

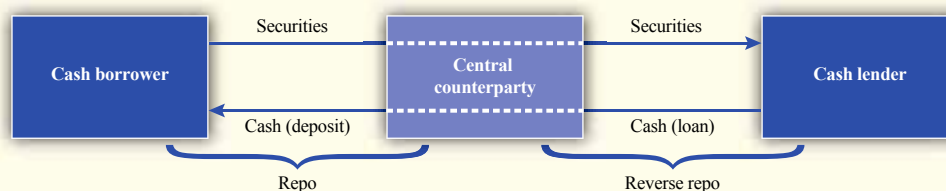
Box 3

THE ADJUSTMENT OF MONETARY STATISTICS FOR REPURCHASE AGREEMENT TRANSACTIONS WITH CENTRAL COUNTERPARTIES

With the forthcoming publication of the end-August monetary data on 27 September 2012 the ECB will amend its statistical measurement of broad money and credit to the private sector to adjust for repurchase agreement (repo) transactions with central counterparties. This box describes the motivation for the adjustment and explains its implementation.

Financial innovations, which may include new financial products and trading practices, may alter financial processes or the way financial institutions operate and hence lead to modifications of the border between monetary and non-monetary assets. In recent years, the financial innovation that has impacted most markedly on the measurement of the broad monetary aggregate M3 for the euro area is repos conducted through central counterparties (CCPs). A CCP interposes itself between counterparties to financial contracts traded in one or more markets, becoming the buyer to every seller and the seller to every buyer. It provides an electronic trading platform, risk management and securities settlement services for market participants in various asset classes. If monetary statistics are not adjusted for repos using CCPs, it drives a wedge between the concept of “money” and the empirical measurement of monetary aggregates. In recent months, the ECB has regularly commented in its Monthly Bulletin on the impact of repo transactions via CCPs on M3 developments and hence on the monetary dynamics.

Chart A Repurchase agreement transaction conducted through a central counterparty



Source: ECB.

Repo transactions conducted through a central counterparty

Repurchase agreements mediated by a CCP are structured as illustrated in Chart A. They have three elements: (i) the cash borrower enters into a repurchase agreement with the CCP, borrowing the required amount and providing collateral to the CCP as required; (ii) the cash lender enters into a reverse repurchase agreement with the CCP; (iii) the CCP administers the transaction and the collateral. Hence the CCP acts as the direct counterparty to the borrower and lender and thus assumes the risk of the borrower defaulting. In addition, the collateral management is highly standardised in terms of profiling and margining, with the result that the transparency of the product is improved and the administrative burden (and cost) for both counterparties reduced compared with a bilateral repo.

Repurchase agreements are relevant for monetary statistics because those between MFIs and the money-holding sector are a sub-component of the marketable instruments included in M3.¹ Moreover, reverse repos are a form of loan and thus recorded as a component of credit granted by MFIs on the consolidated MFI balance sheet. In line with international statistical standards, CCPs are categorised in the ECB statistics as belonging to the sector of non-monetary financial intermediaries other than insurance corporations and pension funds and thus belong to the money-holding sector. Thus far, transactions of MFIs through CCPs have therefore led to changes in M3 and credit to the private sector.

Why should repos via central counterparties not be considered part of money and its counterpart, credit?

Deposits intermediated by CCPs in a repo transaction and held with MFIs should not be considered money as they cannot be used by the CCP at its discretion for payments, cannot be transferred to third parties and cannot be used to store value for the CCP. Under the usual definition of money, it is the cash lender involved in the repo that is the ultimate holder of the MFI deposit. Thus, ideally, the sector of the final cash lender should determine whether a repo should be included in monetary aggregates. If the cash lender is an MFI or a non-euro area resident, the deposit should not be included. If the cash lender belongs to the money-holding sector, the deposit should be recorded as part of money. Similar considerations apply for reverse repurchase agreements and their potential inclusion in the measure of loans to the private sector. A study

¹ Broad money is generally measured as currency in circulation plus some aggregate of the short-term liabilities of MFIs vis-à-vis the money-holding sector that are close substitutes for currency. Euro area M3 includes currency in circulation, overnight deposits, deposits with an agreed maturity of up to two years, deposits redeemable at notice of up to three months and marketable instruments (repurchase agreements, MFI debt securities with a maturity of up to two years and money market fund shares/units).

of the largest euro area CCPs suggests that so far practically all counterparties involved in repos via CCPs have been euro area MFIs or non-euro area residents, i.e. are not part of the euro area money-holding sector.

The quantitative relevance of repos with CCPs

Repurchase agreements with CCPs began, with low volumes, in the early 2000s, and gained significance with the intensification of the financial crisis (to reach an outstanding amount of €296 billion in July 2012), as repo operations through CCPs provide better protection against counterparty risk than bilateral repo transactions. In addition, the intensification of the crisis increased the preference for secured over unsecured money market transactions.

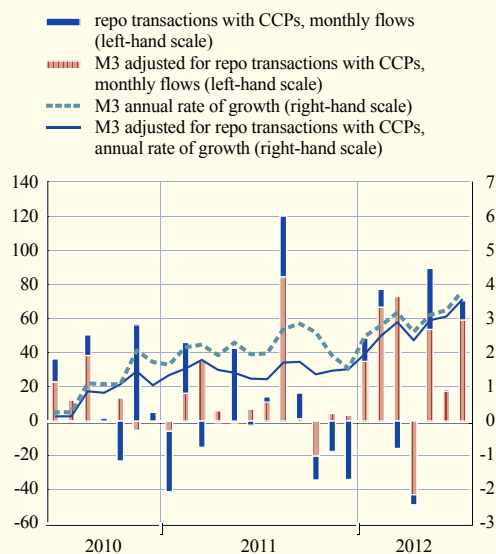
The impact of repos with CCPs on M3 became significant after the collapse of Lehman Brothers. As the volume of transactions tends to fluctuate substantially, repo transactions conducted via CCPs can, at times, have a marked effect on monthly developments in M3 (see Chart B) and loans to the private sector (see Chart C). Interestingly, the annual growth rates for M3 and M3 adjusted for CCP repos are, overall, very similar, as are those for loans to the private sector whether adjusted or not for CCP repos. This suggests that the impact on the medium-term dynamics of money and credit has so far been very limited, unlike the impact on monthly flows.

Adjustment of the monetary and credit aggregates

In the ECB's monthly press release on euro area monetary developments and in Table 2.3 of the "Euro area statistics" section of the Monthly Bulletin, euro area MFIs' transactions as the cash borrower with CCPs will be excluded from the balance sheet item "repurchase agreements", as well as from the monetary aggregates M3-M2 and M3. Any

Chart B M3 unadjusted and adjusted for repurchase agreement transactions with CCPs

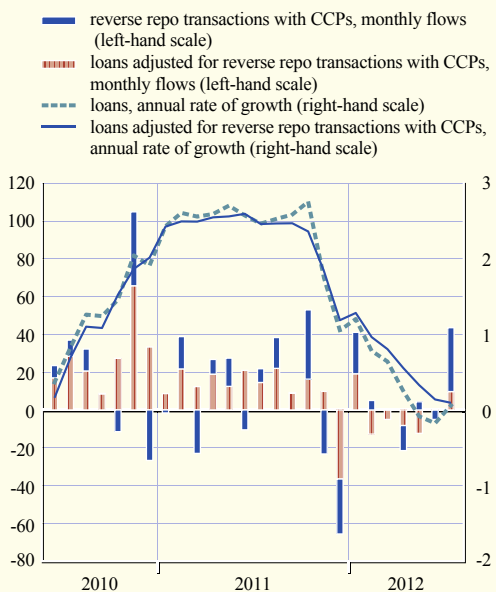
(flows; monthly data; in EUR billions and annual percentage changes; seasonally adjusted; June 2010–July 2012)



Source: ECB.
Note: CCP adjustments are based on provisional data.

Chart C Loans to the private sector unadjusted and adjusted for reverse repurchase agreement transactions with CCPs

(flows; monthly data; in EUR billions and annual percentage changes; seasonally adjusted; June 2010–July 2012)



Source: ECB.
Note: CCP adjustments are based on provisional data.

such transactions where the MFI sector is the cash lender in the (reverse) repurchase agreement will be correspondingly excluded from “credit to other euro area residents” and “loans to the private sector”. These items will instead be reflected in the residual category “other counterparts of M3”. All affected time series will be revised back to June 2010, the first period for which data were collected in accordance with the ECB Regulation concerning MFI balance sheet statistics (ECB/2008/32).

MFI balance sheet statistics outside the context of monetary aggregates and counterparts will not be affected by this change. In these presentations (e.g. the aggregated and consolidated balance sheets of the MFI sector and their breakdowns), MFI repos and reverse repos with CCPs will continue to be recorded as deposits and loans with “other financial intermediaries” as the counterparty sector. This treatment ensures that the MFI balance sheet statistics remain consistent with international statistical standards and other ECB statistical datasets, such as the euro area accounts. At the same time, repos and reverse repos with CCPs will be separately identifiable in order to allow these balance sheet items to be examined in the context of money market analysis.

Conclusion

The ECB will, in all its publications, adjust the measurement of M3 and its counterparts for repurchase agreements with CCPs as from the release of the end-August monetary figures (on 27 September 2012) onwards. The adjustment will be implemented in such a way as to maintain transparency of the monetary statistics and consistency with international statistical standards. In particular, the internal consistency of the monetary statistics and their breakdowns will be preserved, in a manner that will be transparent for external users.

Most importantly, the adjustment of monetary aggregates and credit will ensure that the empirical measurement of M3 and its counterparts remains consistent with the economic concept of money and credit. A strength of the ECB’s monetary analysis is the virtuous circle it creates between the policy analysis and the statistical framework: monetary analysis ensures that the statistical framework can be used effectively for policy applications by examining financial innovations that might otherwise impact on the empirical delineation of the economic concept of “money” and its counterparts. This is a prerequisite for deriving robust policy recommendations when assessing medium to long-term risks to price stability.