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Economic commentaries

Market Operations and Analysis

Norges Bank's Money Market Survey in April 2013

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NORGES BANK

Norges Bank's Money Market Survey 2013

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In April 2013, Norges Bank conducted a survey of the Norwegian money market. This was the first time such a survey was conducted in Norway. The results provide new insights into a market that is essential to the Norwegian financial system and important for the conduct of monetary policy. Results from the survey clearly show that unsecured lending is concentrated at the absolutely shortest maturities. Secured lending primarily takes the form of currency swaps. Activity levels in the currency swap market are high out to a maturity of three months. The survey also shows that Norwegian banks are net lenders of NOK through currency swaps and receive the NOK back as unsecured overnight deposits.

The Norwegian money market

The money market may be defined as the market for loans with maturity of up to one year. While the most important participants in the Norwegian money market are private banks, the government and Norges Bank, non-bank financial institutions, large enterprises and various public institutions also participate.

In the Norwegian money market, the most important instruments for transactions between private participants are bank deposits, short-term notes and currency swaps. The government uses the market to issue Treasury bills, and Norges Bank conducts monetary policy with the aid of its standing facilities and market operations. Money market reference rates, in Norway NIBOR, are the basis for interest rates in a large number of financial contracts and help to determine the lending and deposit rates that firms and households face in the Norwegian economy. The breakdown of the US money market in autumn 2008 and the subsequent consequences very clearly show the importance of a well-functioning money market.

About the survey

On its own initiative, Norges Bank conducted a survey of the Norwegian money market in spring 2013. Nine banks participated. Participating banks are established in Norway and active in the Norwegian money market. At the time of the survey, they accounted for 76 percent of the banking system's total assets.

In the survey, banks reported borrowing and lending activity in April for financial instruments and maturities regarded as comprising the key segments of the money market and where there were few or no publicly available data sources already in existence. The survey therefore focused on bank deposits, currency swaps and repurchase agreements (repos). In addition, information was gathered on the market for Norwegian forward rate agreements (FRAs).

Both the time and the format of the survey were chosen to provide the greatest possible degree of comparability with similar surveys in other countries. Nevertheless, there is no prevailing international standard for reporting data of this type, and comparisons with other data sources must therefore be made with caution.

Survey results

Average daily turnover in the Norwegian money market in April 2013 was NOK 163 billion[1]. Of this volume, borrowing activity accounted for 48 percent, while lending accounted for 52 percent. If all active participants in the Norwegian money market had been included in the survey, lending and borrowing in the period would have been equal.

Chart 1 shows total turnover in the money market broken down by borrowing/lending and by instrument type. The chart shows that large Norwegian banks lend more than they borrow through currency swaps, while they borrow more than they lend through unsecured transactions.

Chart 1: Average total daily turnover by borrowing/lending and by instrument type. April 2013. In millions of NOK.

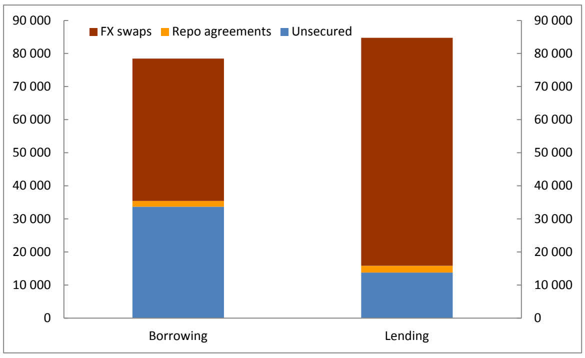
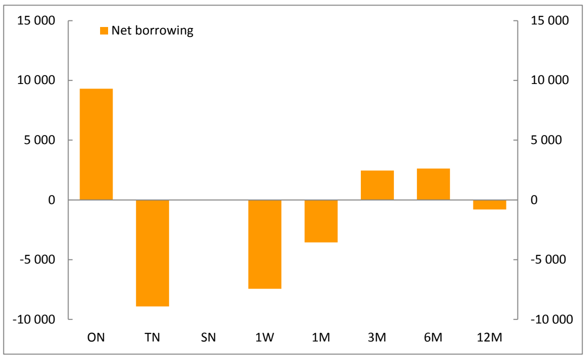


Chart 2 shows net borrowing (borrowing minus lending) and maturity. Large Norwegian banks are net borrowers at overnight maturities[2], but net lenders at longer maturities.

An important reason why borrowing and lending are not equal in volume, either at the various maturities or for the various instruments is that foreign banks and financial institutions are also active in the Norwegian money market. These participants did not take part in the survey, and the discrepancy in volume between lending and borrowing in the survey will largely reflect foreign participants' transactions with Norwegian banks. In addition, a number of smaller Norwegian banks also conduct transactions in the money market. Nevertheless, the volume of these transactions is limited and primarily comprises transactions with larger banks.

Chart 2: Average total net daily borrowing by maturity. April 2013. In millions of NOK.



Charts 1 and 2 illustrate an important characteristic of the Norwegian money market. Norwegian banks lend NOK to foreign participants through currency swaps, particularly at short maturities (one to 30 days). Banks get the NOK back as unsecured overnight loans. The reason for this pattern is that banks not established with a branch or subsidiary bank in Norway do not have access to deposit facilities in Norges Bank. Foreign banks must therefore deposit their NOK in a bank established in Norway, which in turn can redeposit the funds in the Norwegian central bank.

Chart 3 shows total daily turnover by instrument and maturity. This chart illustrates another important characteristic of

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[1] Turnover is defined here as lending plus borrowing for unsecured transactions, repo trades and currency swaps. This definition entails a degree of double counting, since one respondent's lending transaction is often another respondent's borrowing transaction.

[2] See box for explanation.

the Norwegian money market, namely that unsecured lending primarily takes place as overnight transactions. The absence of unsecured transactions with longer maturities reflects broader international developments under way since the financial turbulence in autumn 2008.

Chart 3: Average total daily turnover by instrument and maturity. April 2013. In millions of NOK.

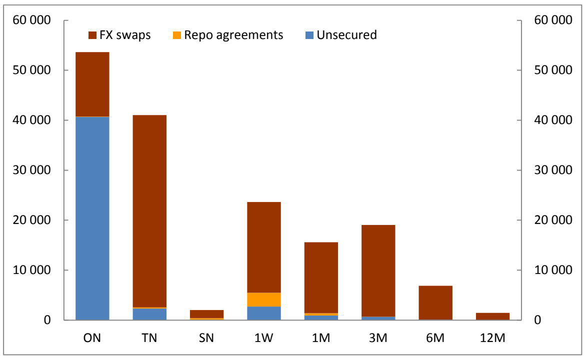


Chart 4 shows daily turnover in the unsecured market segment by maturity and counterparty type. Transactions with non-financial enterprises and non-bank financial institutions account for around 25 percent of total turnover at the shortest maturity. The relative importance of these counterparties is much greater for the smaller banks in the survey than for the larger banks.

Chart 4: Average daily turnover, unsecured transactions. Borrowing activity above the horizontal axis, lending activity below. April 2013. In millions of NOK.

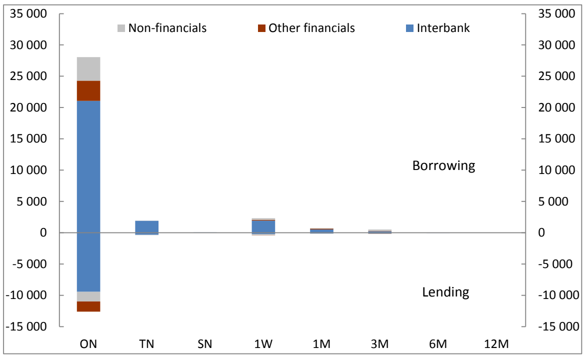
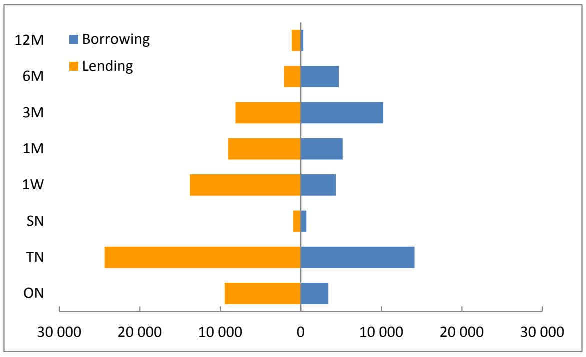


Chart 5 shows banks' borrowing and lending of NOK through currency swaps. The chart indicates that maturities with the most turnover are tomorrow next (TN), one week, one month and three months, but a number of contracts are entered into at maturities of overnight (ON) and six months. In all, Norwegian banks lend more NOK through currency swaps than they borrow. This is possible because foreign participants are net borrowers of NOK through currency swaps.

Chart 5: Average daily volume of currency swaps by maturity. April 2013. In millions of NOK.



As part of the survey, reporting banks completed a questionnaire in which they also had an opportunity to provide qualitative information. Banks reported that the unsecured money market functions satisfactorily at overnight maturities, but functioning is poorer at longer maturities. Compared with the previous year, banks reported that the volumes traded in the unsecured market were higher, the number of counterparties had risen and market depth had improved.

Unfortunately, there is little tangible information regarding the state of this market prior to the financial crisis, but both anecdotal information from Norway and foreign surveys suggest that the unsecured market functioned considerably better prior to 2007-2008.

For secured money market transactions, banks reported that the market functions well at both short and longer maturities. Compared with the previous year, in this market, there are also higher volumes, more counterparties and better market depth.

International comparison

Central banks in the UK, Denmark and the euro area conduct surveys similar to the Norwegian survey. These countries also have a financial market structure which makes it natural to compare the Norwegian survey and the surveys conducted in these countries.

The Norwegian survey shows that average daily turnover volume in the money market was NOK 163 billion, or approximately 7.4 percent of mainland GDP[3]. In a similar survey from 2012, Danmarks Nationalbank reports that average daily turnover volume in the Danish money market was DKK 129 billion, or around 7.1 percent of Denmark's GDP at the time. In the UK, money market turnover in 2011 was 11.9 percent of GDP, but the UK figure also includes the certificate of deposit and commercial paper market. In terms of turnover volume relative to the size of the economy, the Norwegian money market appears to be broadly in line with money markets in neighbouring countries.

However, turnover volume in the money market will depend on such factors as the structure of the banking sector and the central bank's liquidity policy. To compare the functioning of these markets it may be more informative to look at the breakdown of activity by maturity segment and by instrument use.

In the Norwegian survey, lending at maturities of longer than one day as a share of total lending was 43 percent (see Table 1). This is approximately the same as in similar surveys in Denmark, the UK and the euro area. However, the average maturity of *unsecured lending* in Norway was short compared with the other countries. Unsecured lending at maturities longer than one day as a share of total unsecured lending in the Norwegian survey was only 6 percent – in the corresponding foreign surveys, this share was between 15 and 30 percent. Norwegian banks thus use unsecured transactions for lending at longer maturities to a lesser degree than is the case in neighbouring countries. A possible explanation for this is that central banks in these countries use instruments with longer and predictable maturities in their liquidity management.

A comparison with similar foreign surveys also shows that the currency swap market is particularly important in Norway. Currency swaps accounted for 81 percent of Norwegian banks' money market transactions in the survey period, and this instrument is the clearly most important method for carrying out secured money market transactions in Norway. The reason for this is that the repo market is small and underdeveloped in Norway compared with other countries. Currency swaps are therefore the only standardised and liquid instrument banks can use for secured lending.

[3] Mainland GDP at current prices for 2012

Table 1: Comparison of the Norwegian survey with similar foreign surveys. Data from 2012 and 2013.

(in percent)	Norway (2013)	Denmark (2012)	UK. (2013)	Euro area (2012)[4]
Share of unsecured lending	16	29	4	12
Share of currency swaps	81	47		40
Share of repos and other secured transactions	2	24		48
Lending at maturities longer than one day as a share of total lending	43	40	31	47[5]
Unsecured lending at maturities longer than one day as a share of total unsecured lending	6	30	20	15

Maturities and instruments in the survey

The maturity breakdown is in accordance with the most common maturities for money market transactions.

ON stands for overnight and refers to transactions running from the contract date to the following business day.

TN stands for “tomorrow next” and refers to transactions running from the first business day after the contract date to the following business day.

SN stands for “spot next” and refers to transactions running from two business days after the contract date to the following business day.

1W refers to all transactions with maturities between two business days and up to one week.

1M refers to all transactions with maturities longer than one week and up to one month. Similar logic applies to the categories *3M, 6M and 12M.*

Currency swaps are agreements between two parties to exchange one currency for another, and re-exchange them on a future date. Currency swaps therefore represent a form of secured loan. Agreements where the respondent has exchanged foreign currency for NOK are defined as borrowing, and agreements where NOK is exchanged for foreign currency are defined as lending.

Repurchase agreements (“*repos”* or *“sell-buy backs”)* are agreements where one party sells a financial instrument to the counterparty, and at the same time is obliged to buy back the instrument at an agreed price on a specified future date. In an economic sense, a repurchase agreement may be considered a secured lending transaction, where the collateral consists of the financial instrument that is bought/sold.

[4] For the euro area, shares of total turnover are shown and for the other countries, shares of lending activity.

[5] This figure pertains to currency swaps. For other unsecured lending, the share is 15 percent.