

No. 7 | 2012

Economic commentaries

How is market turbulence affecting Norwegian banking groups' funding costs?

*Jermund Molland and Monique Erard, Liquidity Surveillance Department, Norges Bank Financial Stability**

How is market turbulence affecting Norwegian banking groups' funding costs? ¹

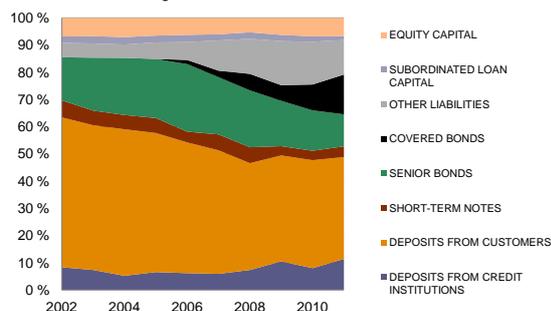
Recent years' turbulence in financial markets has led to changes in funding conditions for Norwegian banking groups. Through 2008, risk premiums on banking groups' bond funding rose sharply. After falling back and stabilising somewhat, premiums rose again from summer 2011. As banking groups must replace bonds issued prior to 2008, the average cost of bond funding rises, pushing up banking groups' total funding costs.

Funding structure

In this *Commentary* we will take a closer look at how financial market turmoil has affected the cost of Norwegian banking groups' long-term wholesale funding and the effect this has on overall funding costs. The assumptions underlying the analysis are presented in Box 1.

Norwegian banking groups' funding can be primarily divided into equity capital, customer deposits and wholesale funding². The share of equity capital and subordinated loan capital has remained fairly stable in recent years, while the share of deposits has declined (see Chart 1). At the same time, wholesale funding accounts for an increasing share of funding.³

Chart 1 Funding structure of Norwegian banking groups¹⁾. Annual amounts. Percent of total funding.²⁾ 2002 – 2011



1) Covered bond mortgage companies and Norwegian banks (except branches and subsidiaries of foreign banks in Norway).

2) Aggregated amounts adjusted for swap arrangement
Source: Norges Bank

¹ We are grateful to Sindre Weme and Ketil Rakkestad for useful comments.

² Wholesale funding comprises bonds and short-term notes and deposits from credit institutions.

³ The swap arrangement, which was introduced in 2008, has resulted in a sharp increase in other liabilities, though this share will gradually decline as the swap agreements expire.

To calculate total funding costs, we begin with a simplified balance sheet, where the liability side comprises senior bank bonds, covered bonds (including the swap arrangement), short-term wholesale funding and customer deposits. This represents approximately 85 percent of banking groups' total funding at the end of 2011. This simplification thus provides a good picture of developments in total funding costs. The average cost of subordinated loan and equity capital has historically been higher than the sources of funding we have included. This suggests that our calculations underestimate total funding costs to some extent.

Long-term wholesale funding

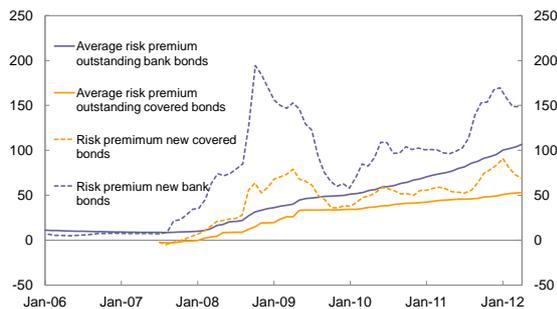
Norwegian banking groups' long-term funding primarily comprises senior bank bonds and covered bonds. These bonds are issued in both Norwegian and foreign capital markets. High lending growth relative to growth in deposits and access to issuing covered bonds beginning in 2007 have boosted the share of long-term wholesale funding in recent years. From accounting for approximately 15 percent of Norwegian banking groups' total funding in 2002, covered bonds and senior bank bonds accounted for around 25 percent at the end of 2011.⁴

The effective interest rate a banking group has to pay when issuing a bond may be expressed by a benchmark rate and a risk premium. The benchmark rate is usually a money market

⁴ Excluding covered bonds used in the swap arrangement.

rate or the yield on a government security with the same maturity. The risk premium reflects investors' reward for the risk associated with the bond. Since the turbulence in financial markets began, risk premiums for Norwegian banking groups have risen and remained higher than in the years prior to 2008 (see Chart 2).

Chart 2 Estimated average risk premiums¹⁾ on new and outstanding bonds for Norwegian banking groups. Basis points. Monthly average. January 2006 - April 2012



1) Spread over three-month NIBOR/mid-swap with three-month leg
Sources: DnB Markets and Norges Bank

When banking groups replace bonds issued at low risk premiums before the turbulence in financial markets began, they pay a higher risk premium. That explains the increase in the average risk premium on banking groups' outstanding bonds (see Chart 2). Average risk premiums will continue to rise as long as risk premiums on new bond issues are higher than the average premium on outstanding bonds. Thus, a reduction in risk premiums on newly issued bonds in the first quarter of 2012 did not result in a reduction in average premiums, though it helped to curb the increase.

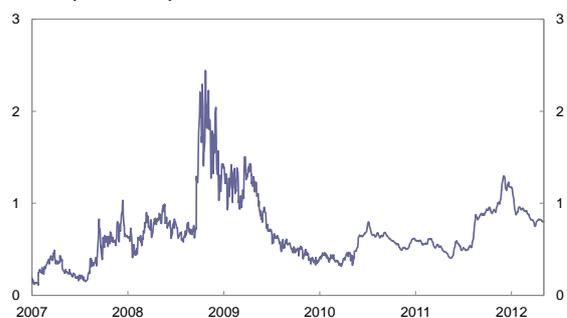
Norwegian banking groups' assets primarily consist of floating-rate loans or loans with short fixed-rate periods. To limit the interest rate risk associated with funding assets, banks primarily seek a floating rate on their borrowing as well. They achieve this by obtaining funding at a floating rate in the bond market or by issuing fixed-rate bonds and swapping them for a floating rate in the interest rate swap market. The Norwegian Interbank Offered Rate (NIBOR) is usually used

as a benchmark for the floating rate banks pay.

The cost of long-term wholesale funding can therefore be expressed as the sum of NIBOR and risk premium banking groups pay for funding. Changes in NIBOR will impact directly on cost of both new issues and bonds outstanding.

In recent years, the spread between the key policy rate and NIBOR has widened, partly reflecting heightened uncertainty in the money market (see Chart 3). This has also pushed up the cost of banking groups' wholesale funding.

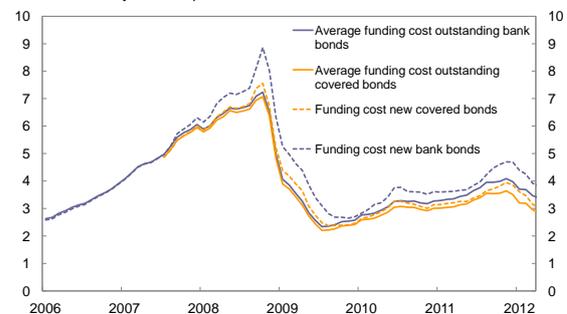
Chart 3 Spread between three-month NIBOR and key policy rate expectations in the market.¹⁾ Percentage points. Five-day moving average. Daily figures. 5 January 2007 - 2 May 2012



1) Expected key rates estimated by Norges Bank
Sources: Thomson Reuters and Norges Bank

A lower NIBOR owing to a lower key policy rate has resulted in reduced costs for long-term wholesale funding for banks so far in 2012 (see Chart 4).

Chart 4 Estimated average funding costs¹⁾ for new and outstanding bonds. Norwegian banking groups. Monthly average. Percent. January 2006 - April 2012

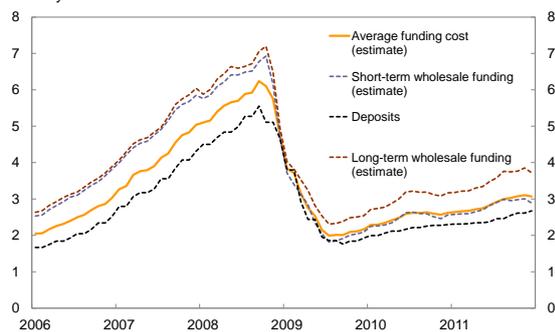


1) Sum of 3-month nominal NIBOR and risk premium on bonds
Sources: DnB Markets and Norges Bank

Total funding

Total funding costs for Norwegian banking groups are lower than the cost of long-term wholesale funding (see Chart 5). The primary reason is that customer deposits are banking groups' most important source of funding (see Chart 1), and this source of funding has been substantially lower-priced than other sources in recent years.

Chart 5 Funding costs in Norwegian banking groups¹⁾. Monthly figures. Percent. January 2006 - December 2011

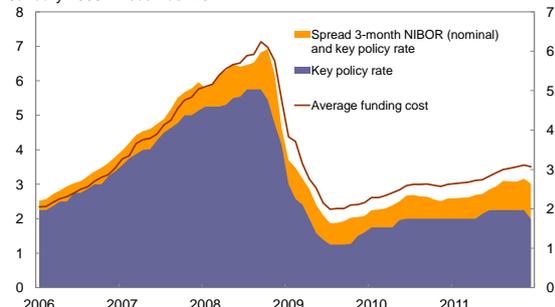


¹⁾ Covered bond mortgage companies and Norwegian banks (except branches and subsidiaries of foreign banks in Norway).

Sources: Bloomberg, Stamdata, DNB Markets and Norges Bank

At the same time, banking groups' total funding costs have risen relative to the key policy rate and NIBOR (see Chart 6), reflecting higher average risk premiums on wholesale funding (see Chart 2) and a higher proportion of wholesale funding through the period. Higher money market premiums are behind the faster increase relative to the key policy rate.⁵

Chart 6 Estimated average funding cost in Norwegian banking groups¹⁾, money market rates and key policy rate. Percent. Monthly figures. January 2006 - December 2011



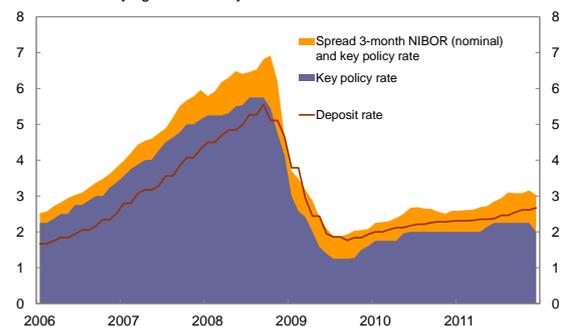
¹⁾ Covered bond mortgage companies and Norwegian banks (except branches and subsidiaries of foreign banks in Norway).

Sources: Bloomberg, Stamdata, DNB Markets and Norges Bank

⁵ Higher money market risk premiums raise costs related to both long-term and short-term wholesale funding.

In recent years, more expensive wholesale funding and preferential treatment of deposits in the proposed new liquidity requirements for banking groups (Basel III/CRD IV) have also helped to raise the price of deposits relative to the key rates and money market rates (see Chart 7). This has also pushed up total funding costs relative to the key policy rate and NIBOR.

Chart 7 Deposit rate¹⁾, money market rate and key policy rate. Percent. Monthly figures. January 2006 - December 2011



¹⁾ Volume-weighted. Covered bond mortgage companies and Norwegian banks (except branches and subsidiaries of foreign banks in Norway)

Source: Norges Bank

Conclusion

Recent years' financial market turbulence has resulted in higher risk premiums for banking groups' wholesale funding. Along with higher deposit rates and a larger share of wholesale funding, this has contributed to raising banking groups' funding costs relative to the key policy rate and NIBOR. Further developments in funding costs will depend on several factors. Proposed new rules (Basel III/CRD IV) will require more stable bank funding. Banking groups will have to lengthen the maturity of wholesale funding, and competition for customer deposits may increase. As a result, average funding costs may remain high relative to the key policy rate. At the same time, risk premiums on long-term funding and in the money market may decline, if uncertainty in financial markets eases. This may also restrain the demand for deposits, and the funding costs facing banking groups might decline ahead.

Box 1

The calculations are based on issue data, indicative risk premiums and balance sheet amounts for Norwegian banking groups in the period from January 2002 to April 2012. The following assumptions have been made:

- The liabilities side comprises senior bank bonds, covered bonds (including the swap arrangement) short-term wholesale funding and deposits. At the end of 2011, this accounts for 85 percent of Norwegian banking groups' total funding.
- The maturity of covered bonds and senior bank bonds has been set at 6 and 4.5 years, respectively. This is based on historical averages of bonds issued in the period between 2002 and 2012.
- Short-term wholesale funding includes short-term notes and loans from credit institutions with a maturity of up to one year.
- Banking groups pay a floating rate on all bond funding with three-month NIBOR as the benchmark rate.

The amounts underlying this publication will not be disclosed, since parts of the data set are based on confidential data.