Ireland, and Portugal is only 2 percent. Italy and Spain account also for a moderate share, equal to 4 percent. However, more generalized distress leading to a broad-based global downturn would undoubtedly depress global oil prices as well as demand for Norway's non-oil exports.

Non Oil and Gas Exports (2010)



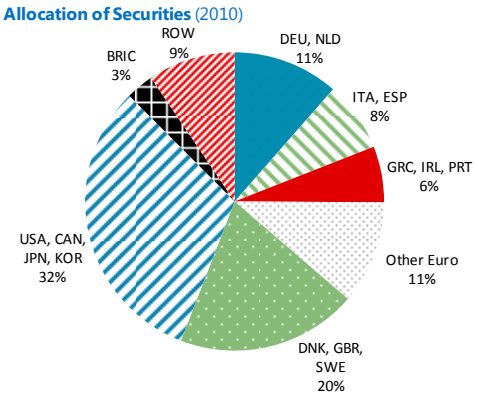
Sources: COMTRADE; and IMF staff calculations.

Regarding international financial linkages, foreign assets are primarily invested in securities and are largely owned by the Government Pension Fund—Global (GPF-G). Portfolio investment in equity and fixed-income securities accounts for 62 percent of gross foreign assets. The large majority of these securities are held within the GPF-G, which can only invest abroad in publicly traded stocks, fixed-income securities, and in real estate but only up to 5 percent of the total portfolio.



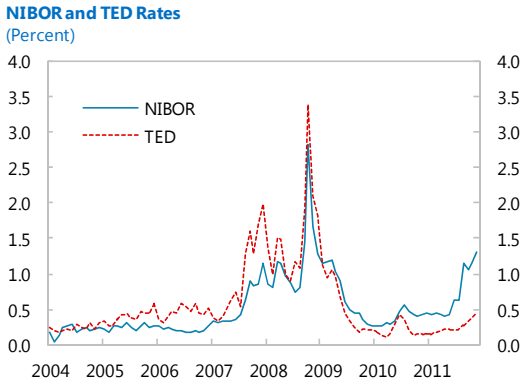
Source: IMF staff calculations.

Foreign investment is largely concentrated in Europe, but the banking sector's exposure to the eurozone periphery is very limited. More than half of Norway's foreign securities are issued by European countries, with the GPF-G having an explicit mandate to invest between 50 and 60 percent of its portfolio in the region. Banks' exposure to distressed eurozone countries is, however, very limited, with DNB (the largest Norwegian bank and the only one included in the European Banking Authority stress tests) holding no sovereign bonds of Greece, Ireland, Portugal, Belgium, Italy, or Spain.



Source: IMF staff calculations.

The most significant exposure to international risks derives from banks' reliance on foreign wholesale funds. Norwegian banks finance almost 20 percent of their assets with short-term foreign wholesale funds, thereby heavily exposing banks to international financial conditions. The NIBOR spread (the difference between Norway's interbank rate and treasury bills) is indeed highly correlated with the TED spreads that captures funding tensions in the US market. Econometric analysis suggests that a 1 standard deviation shock to an index of European financial stress reduces Norway's mainland GDP growth by 0.5 percentage points after three quarters (2009 Norway Article IV Staff Report, Annex III).



Source: Haver Analytics.

INTERNATIONAL MONETARY FUND

NORWAY

STAFF REPORT FOR THE 2011 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

January 13, 2012

Prepared By European Department

CONTENTS

FUND RELATIONS

(As of November 30, 2011)

Membership Status
Joined: December 27, 1945; Article VIII

General Resources Account

	SDR Million	Percent Quota
Quota	1,883.70	100.00
Fund holdings of currency	1,380.41	73.28
Reserves tranche position	503.30	26.72
Lending to the Fund		
New Arrangements to Borrow	350.89	

SDR Department

	SDR Millions	Percent Allocation
Net cumulative allocations	1,563.07	100.00
Holdings	1,523.46	97.47

Outstanding Purchases and Loans
None

Latest Financial Arrangements
None

Projected Payments to the Fund
(SDR Million; based on existing use of resources and present holdings of SDRs)

		Forthcoming		
	2012	2013	2014	2015
Principal				
Charges/Interest	0.09	0. 09	0. 09	0. 09
Total	0.09	0. 09	0. 09	0. 09

Implementation of HIPC Initiative
Not applicable

Implementation of Multilateral Debt Relief Initiative
Not applicable

Implementation of Post-Catastrophe Debt Relief
Not applicable

Exchange Arrangements
Norway has a freely floating exchange rate. The exchange system is free of restrictions on the making of payments and transfers for current international transactions other than restrictions notified to the Fund in accordance with Decision No. 144-(52/51).

Article IV Consultation
Norway is on the 24-month consultation cycle.

FSAP Participation
A review under the Financial Sector Assessment Program (FSAP) was completed in 2005.

Technical Assistance
None

Resident Representative
None

STATISTICAL ISSUES

Economic and financial data provided by the Fund are considered Adequate for surveillance purposes. Norway subscribed to the Special Data Dissemination Standard (SDDS) and meets the SDDS Specifications for the coverage, periodicity, and timeliness of data. SDSS metadata are posted on the Dissemination Standard Bulletin Board (DSBB).

Norway: Table of Common Indicators Required for Surveillance

(As of November 30, 2011)

	Date of latest observation	Date received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]
Exchange Rates	29/11/11	30/11/11	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	31/10/11	21/11/11	M	M	M
Reserve/Base Money	31/10/11	14/11/11	M	M	M
Broad Money	31/10/11	29/11/11	M	M	M
Central Bank Balance Sheet	31/10/11	14/11/11	M	M	M
Consolidated Balance Sheet of the Banking System	30/09/11	07/11/11	M	M	M
Interest Rates[2]	Q3 2011	23/11/11	Q	Q	Q
Consumer Price Index	31/10/11	10/11/11	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	2010	03/06/11	A	A	A
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	September 2011	31/10/11	M	M	M
Stocks of Central Government and Central Government-Guaranteed Debt[5]	2010	03/06/11	A	A	A
External Current Account Balance	Q2 2011	05/09/11	Q	Q	Q
Exports and Imports of Goods and Services	Q3 2011	22/11/11	Q	Q	Q
GDP/GNP	Q3 2011	22/11/11	Q	Q	Q
Gross External Debt	Q2 2011	16/09/11	Q	Q	Q
International Investment Position[6]	31/12/10	30/09/11	A	A	A

[1] Any reserve assets that are pledged of otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing.
[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.
[5] Including currency and maturity composition.
[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.
[7] Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

INTERNATIONAL MONETARY FUND
Public Information Notice
EXTERNAL RELATIONS DEPARTMENT

Public Information Notice (PIN) No. 12/9
FOR IMMEDIATE RELEASE
February 2, 2012

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Executive Board Concludes 2011 Article IV Consultation with Norway

On January 27, 2012, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Norway.[1]

Background

Norway's economy has performed well amidst considerable global turbulence. Over the last two years, mainland GDP has grown steadily at an annual pace of 2-3 percent, supported by robust growth in consumer spending, a rebounding housing market, and favorable terms of trade developments. Output has now surpassed its pre-recession levels, and unemployment remains low at around 3¼ percent. This solid recovery has been aided by supportive policies, including low interest rates (the policy rate is currently 1¾ percent) and temporary fiscal stimulus employed during the recession. Financial sector performance has generally picked up along with economic activity over the last two years, with credit growing solidly and capital ratios increasing. However, progress on reducing liquidity risks has been mixed: the average maturity of wholesale liabilities has been lengthened, but the sector-wide deposit-to-loan ratio remains somewhat low and falling.

Going forward, moderately paced growth is expected to continue. Mainland GDP is projected to grow by around 2¼ percent in 2012. Expansion will be mostly propelled by domestic demand, given solid wage growth, continued near-term momentum in the housing market, and sluggish

[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.imf.org/external/np/sec/misc/qualifiers.htm.

growth amongst major trading partners. The closing of the output gap, along with upward pressure on prices from solid wage growth, should slowly push up inflation from its current low rates (which partly reflect past krone appreciation) toward the 2½ percent target over the next two years. Over the medium term, growth is expected to stay near its potential rate of 2¾ percent, but gradually become more balanced as external demand slowly improves and as domestic demand eases due to tighter macroeconomic policies and eventual cooling of the housing market.

However, this relatively benign central scenario is subject to significant risks. One important risk is the possibility of intensified turmoil in the eurozone. Although Norway's economy is better placed than many in Europe to weather such turmoil—given its low sovereign risk and the limited direct exposure of Norway's banks to the most vulnerable eurozone countries—severe stress would undoubtedly affect Norway via shaken consumer confidence, lower oil prices and non-oil exports, and strains in international interbank markets, which are an important funding source for Norway's largest banks. A key domestic risk is that buoyant house prices (Norway currently has the highest house price-to-rent ratio relative to its historical average amongst all OECD economies) may eventually reverse, with adverse consequences for consumption, residential investment, and financial stability, especially given very high levels of household debt.

Executive Board Assessment

Executive Directors welcomed Norway's steady economic recovery, which has benefited from supportive policies. The challenge going forward will be to continue stable growth in the face of a difficult near-term global outlook while at the same time reducing vulnerabilities arising from long-run fiscal pressures and high levels of household debt and house prices.

To address the latter risks, Directors agreed on the need to tighten macroprudential policies. They welcomed efforts to tighten standards for mortgage lending, including through the use of recommended limits on loan-to-value and loan-to-income ratios. Further actions to reduce financial stability risks could include making these limits more binding; raising minimum risk weights on mortgages, in coordination with other Nordic countries to limit the scope for cross-border regulatory arbitrage; and reducing the degree to which the tax code provides incentives for households and corporations to leverage themselves. Banks should be encouraged to bolster their capital and liquidity buffers, including by exercising restraint on dividends and remuneration, and reducing reliance on short-term foreign wholesale funding. Directors also called for close monitoring of mortgage companies, which rely heavily on covered bond financing.

Directors welcomed the ongoing work on strengthening the institutional framework for macroprudential policy, with an enhanced role for the central bank. Issues to be addressed would include the coordination of macroprudential policy with liquidity management, payment

systems oversight, and monetary policy; the adoption of a framework that encourages information-sharing across policymaking bodies, while fitting the national context; and the establishment of clear lines of responsibility.

Directors supported the broadly neutral fiscal stance in the short term. Provided that growth strengthens, fiscal tightening would be appropriate over the medium term to rebuild precautionary fiscal buffers and ensure that the fiscal guidelines are met on average over the cycle. It would also help reduce the long-run fiscal gap stemming from rising healthcare and pension costs and declining oil revenue. Directors welcomed the progress on entitlement reform. They encouraged the authorities to build broad public consensus for further reforms aimed at reducing costs, increasing efficiency, and bolstering employment, while maintaining a strong safety net for those in need.

Directors noted that the contractionary effects from macroprudential and medium-term fiscal tightening can be largely offset by keeping monetary policy looser than it would be otherwise. Such a policy mix will also reduce risks of excessive exchange rate appreciation and associated competitiveness problems. In this context, Directors generally agreed that the current monetary policy stance is appropriate and that monetary policy should be the first line of defense to address downside risks. A number of Directors observed that Norway also has room to delay fiscal tightening should large external risks materialize.

Norway: Selected Economic and Social Indicators, 2004–12

								Projections	
	2004	2005	2006	2007	2008	2009	2010	2011	2012
Real economy (change in percent)									
Real GDP	4.0	2.6	2.4	2.7	0.0	-1.6	0.7	1.7	1.7
Real mainland GDP	4.1	3.8	4.6	6.8	1.4	-1.6	1.8	2.6	2.2
Domestic demand	7.1	5.4	6.4	5.9	1.3	-4.1	3.2	3.0	2.9
Private consumption	5.2	4.9	5.1	5.4	1.7	0.0	3.6	3.1	3.0
Private mainland fixed investment	12.7	15.1	10.7	14.6	-2.4	-18.4	-1.0	6.1	5.4
Government consumption	0.7	1.9	1.9	2.7	2.6	4.3	1.7	2.5	2.5
Unemployment rate (percent of labor force)	4.5	4.6	3.4	2.5	2.6	3.2	3.6	3.6	3.6
Output gap (mainland economy, - implies output below potential)	-0.9	-0.6	0.7	2.4	1.5	-0.7	-1.0	0.0	-0.2
CPI (average)	0.5	1.5	2.3	0.7	3.8	2.2	2.4	1.4	2.0
CPI (end of period)	1.1	1.8	2.2	2.8	2.1	2.0	2.8	1.6	2.2
Gross national saving (percent of GDP)	32.5	37.2	38.9	37.2	39.0	31.5	33.9	35.8	35.2
Gross domestic investment (percent of GDP)	20.3	21.5	23.0	25.8	24.5	22.5	22.4	22.1	22.8
Public finance									
Central government (fiscal accounts basis)									
Overall balance (percent of mainland GDP) 1/	9.2	14.5	19.7	18.3	22.3	10.0	8.9	11.5	10.8
Structural nonoil balance (percent of mainland trend GDP) 2/	-3.4	-3.4	-2.9	-2.8	-3.3	-5.3	-5.4	-5.2	-5.5
in percent of Pension Fund Global capital 3/	-5.6	-4.9	-3.4	-2.7	-3.0	-4.4	-4.1	-3.5	-3.9
General government (national accounts basis, percent of GDP)									
Overall balance	11.1	15.0	18.2	17.2	18.8	10.6	10.5	13.2	11.6
Net financial assets	103.7	120.6	133.8	139.2	123.8	157.0	164.0	168.1	175.1
of which: capital of Government Pension Fund Global	57.9	71.4	81.7	87.4	88.8	111.9	121.8	128.6	137.0
Money and credit (end of period, 12-month percent change)									
Broad money, M2	7.5	11.7	13.7	16.7	3.8	2.3	5.4	…	…
Domestic credit, C2	8.6	13.2	14.3	14.0	12.0	2.9	6.1	…	…
Interest rates (year average, in percent)									
Three-month interbank rate	2.0	2.2	3.1	5.0	6.2	2.5	2.5	2.8	…
Ten-year government bond yield	4.4	3.7	4.1	4.8	4.5	4.0	3.5	3.8	…
Balance of payments (percent of mainland GDP)									
Current account balance	16.2	21.6	23.2	18.2	23.8	14.7	14.6	17.8	15.9
Balance of goods and services	17.2	21.7	23.4	17.9	23.7	14.3	15.7	18.3	16.2
Mainland trade balance of goods	-8.0	-7.9	-8.1	-8.4	-8.0	-6.9	-6.7	-6.5	-6.8
Offshore trade balance of goods	24.1	28.5	30.5	26.2	31.6	20.8	22.2	24.5	22.8
Exports of goods and services (volume change in percent)	1.1	0.4	-0.9	1.4	0.7	-4.6	1.1	0.4	0.3
Imports of goods and services (volume change in percent)	9.7	7.8	9.2	10.1	4.1	-12.7	9.3	4.0	3.7
Terms of trade (change in percent)	7.7	15.6	11.9	-2.5	13.1	-13.9	6.2	…	…
International reserves (end of period, in billions of US dollars)	44.3	47.0	56.8	60.8	50.9	48.9	52.9	…	…
Fund position									
Holdings of currency (percent of quota)	66.5	87.4	91.8	93.3	88.4	80.6	76.6	…	…
Holdings of SDR (percent of allocation)	138.5	128.1	179.5	138.6	169.0	102.4	102.0	…	…
Quota (SDR millions)	1,672	1,672	1,672	1,672	1,672	1,672	1,672	…	…
Exchange rates (end of period)									
Exchange rate regime	Free float								
Bilateral rate (NOK/USD), end-of-period	6.0	6.8	6.3	5.4	7.0	6.2	5.8	6.0	…
Nominal effective rate (2005=100)	99.0	99.5	99.0	103.4	88.7	101.2	101.3	…	…
Real effective rate (2005=100)	98.8	99.3	98.9	102.7	88.7	102.0	102.5	…	…

Sources: Ministry of Finance; Norges Bank; Statistics Norway; International Financial Statistics; and IMF staff estimates and projections.
1/ Projections based on authorities' 2012 budget.
2/ Authorities' key fiscal policy variable; excludes oil-related revenue and expenditure, GPF-G income, as well as cyclical effects.
3/ Over-the-cycle deficit target: 4 percent.

Statement by Mr. Audun Gronn,
Alternate Executive Director for Norway
January, 27, 2012

On behalf of my Norwegian authorities, I would like to thank staff for a very well-written report on the Norwegian economy. My authorities broadly agree with staff's findings and analysis in the report, and welcome the recommendations.

Economic development and main economic challenges
The description of current economic developments and the outlook for the domestic economy are mainly in accordance with the views of my authorities. The prospects for a balanced development in the Norwegian economy over the medium term are indeed good, but, as staff also notes, there are risk factors present.

The main challenge is the risk related to the competitive situation for manufacturing and other exposed sectors in the economy. There are signs of a dual development within these sectors. Firms providing goods and services to the oil sector[1] experience strong demand due to high oil investments, while other parts of the exposed sector suffer from weak external demand. High wage cost levels and a strong krone exchange rate constitute a threat to balanced development in the years to come. These challenges will become even more pronounced a few years from now when oil investments are expected to decline.

Another challenge is linked to high house prices. This is well described in the staff report. House prices have steadily increased over the last two decades, only interrupted by a slight decline starting in mid 2007 and ending in late 2008. The risk of elevated house prices stresses the need to pursue macro prudential measures and regulations on credit practice in banks.

Fiscal policy
The Norwegian fiscal framework supports a stable development of the mainland economy and reduces the risk of "Dutch disease" by keeping spending of oil revenues on a sustainable path. Furthermore, the framework ensures that also future generations will benefit from the oil wealth. The Government's net cash flow from oil activities is set aside in The Government Pension Fund Global and invested abroad. Oil income is phased into the economy on par with the expected real return from the Government Pension Fund Global, estimated at four percent.

This framework has worked well and has broad political support in the parliament. However, a large Pension fund generates constant pressure from various interest groups to spend more than what follows from the established guidelines. My authorities would like to highlight the importance of adhering to the Norwegian comprehensive fiscal framework.

[1] The term "oil" in this statement refers to both oil and gas.

Staff recommends in the report that fiscal policy should be tightened over the medium term. My authorities take note of this advice, but would like to emphasize that the present fiscal guidelines already ensure a careful and gradual phasing in of oil revenues in the Norwegian economy. Due to the gradually increasing size of the Pension Fund Global, the calculated four per cent return of the fund increases as well. Based on present estimates, the fiscal guidelines give room for an annual increase in spending of oil revenues in the magnitude of ¼ per cent of GDP of Mainland-Norway over the medium term. This implies that an expansionary fiscal impulse of the same size will be in line with the fiscal framework for Norway, and, also, that staff's advice to keep spending of oil revenue somewhat below the four per cent path may be consistent with a slightly expansionary or a neutral fiscal stance.

In 2011, spending of oil revenue came in well below the 4 per cent target. The projection for 2012 is also below. In 2009 and 2010, spending ended above the target, mainly as a result of the effects of the financial crisis. These examples confirm the purpose and the validity of the fiscal rule.

Norway faces substantial fiscal challenges over the long run, especially from an ageing population. Age-related spending will gradually surpass the expected real return on the Pension Fund. It cannot be financed by putting more money into the Pension Fund alone. As other countries, Norway will have to structure public expenditure arrangements so they can be sustained as life expectancy increases.

A major pension reform was implemented from 2011. A life expectancy divisor has been introduced, implying that one has to work longer to maintain a given benefit level when life expectancy increases. Retirement age has been made flexible, but individuals bear the full cost of early retirement and get the full economic gain of working longer. Incentives to work are also improved by a stronger link between contributions and benefits. Statistics Norway has calculated the effects of the reform on labor supply to be quite considerable, and it might well be that the pension reform contributes to a somewhat better long term fiscal balance than indicated by the IMF staff report. The effective retirement age has also risen in the recent years. Nevertheless, changing incentives to increase labor supply should be the main route to long term fiscal sustainability, and the Norwegian authorities take note of the advice regarding the need for further reforms in the disability pension scheme and the sickness leave scheme.

Monetary Policy

The Norwegian authorities generally concur with staff's assessment of monetary policy. If downside risks materialize, monetary policy should be the first line of defense. If conditions warrant, measures could include not only policy rate changes, but also liquidity measures.

In the October 2011 *Monetary Policy Report*, Norges Bank's baseline outlook for the Norwegian economy was for growth to remain robust. Inflation, albeit currently low, would eventually accelerate. In November and December, the risk of a renewed recession

within the euro area increased markedly. The situation in the euro area led to considerable disturbances in the European banking system and money and credit markets. Short-term and long-term funding became increasingly costly and less accessible for European banks. Market funding also became more expensive and less accessible for Norwegian banks. To dampen the effect of the intensified turbulence in financial markets and weaker prospects for external growth, Norges Bank cut the key policy rate to 1.75 per cent on December 14, 2011. In its communication, Norges Bank pointed out that "in a situation with elevated uncertainty, it may be appropriate to take measures to mitigate effects of a particularly adverse outcome on the economy. The Executive Board is of the view that it is appropriate to reduce the key policy rate now in order to guard against an economic setback and even lower inflation."

There is a risk that a potential further deepening of the euro crisis could erode business confidence and constrain the otherwise buoyant business investment climate. If oil prices were to decline significantly during a prolonged international downturn, activity in Norway could fall. In the medium to long term, imbalances could intensify further due to high levels of debt in Norwegian households, making them vulnerable to loss of income and higher interest rates.

The objective of monetary policy in Norway is low and stable inflation. There are limits to the number of considerations monetary policy can attend to. In this regard, my authorities agree with staff's recommendation for more targeted instruments to dampen the build-up of risk in the financial system.

Financial sector issues

Norwegian financial institutions have improved their capital base somewhat and have also to a certain extent improved their funding situation over the last years. The strength of the Norwegian economy is a risk-reducing factor for Norwegian financial institutions' domestic operations. Norwegian financial institutions' balance sheets are, however, vulnerable to a deterioration of international macroeconomic conditions. Increased turbulence in global financial markets, and weaker demand for goods and services by Norway's trading partners, could easily have a negative impact on banks' credit risk and funding.

There is a close relationship between household debt and developments in the housing market. As noted, house prices have increased over a prolonged period, and households' debt-to-disposable income ratio has reached an all-time high of more than 200 per cent. My authorities agree with staff that high household debt, combined with high and rising house prices, pose a significant risk to financial stability. Most Norwegian households are homeowners, and residential mortgages make up approximately 85 per cent of household debt. Households are vulnerable to higher interest rates, loss of income and/or a drop in prices for residential property, while banks are vulnerable to losses stemming from financial problems in the household sector, be it directly or via lower household demand. Continued low interest rates may influence expectations of households and contribute to further increases in house prices and household debt.

Regulation and supervision are important contributors to confidence in the financial system and to financial stability. Supervision of banking and other parts of the financial sector promotes solid financial institutions with good risk awareness, management and control. The government is presently preparing the institutional framework for and the introduction of new macro prudential policies based inter alia on the recommendations in Basel III and the European Commission proposal for CRD IV. We have duly noted the advice in the staff report.

As also referred to in the report, the Norwegian Financial Supervisory Authority has recently adopted amendments strengthening its guidelines for prudent residential mortgage lending. The limit for what is considered a prudent loan-to-value ratio for residential mortgages was reduced from 90 to 85 per cent of the property's market value in late 2011. This limit applies to all loans secured by the property. Further, if total lending exceeds 70 per cent of the property's market value, interest-only loans should be avoided. Banks and other regulated lenders operating in the Norwegian market are also recommended to make allowances for at least a 5 percentage point increase in interest rates when assessing a loan applicant's debt-servicing capacity. The FSA has indicated that breach of the guidelines may compel the FSA to impose higher capital requirements in accordance with the Basel II Pillar 2 process. As a part of the general housing policy a state agency (Husbanken) manages a designated policy towards specific and vulnerable groups in the housing market.

The Basel III and the proposed CRD IV frameworks recommend certain standard regulatory risk weights for residential mortgages, and also allow for lower risk weights in banks' own internal rating models. My authorities are concerned that these risk weights may be too low, and lead to too low capital requirements for banks operating in the Norwegian market. This issue will be discussed both domestically and with the Nordic neighbors. Important factors here are the method used for calculating minimum capital requirements, as well as the required minimum percentages. In December 2011 the Ministry of Finance decided that the so-called Basel I floor, requiring a minimum level for the denominator of the capital requirement calculation, should be continued for an indefinite period for Norwegian banks.

Tax policy

My authorities acknowledge that owner-occupied housing is favored both as regards the income tax and as regards the wealth tax. Home ownership is deeply rooted in Norway. This implies that an increased tax burden on people's homes is a challenging political issue. Despite this, a new and fairer model for assessing the tax value of homes for the purpose of wealth taxation was implemented from 2010, implying a roughly 25 per cent increase in such values.

If a tax on imputed rents is not deemed feasible, limited deductibility of mortgage interest payments might be seen as a possible second best measure, but with some clear disadvantages. Most importantly, housing investments would be affected only to the extent they are debt financed. Moreover, it will be difficult and costly in practice to distinguish mortgage interest payments from other interest expenses. An inadequate

distinction may cause investment distortions. A substantial reduction in the tax value of mortgage deductions, however, followed the implementation of the dual tax system in 1992 when interest payments became deductible only against the low capital tax (with a tax rate of 28 percent).

My authorities take note of staff's recommendation to introduce an allowance for corporate equity (ACE). So far few countries have introduced a deduction for the cost of equity in the corporate tax. Most countries seem reluctant to forego their share of the source-based taxation. My authorities do not rule out a consideration of the ACE-model sometime in the future, but have no immediate plan to introduce such a substantial change to the tax system.