

NORGES BANK'S MONEY MARKET SURVEY

2016



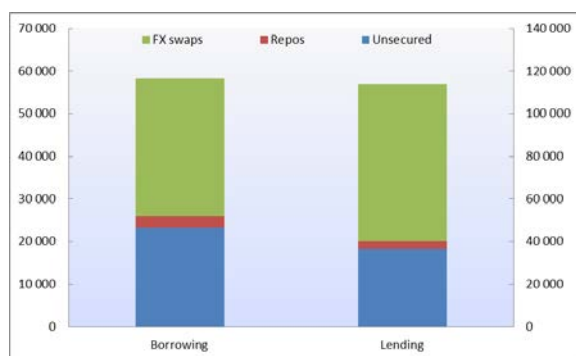
NORGES BANK

Money Market Survey 2016

Each year, Norges Bank conducts a survey of activity in the Norwegian money market. The money market plays a key role in the implementation of monetary policy decisions and in the financial system in general, but sources of information about the activity are limited. The survey was established in 2013 to provide insight into the market and is conducted every April.

Eight banks took part in the 2016 survey¹, reporting lending and borrowing activity using unsecured bank deposits, foreign exchange (FX) swaps² and repurchase agreements (repos) in April 2016. They also responded to questions about the market for Norwegian forward rate agreements (FRAs).

Chart 1: Lending and borrowing by instrument. Daily average for April 2016. In millions of NOK



Charts in this report summarise the 2016 survey results. Charts with results from 2016 show average daily activity for banks that took part in the April survey. Activity refers to the sum of lending and borrowing by volume. Charts showing developments between 2013 and 2016 show average daily activity per reporting bank in April of the applicable year.³

Total activity

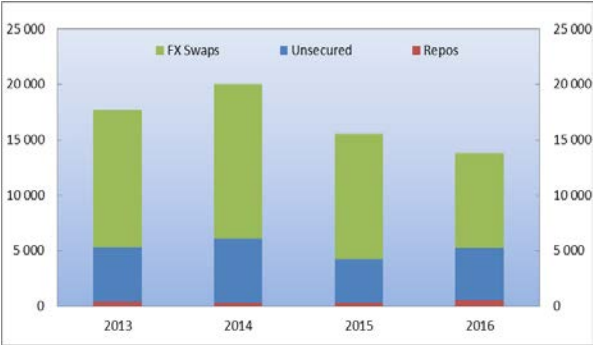
Chart 1 shows banks' average daily borrowing and lending in the money market by instrument. Reporting banks borrowed more than they lent in the unsecured market in April 2016. Banks reported most lending via FX swap agreements where collateral is posted in another currency. Furthermore, repos accounted for a relatively small share of money market activity. Similar results have been reported in the money market surveys conducted in previous years.

¹ In 2013, 2014 and 2015, nine, ten and eleven banks, respectively, took part in the money market survey.

² Banks have only reported FX swap agreements involving NOK.

³ Owing to the dates of Easter and the variation of participating banks, the figures may not be directly comparable from one year to the next.

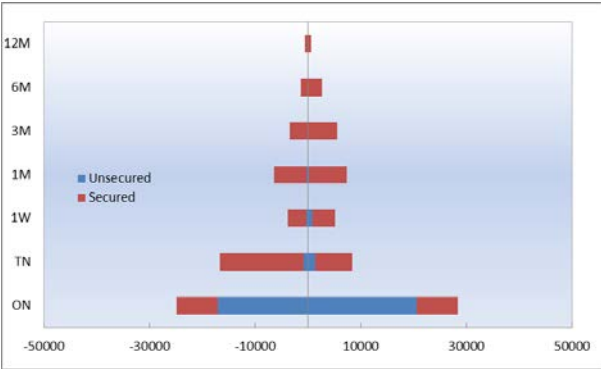
Chart 2: Total activity in the money market 2013 - 2016. Daily average by bank. In millions of NOK



Reported money market activity per bank has declined in the past two years (Chart 2). The breakdown of activity by instrument has changed somewhat between 2013 and 2016.

As a share of total activity, FX swaps have declined from approximately 70% in the first three years to approximately 60% in 2016. Repos represented between 1% and 2% of total activity in the first three years, and increased to 4% in 2016. Unsecured borrowing accounted for between 26% and 30% of total activity in the first three years and increased to 36% in 2016.

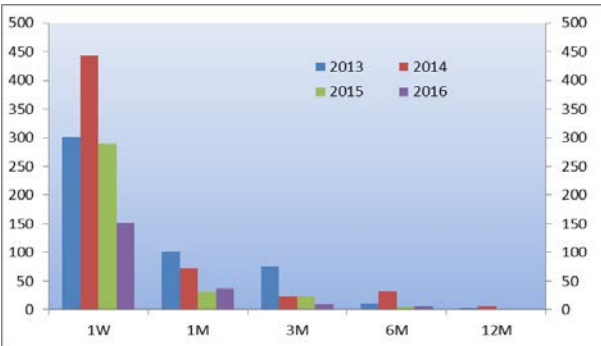
Chart 3: Lending and borrowing by maturity, transaction type and sign. Daily average for April 2016. In millions of NOK



Unsecured transactions

Chart 3 shows the breakdown of banks’ borrowing and lending between unsecured and secured⁴ transactions. Unsecured transactions primarily take place at overnight maturities, and account for approximately 70% of the overnight (ON) market. The remaining percentage of the ON market comprises secured transactions, primarily FX swaps. Few unsecured transactions were conducted at longer maturities.

Chart 4: Unsecured lending activity by maturities beyond one day. 2013 - 2016. Daily average per bank. In millions of NOK



The number of unsecured transactions with maturities beyond one day has fallen in recent years (Chart 4). Banks report that unsecured transactions are primarily conducted in the interbank market.

⁴ FX swaps and repos are secured transactions.

Chart 5: Repo activity by maturity, market and transaction type. Daily average for April 2016. In millions of NOK

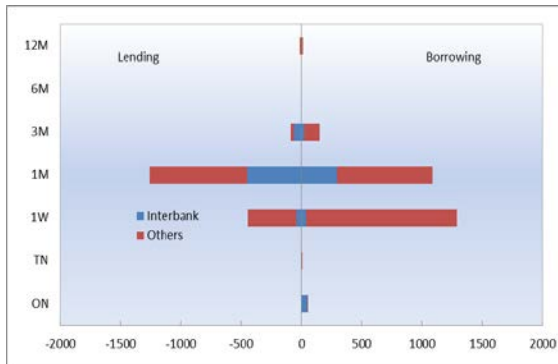


Chart 6: Repo activity by maturity. 2013 - 2016. Daily average per bank. In millions of NOK

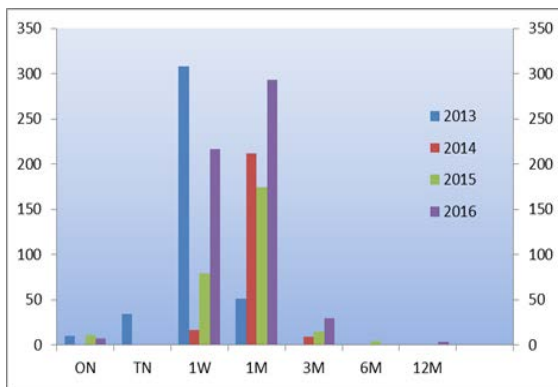
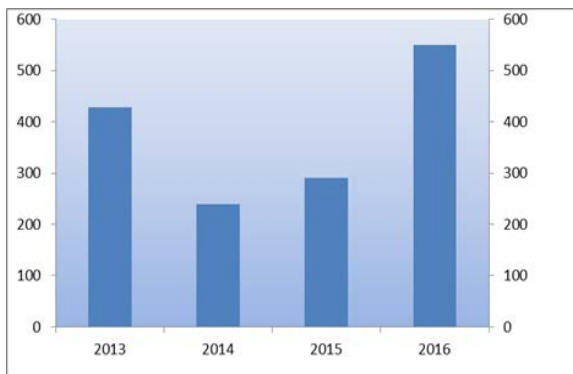


Chart 7: Repo activity. 2013-2016. Daily average per bank. In millions of NOK



Repos

Chart 5 shows that reporting banks' repo borrowing exceeds repo lending, and that most transactions are outside the interbank market. Most repo activity is at one-week and one-month maturities.

In 2016, reported activity in repos at one-month maturity was higher than in previous years (Chart 6). Activity in one-week repos was higher in 2016 than in 2014 and 2015, but lower than in 2013.

Chart 7 shows developments in repo activity since 2013. Reported activity was highest in 2016, when the average daily sum of borrowing and lending was approximately NOK 550m per reporting bank.

Chart 8: FX swap activity by maturity, counterparty and transaction type. Daily average for April 2016. In millions of NOK

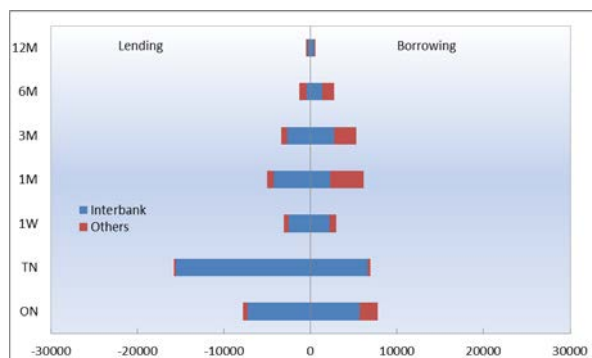


Chart 9: FX swap activity. 2013 – 2019. Daily average per bank. In millions of NOK

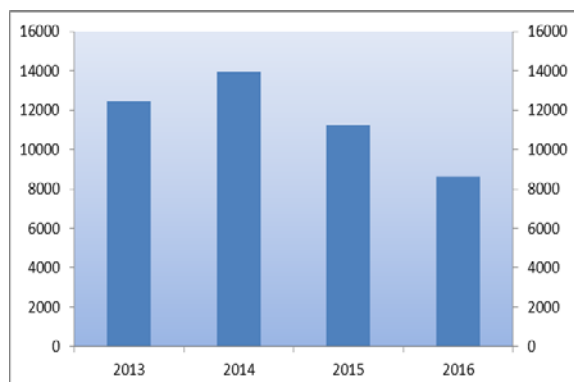
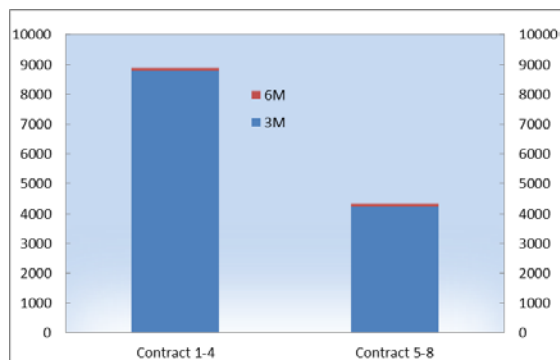


Chart 10: Turnover volumes for FRAs, measured by the notional amounts of the contracts. Daily average for April 2016. In millions of NOK



Foreign exchange swaps

Chart 8 shows the breakdown of reporting banks' FX swap transactions by maturity. Activity was highest at tomorrow/next (T/N), and reporting banks' lending exceeded borrowing at this maturity. Activity was lower at other maturities and the breakdown of reporting banks' lending and borrowing was somewhat more balanced.

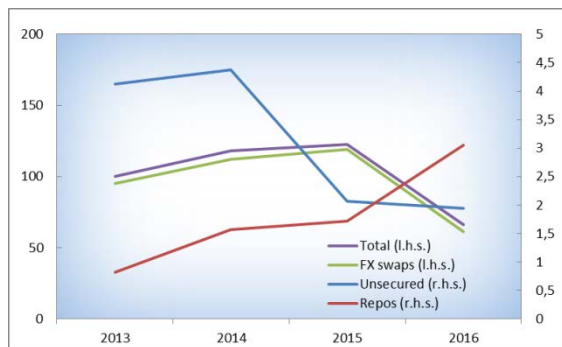
Daily FX swap activity per reporting bank was approximately NOK 8.6bn in 2016, which is the lowest level in the four years that the money market survey has been conducted (Chart 9).

Forward rate agreements (FRAs)

Chart 10 shows turnover volumes for Norwegian FRAs by settlement date⁵ and maturity of the underlying money market rate. Turnover almost exclusively comprises contracts with a three-month underlying money market rate. The first four contracts accounted for about two thirds of total turnover volume, and the second four contracts accounted for about a third.

⁵ The first four FRAs are contracts with settlement dates on IMM dates from June 2016 until March 2017, while settlement dates for the second four are on IMM dates from June 2017 to March 2017.

Chart 11: Maturity-weighted activity (normalised) by instrument. 2013 – 2016. Daily average per bank. In millions of NOK



Maturity-weighted activity

Data from money market surveys in the period between 2013 and 2016 show that maturity-weighted⁶ activity in the FX market and the unsecured market has fallen (Chart 11).⁷ This has resulted in a fall in maturity-weighted activity in the money market as a whole in recent years. Lower maturity-weighted activity in unsecured lending primarily reflects the decline in lending at longer maturities (Chart 4). The decline in maturity-weighted FX swap activity reflects a general decline in volume (Chart 9) and applies to all maturities.

Chart 11 also shows that maturity-weighted repo activity has increased steadily over the past four years, which may reflect both a general increase in activity and higher turnover in repos with longer maturities (Charts 6 and 7).

⁶ Turnover is weighted by the maturity of the transaction. ON and TN are weighted by 1, one week by 7, one month by 30 and so on up to 360 for 12 months.

⁷ Turnover was normalised to 100 in 2013.

Table 1: Borrowing and lending in the Norwegian money market. April 2016. Daily average. In millions of NOK

	Unsecured	Repo	FX swaps	Total
Borrowing	23 296	2 604	32 291	58 191
Overnight	20 593	56	7 737	28 386
Tomorrow-Next (T/N)	1 450	5	6 899	8 354
T/N- 1 week	934	1 292	2 955	5 180
1 week - 1 month	199	1 088	6 131	7 417
1 month - 3 months	73	150	5 317	5 540
3 months - 6 months	48	0	2 704	2 752
6 months - 12 months	0	14	548	562
Lending	18 331	1 799	36 796	56 926
Overnight	17 112	1	7 788	24 901
Tomorrow-Next (T/N)	838	2	15 813	16 654
T/N- 1 week	280	439	3 074	3 793
1 week - 1 month	100	1 258	4 976	6 333
1 month - 3 months	0	85	3 366	3 451
3 months - 6 months	0	0	1 278	1 278
6 months - 12 months	0	14	502	516
Total	41 627	4 403	69 087	115 117

Table 2: Turnover in Norwegian FRAs. April 2016. Daily average. In millions of NOK

	FRAs		
	Contract 1-4	Contract 5-8	Total
3M	8 786	4 229	13 015
6M	105	95	200
Total	8 891	4 324	13 215