The Eurosystem’s new money market statistical reporting – initial results for Germany

On 1 July 2016, the Eurosystem introduced money market statistical reporting (MMSR), under which monetary financial institutions (MFIs) have begun to report transactions in the euro money market on a daily, transaction-by-transaction basis. This provides the Eurosystem with comprehensive and standardised information of both a highly granular and very timely nature to assess the situation on the money market. Current data on activity in, the conditions on and the structures of the money market are of major importance for implementing monetary policy. Given the overriding importance of the money market in the monetary transmission process, the statistics constitute a considerably improved underlying dataset for a more targeted design of the monetary policy toolkit.

The transactions captured in the scope of MMSR are euro-denominated money market transactions in the secured, unsecured, foreign exchange (FX) swap and EONIA swap market segments for selected institutions. At present, the largest 52 institutions in the euro area are required to submit reports. Some 14 of these institutions are domiciled in Germany and submit their reports to the Bundesbank. Moreover, owing to the unique features of the German banking system, the Bundesbank collects data from additional reporting MFIs domiciled in Germany in order to ensure that the sample is representative. A total of 128 institutions are currently subject to a reporting requirement.

On the basis of the data collected during the first year of MMSR, this article presents the current structure of the euro area money market, in particular for the German market. The lion’s share of the trading volume was attributable to secured transactions. The survey found that trading in the secured and unsecured segments, as well as in foreign exchange swaps, was concentrated on overnight maturities. The bulk of secured trading and foreign exchange swaps took place between banks and across borders. In the unsecured money market, on the other hand, trading with non-banks was more pronounced, with a particular focus on transactions with resident counterparties.

MMSR will be used in future to not only analyse and assess the state of the euro money market but also so that the Eurosystem can provide an unsecured overnight reference interest rate.
The importance of MMSR for the Eurosystem

The introduction on 1 July 2016 of MMSR\(^1\) means that, for the first time, transactions conducted by MFIs in the Eurosystem money market are being reported on a daily, transaction-by-transaction basis. This provides the Eurosystem with standardised information of both a highly granular and very timely nature to assess the situation on the euro money market.

The monetary transmission process begins with the money market. Granular and timely information on money market activities and conditions is therefore of major importance for implementing monetary policy. In order to assess the effects of monetary policy, a profound understanding of the liquidity and funding costs of the banking system in the euro area is required. This is also highly topical in the present monetary policy environment, which is characterised by the Eurosystem operating as an intermediary and by large quantities of excess liquidity.\(^2\) In addition, money market tensions during the financial crisis exposed the need to comprehensively monitor the functioning of the money market for monetary policy purposes. On the basis of solid evidence, more targeted measures can be taken in a crisis situation to maintain an appropriate monetary transmission process without monetary policy measures unduly constraining the functioning of the market.

In essence, the transactions captured in the scope of MMSR are euro-denominated money market transactions effected by selected euro area institutions in the secured, unsecured, foreign exchange swap and EONIA\(^3\) swap market segments. The deadline for submitting the data collected to the Bundesbank is 6:30 on the business day following the conclusion of the transaction.\(^4\) This ensures that the required information is available in a timely manner and makes it possible to both assess the current market situation and analyse structural developments over time.

Selection of reporting agents

Statistical data on money market transactions are collected from a sample of the 52 largest euro area MFIs, with the exception of money market funds (hereinafter referred to as the Eurosystem sample).\(^5\) An MFI is required to report data on money market transactions if, on 31 December 2014, its total main balance sheet assets exceeded 0.35% of the total main balance sheet assets of all euro area MFIs. This number does not include branches outside the country of domicile of the reporting agent. The total main balance sheet assets are calculated by the European Central Bank (ECB) based on data on the consolidated MFI balance sheets collected by the national central banks for their respective member states.\(^6\) Under this criterion, 14 institutions domiciled in Germany submit reports to the Bundesbank.

The Regulation also enables the national central banks to define the set of reporting agents as larger than the minimum framework set for the euro area. This right was granted in order to accommodate unique features in individual countries that play a major role in obtaining a representative set of money market statistics.

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2. Excess liquidity is the term used to refer to the highly liquid deposits that commercial banks hold on their central bank accounts which are in excess of reserve requirements (excess reserves). The term also comprises funds deposited by banks in the deposit facility. Prior to the outbreak of the financial crisis in October 2008, the Eurosystem supplied the banking system with central bank money such that there was no meaningful excess liquidity (and also no shortage of central bank money).
3. EONIA stands for euro overnight index average.
5. The Regulation provides for the possibility of expanding the sample at a later date subject to a decision by the Governing Council of the ECB. Thus, for instance, reporting agents in all euro area countries could be captured. This has not been implemented yet, however.
Germany is a case in point. Its banking system has a much more heterogeneous structure, with a large share of smaller institutions, than those of many other countries in the euro area. In addition, banks in Germany are key actors in the euro money market since, for instance, they have traditionally been heavily involved in the (cross-border) redistribution of central bank liquidity. In order to analyse the money market and its structure, it is therefore important to also obtain information on whether, and to what extent, smaller institutions, as well as those with a variety of business models, are active in the money market. In view of these factors, it was necessary to enlarge the group of reporting agents in Germany in an appropriate manner.

Two criteria motivate the sample selection for Germany. The first is that institutions have to have possessed a TARGET2 payment module account (PM account)\(^7\) on 31 December 2014. Second, the amount of total main balance sheet assets has to have been over €1 billion on that date. Dependent branches whose parent company is domiciled in the euro area were excluded from the sample. In order to ensure proportionality, an optional exemption from the reporting requirement was created. This option is available if an institution has not made any transactions via its PM account that have to be reported under MMSR since 1 January 2014. However, once such a transaction is completed, it must be reported to the Bundesbank immediately by the institution. The exemption then expires.

A total of 128 institutions in Germany are required to submit reports to the Bundesbank for MMSR purposes (hereinafter referred to as the Bundesbank sample). This comprises not only the largest institutions domiciled in Germany but also additional institutions from, for instance, the savings bank and cooperative bank sector, as well as regional banks.

### MMSR coverage

#### General reporting items

MMSR covers euro-denominated transactions effected by reporting agents in the secured, unsecured, foreign exchange swap and EONIA swap (euro overnight index swaps, or OIS) market segments.

Both borrowing and lending are reported in the scope of MMSR (bilateral reporting). This also makes it possible to capture transactions of reporting MFIs with counterparties not covered by the sample. Counterparties can be matched for particular evaluation purposes if both counterparties are reporting agents. This can occur either via a unique transaction identifier (UTI) or – if no UTI has been reported – via the transaction’s individual attributes.

Individual transactions with other MFIs, other financial intermediaries (OFIs), insurance corporations, pension funds, general government or non-financial corporations (wholesale\(^8\) transactions) are to be reported. Transactions with central banks for investment purposes have to be reported as well.\(^9\) As regards unsecured lending, only transactions with other MFIs are subject to the reporting requirement. As a general rule, transactions with a maturity of up to and including 397 days after the settlement date are reported. An exception is the EONIA swap market segment: here, transactions are to be reported for all maturities.

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7. A payment module (PM) account is a fully fledged account on the TARGET2 SSP that facilitates the use of all functionalities in the Bundesbank’s account management system, including the settlement of individual payments, ancillary system settlement (eg securities clearing activities via Clearstream) and the settlement of retail payments. The PM account can also be used to obtain intraday credit and for recourse to standing facilities. This account is intended to settle the cash leg of open market operations and can also be used for holding minimum reserves.

8. Classification as “wholesale” is in line with the Basel III LCR framework.

9. What it means is that transactions as part of open market operations and standing facilities are not subject to the reporting requirement.
The following information must be reported for all market segments: attributes which clearly identify the transaction; information on the counterparty; data on the conclusion, settlement and maturity; as well as the volume and conditions. Additional attributes must be given depending on the market segment.

**Reporting items specific to market segments**

As regards the secured segment of the money market, MFIs report repos, securities lending against cash as well as buy and sell-back transactions. Transactions can have either a fixed maturity (“fixed-term”) or the option of extending or ending the arrangement on any given date (“open-basis”). If an open-basis transaction is rolled over, it is reported on a daily basis until termination. The nominal amount and interest rate for the transaction are reported in this market segment. The MFI reports whether the interest rate is fixed or floating (variable rate). Information on the collateral posted is also provided, specifying whether it is single collateral, multiple collateral or a collateral pool. If available, the international securities identification number (ISIN) of the collateral item(s) is included in the report. Otherwise, identifying features of the collateral such as the sector of the issuer, the CFI code\(^\text{10}\) or information as to whether it is a pool without an ISIN or not are reported. Further information to be provided includes the nominal value of the collateral and any haircut.

Items that are required to be reported in the unsecured market segment include deposits, call money/call accounts and short-term securities. The latter include certificates of deposits, (asset-backed) commercial paper, floating rate notes and other short-term debt securities is-
sued (unsubordinated securities except for other equity with a maturity of up to and including 397 days after the settlement date).

Call money and call accounts – just like open-basis transactions in the secured market segment – are reported on a daily basis until they mature. Here, it is the outstanding amounts at the end of the business day and not individual transactions that are to be reported. MFIs report purchases and sales of short-term securities only upon issue; secondary market trading is not subject to the reporting requirement. Other items to likewise be reported in the unsecured market segment are the nominal amount and the interest rate for the transaction, broken down by fixed rate or variable rate remuneration. In this segment, borrowing transactions with all above-mentioned counterparties are reported. For lending, only transactions with other MFIs are reported. Specifically for this market segment, the type of instrument and additional attributes are to be listed where the transaction contains a call/put option on the part of the creditor or debtor.

Foreign exchange swap transactions in which the euro is one of the exchanged currencies fall under the reporting requirement. Such transactions are relevant for the analysis of the euro area money market owing to their impact on euro liquidity. For this market segment, too, the nominal amount of the transaction, the foreign exchange spot rate and foreign exchange forward points are to be given. The report also includes the foreign currency.

In the case of EONIA swaps, the EONIA variable overnight rate (a reference rate for unsecured euro overnight trading) is exchanged for a fixed interest rate. These transactions are reported under MMSR irrespective of their maturity. Not only the nominal amount but also the agreed fixed rate of the transaction is reported.

Overview of the data in the context of the Eurosystem

The collection of statistical data on money market transactions commenced on 1 July 2016. In order to gain an initial overview of the information acquired since then, the trading volumes of the secured, unsecured and foreign exchange swap market segments will be examined. It is not possible to comment on the EONIA swap segment due to statistical confidentiality.

The first year of MMSR was characterised by a high level of excess liquidity, stemming especially from the Eurosystem’s high volume of asset purchases for monetary policy purposes. Purchases made under the expanded asset purchase programme (APP) increased excess liquidity from just over €900 billion in July 2016 to around €1,600 billion in June 2017. At the same time, the Eurosystem’s deposit facility rate remained unchanged at -0.40%. Owing to the very high level of excess liquidity, the deposit facility rate currently serves as the reference rate for the EONIA, meaning that the EONIA hovered between -0.32% and -0.37% in the period observed. These conditions also had an impact on money market activity.

The 52 institutions included in the Eurosystem sample reported an average volume of just under €800 billion per business day (for around 37,000 transactions each day) within the first year of MMSR in the secured, unsecured and foreign exchange swap segments. A comparison of the three market segments analysed shows that the secured segment had the largest share of the total volume, followed by foreign exchange swaps and the unsecured segment.

11 A reporting requirement for lending to non-banks was waived since such transactions are largely assignable to the reporting agents’ mortgage business and thus have no relationship with the money market.


Data starting from 1 July 2016 available

High excess liquidity and negative deposit facility rate are key conditions of money market

Secured segment with largest market share
Looking at the geographical distribution of the counterparties shows that more than half of all transactions in the unsecured money market were concluded with domestic counterparties, ie with counterparties resident in the same country as the reporting institution. The bulk of foreign exchange swaps took place across borders, however. These were split roughly evenly between transactions with counterparties domiciled within and outside the euro area.13

Building on this initial overview of MMSR in the Eurosystem context, this article will now present a more in-depth, data-based examination of the euro money market in Germany.

Detailed analysis of the euro money market in Germany based on the Bundesbank sample

In the scope of MMSR, a total transaction amount of €67 trillion was reported in the secured, unsecured and foreign exchange swap segments by the 128 reporting MFIs in Germany (including the 14 institutions also included in the Eurosystem sample) between 1 July 2016 and 30 June 2017. The transaction amount was spread across around 6 million reported transactions. A volume of over €260 billion on average was traded each business day (at around 23,000 transactions per day).

As in the Eurosystem sample, the largest share of the volume for the MFIs in Germany subject to the reporting requirement came from the secured segment, at just under €31 trillion. This corresponds to a share of around 46% of the transactions reported in the three segments under review. The unsecured segment and foreign exchange swaps accounted for around 27% (€18 trillion) of the contracts traded. Roughly half of the trading volume was attributable to borrowing and the other half to lending, an exception being the unsecured segment, which had a significantly higher share of borrowing. This is due to the asymmetrical reporting requirement: in the case of lending, only interbank market transactions are to be reported. When interpreting these aggregate figures, it should also be borne in mind that transactions between reporting agents are reported bilaterally.

Statements on the distribution of secured money market transactions cannot be published at present owing to Eurosystem publication restrictions that are currently in place.

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The number of transactions was dominated by unsecured money market trading at just under 4 million transactions (64%). This is due to the high proportion of smaller reporting agents, which were active in greater numbers in the unsecured market. The secured segment accounted for 30% of the contracts and foreign exchange swaps for just under 7%. The notably smaller proportion of foreign exchange swaps is attributable to the higher transaction amounts on average. The foreign exchange swap figure therefore stood at €47 million, while the figures for the secured and unsecured segments amounted to €17 million and €5 million respectively. However, the median for each segment was significantly below these values in some cases. This shows that a large number of transactions with somewhat smaller volumes were reported compared to a low number of high-volume transactions.

Secured money market

In the secured segment, transactions were split almost equally between borrowing (around €16 trillion) and lending (around €15 trillion). The institutions included in the Bundesbank sample concluded most of their secured trading contracts across borders. Some 75% of lending and 88% of borrowing was conducted with counterparties domiciled abroad, most of it with counterparties outside the euro area.

An analysis of the counterparties reveals that just under 80% of transactions were concluded in the interbank market.14 At the same time, just over 60% of all transactions were settled via a CCP. Nevertheless, the vast majority of the transactions (more than 80%) were traded against individual securities and not against a range of securities with established minimum standards (“baskets”, which are often provided by CCPs). This suggests that, in the current market environment, secured transactions are often driven by securities and less by liquidity.

Around three-quarters of the securities posted as collateral were government bonds. In addition, approximately 50% of the transactions carried out by institutions in the Bundesbank sample were concluded against collateral issued in Germany. Securities issued in France and Italy were also posted more often as collateral.15

The maturity of the transactions tended to be short-term. Over 80% of trading contracts

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14 The interbank market comprises transactions between banks, including central counterparties (CCPs).
15 Calculations are based on transactions for which an ISIN has been provided.
were concluded with a maturity of one day (overnight, tom/next and spot/next). This is partly attributable to the fact that open-basis transactions have to be reported daily for as long as they continue to be rolled over. In the case of longer maturities, transactions in the secured borrowing segment were primarily concluded with a maturity of one week, while, in the lending segment, this maturity reached one month.

Unsecured money market

In the period under review, around €2 trillion in borrowing operations and €4 trillion in lending operations were carried out in the unsecured interbank market. The agents reporting to the Bundesbank were therefore more likely to be lenders on average. With regard to lending, what is noteworthy about this segment is that only interbank activity is reported. In the case of borrowing, however, transactions with non-banks are reported in the scope of MMSR. The inclusion of these transactions results in a total borrowing figure of around €14 trillion, i.e. the interbank market constituted only around 13% of the total unsecured borrowing transactions recorded. A greater share of the transactions with non-banks were, in particular, with non-financial corporations and investment funds, with the exception of money market funds.

An analysis of the counterparties’ countries of domicile highlights the fact that institutions in the unsecured market segment were primarily active in their home markets. In the interbank market, 93% of the lending transaction volume and 56% of the borrowing transaction volume was conducted with banks domiciled in Germany. Taking all counterparties into account, 83% of borrowing transactions were carried out in Germany. The discernible preference for trading with domestic counterparties in the unsecured segment can be attributed, first, to the greater degree of information generally available on these counterparties. Second, the pre-existing network systems in Germany also contribute to domestic market activity.

Trading was dominated by deposit business, i.e. deposits and call money/call accounts. In the case of borrowing in the interbank market, deposits with a fixed maturity made up around 70% of the transactions, while, in the case of lending, call money accounted for 71% of the transactions.
54% of the traded volume, while call money and call accounts accounted for 44%. In terms of lending, the share of the latter was in fact just under 76% (deposits: 23%), which can be attributed to the fact that they are reported on a daily basis when rolled over. Sales and purchases of short-term securities on the primary market made up less than 2% of the traded volume in each case. When analysing the borrowing levels of all counterparties, the share of call money and call accounts was significantly higher than the corresponding share in the interbank market, at 71%. Only 28% of transactions were concluded in the form of deposits with a fixed maturity.

In the interbank market, by far the largest share of the transaction amount went to the overnight segment, where 89% of lending and 70% of borrowing took place with a one-day maturity (overnight, tom/next and spot/next). When all counterparties were included, the share of overnight borrowing was still 62%. In the case of longer maturities, even greater borrowing activity could be observed in the unsecured segment for maturities of up to three months.

### Foreign exchange swap market

In the foreign exchange swap segment, MFIs traded a total volume of around €18 trillion. As in the secured segment, reports were spread almost evenly between transactions that absorbed euro liquidity and transactions that generated euro liquidity. Over 80% of the foreign exchange swaps involved an exchange of euro liquidity for US dollars, with the other main currencies for which the euro was exchanged being the pound sterling, Swiss francs and yen.

Over 80% of the counterparties in foreign exchange swaps were banks, and only 18% of the counterparties purchasing euro were domiciled in Germany (15% in the case of counterparties selling euro). Just under half of the transactions were concluded with counterparties domiciled in the United States, the United Kingdom and France. Maturities were chiefly in the overnight segment with a 55% share, while increased activity was also observable in the one-week and one-month segments.

### Conclusion and outlook

The data collected under MMSR open the door to a comprehensive, daily and granular insight into the activities on, and structure of, the euro money market. Unlike previous surveys and other data sources that depict individual sections of the money market, usually geared to a specific reporting date, the Eurosystem’s MMSR provides the opportunity to systematically assess the functional ability of, and dynamics of change in, the money market and to detect structural change earlier than before. The new MMSR framework will thus strengthen the Eurosystem’s analytical capacity. Given the over-
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Money market in Germany focused on secured overnight interbank trading

In all of the segments analysed in this article, it can be observed that euro money market trading in Germany was mainly concentrated on overnight maturities. Most of the trading was also between banks; only in the unsecured money market was trading with non-banks more pronounced. This segment also predominantly saw trading with counterparties domiciled in Germany, while cross-border transactions were predominant in the secured and foreign exchange swap segments. It becomes clear when comparing the segments that secured transactions make up the lion’s share of the trading volumes. This secured trading is carried out chiefly via CCPs and government bonds are generally posted as collateral, with most of the posted collateral being issued in Germany. Deposit business (deposits and call money/call accounts) are predominant in the unsecured segment, while the trading of short-term securities on the primary market plays a negligible role. The vast majority of foreign exchange swaps are transactions against the US dollar.

The Bundesbank sample, which is broader compared to the Eurosystem sample and which also includes smaller MFIs, reveals differences between the money market activities of smaller and larger institutions in Germany. For instance, the smaller institutions effect a large number of comparatively smaller transactions and are primarily active in the unsecured money market segment. The data indicate that the inclusion of additional MFIs – with their variety of business models – could deliver much deeper knowledge.

The observed money market activities took place in a monetary setting characterised by high excess liquidity and negative interest rates, considerably affecting the way market participants trade in the money market. With the aid of MMSR, it will be possible in future to identify the extent to which money market activities are adapting to an evolving monetary setting.

In future, the Bundesbank will regularly publish aggregate data from the Bundesbank sample on interest rates and volumes for various segments and maturities on the money market. Corresponding data on the Eurosystem sample will be provided by the ECB. The purpose of this will be to enhance market transparency and therefore improve money market functioning.

MMSR will be used in future not only to analyse and assess the state of the euro money market but also so that the Eurosystem can provide a reference interest rate. On 21 September 2017, the Eurosystem announced that it will prepare and publish an unsecured overnight reference rate before 2020. The reports collected as part of MMSR in the unsecured segment will be used for this purpose.