Benoît Cœuré: Collateral scarcity – a gone or a going concern?

Speech by Mr Benoît Cœuré, Member of the Executive Board of the European Central Bank, at the European Central Bank-De Nederlandsche Bank joint central bank seminar on "Collateral and liquidity", Amsterdam, 1 October 2012.

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I would like to thank Pontus Aberg for his contribution to the speech. I remain solely responsible for the opinions expressed herein.

Ladies and Gentlemen,

It is a great pleasure for me to speak here today at this conference, kindly hosted by De Nederlandsche Bank.

1. The use of collateral is as old as economic transactions, and is mentioned in the Bible:

2. "If thou at all take thy neighbour's raiment to pledge, thou shalt deliver it unto him by that the sun goeth down: For that [is] his covering only, it [is] his raiment for his skin: wherein shall he sleep?"[1]

3. The importance of collateral in the economy may have been neglected in earlier academic work, but has been well recognised lately. In his seminal work[2] on the topic John Geanakoplos says that:

> "…the main business of Wall Street is to help people make and keep promises. Over time, as more people have been included in the process, punishment and reputation have been replaced by collateral. This enabled a proliferation of promises, but has led to a scarcity of collateral. The ensuing efforts of Wall Street, in conjunction, of course, with the government and in particular the courts and the tax code, to stretch the available collateral has significant and surprising effects on the working of the economy, including the cyclical or volatile behavior of prices…"

Today, in my opening remarks I would like to consider one issue regarding collateral that was mentioned in that quote, namely the scarcity of eligible collateral.

One reason that makes collateral scarce is that the supply of "sound" collateral is in principle limited. Collateral is sound if it guarantees a quasi-certain stream of revenues. Indeed if investors' trust in the creditworthiness of assets decreases, then the amount of collateral gauged sound reduces. During the crisis there has been a widespread flight to quality, out of certain asset classes, which used to be considered sound.

Collateral scarcity is a somewhat more topical issue in the euro area than elsewhere. It can affect the functioning and stability of the financial system in several ways, possibly resulting in: i) persistent changes in the relative cost of different forms of bank funding, a phenomenon that we have observed for some time; ii) changes in bank balance sheets with implications on lending behaviour; and iii) a greater sensitivity of financing conditions to changes in the value of collateral assets.[3] That said, let me emphasise upfront that there is a difference between scarcity and shortage. Scarcity is a fact and not a problem ***per se***. Allocating scarce

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[1] Exodus 22:26–27, King James' Bible.

[2] Geneakoplos, J, "Promises, Promises," in W. B. Arthur, S. Durlauf, and D. Lane, eds., *The Economy as an Evolving Complex System, II*, Addison-Wesley, Reading MA, 1997, pp. 285–320.

[3] On collateral scarcity, see, for instance, Levels A. and J. Capel: "Is collateral becoming scarce? Evidence from the euro area", DNB Occasional Studies, Vol. 10, No. 1, 2012.

resources through prices is the way our economies work. The problem would be a shortage of collateral and/or an impaired price mechanism. I will argue that is not the case in the euro area, where there is no aggregate shortage of collateral; local tensions may arise but they are being addressed in various ways. In this context, the Eurosystem has taken a number of measures to make the supply of collateral assets more elastic, which ultimately should help a smooth transmission of monetary policy impulses, and support financial stability.

But first, allow me to say a few words on the collateral framework of the Eurosystem, and how it is developing, as this is relevant when discussing collateral scarcity.

The collateral framework of the Eurosystem: general principles and reaction to the crisis

As you know, the Eurosystem has always implemented a “broad” collateral framework, i.e. it has chosen to accept a broad range of asset types as collateral in its credit operations reflecting: i) the large number of, and differences among, its eligible counterparties, ii) the heterogeneity of financial markets in Europe, in particular in the early times of EMU, and iii) the differences in business models of European banks. Despite this broad pool of collateral accepted even in normal times, the collateral framework is by no means static in nature. In fact, the Eurosystem has made a considerable number of amendments to its framework for conducting monetary policy, including an extension of collateral eligibility by accepting more asset types and reducing rating thresholds both in the aftermath of the Lehman default and, more recently, in response to the sovereign crisis.

What are the guiding principles of our collateral framework and what factors drive amendments to it? ***First***, in accordance with the Statute of the ESCB and the ECB, the collateral accepted by the Eurosystem in all credit operations must be “adequate”. In determining this “adequacy”, the Eurosystem has to achieve two goals. The first goal is to provide the necessary funding to the banking sector which, in turn, requires that sufficient quantities of eligible collateral be available on the balance sheet of counterparties. The second goal is the integrity of the Eurosystem’s balance sheet, which requires that risks in lending to banks be kept under control. To achieve this goal the Eurosystem applies a set of eligibility criteria for collateral and implements appropriate risk mitigating measures. The principle underlying these measures is the effort to equalise the “post-mitigation risk” of any eligible asset, i.e. the remaining risk after the implementation of risk control measures, while being aware that we can never perfectly achieve this result. This would mean, for example, that by applying a haircut of 0.5% to a Treasury bill, we achieve the same protection as when we apply a haircut of 60% or more to a 10-year bank loan, when both these assets are accepted as collateral in central bank operations.

The second guiding principle is that the Eurosystem should closely follow and respond to market developments, financial innovation and counterparties’ behaviour. To do so, the Eurosystem must remain ready to adapt its framework to such developments at any time. This may require changes in the eligibility criteria, including the acceptance of additional asset classes or rejection of existing asset classes, or adjustments in the risk control and valuation framework.

There are several reasons why central banks may need to adopt a broad collateral framework, particularly in a crisis, and to have it broader relative to the interbank repo collateral set. First, the role of a central bank as a backstop facility avoids a worsening crisis of confidence, i.e. it avoids a negative feedback loop-of-liquidity crisis. Second, a central bank is the only player that never has liquidity constraints. Therefore, in case of counterparty default, the central bank has ample time to liquidate collateral and await mean reversion of values. Third, central banks can impose haircuts that protect them from adverse scenarios in the collateral liquidation process, as they are considered risk-free.

For these reasons, it makes economic sense that, in a liquidity crisis, central banks continue to accept what is no longer accepted in the interbank market. They nevertheless should still act with prudence. This means adequate risk protection, careful monitoring of submitted collateral and adjusted eligibility criteria if necessary.

Collateral scarcity

Collateral scarcity may be driven by regulatory changes but also by increased risk aversion and counterparty risk. We see the move from unsecured to secured transactions on several layers, for example in money markets, the longer-term wholesale funding markets, in an increased use of CCPs as mandated by the G-20, and a larger recourse to central bank liquidity. This move, together with asset purchase programmes by central banks, is likely to increase the demand for high-quality assets. However, while collateral scarcity has become a concern for many euro area banks, this does not seem to be the case in other regions.

The average amount of eligible collateral for Eurosystem liquidity operations was €14.3 trillion during the second quarter of this year. However, only €2.5 trillion was put forward as collateral[4] by counterparties to be used in our liquidity operations that came to an average outstanding amount of around €1.3 trillion (see Chart 1). This shows that, despite the fears of collateral scarcity in the euro area, there is some leeway in collateral availability. Naturally, this aggregate view masks country differences. Indeed, the concerns about collateral scarcity is characterised by heterogeneity in the euro area since some credit institutions have a sufficient collateral pool, while others have less leeway. Not surprisingly, the latter are usually located in those Member States that are hit particularly hard by the sovereign debt and banking crisis.

To some degree, the composition of assets used as collateral in Eurosystem liquidity operations mirrors the state of the financial markets (see Chart 2). First, as a result of the dried-up market activity in the securitisation market starting in late 2007, the share of ABSs as collateral quickly increased, from around 16% in 2007 to 28% the following year, indicating that such securitisation transactions were increasingly being held on the balance sheet of the originator bank and pledged as collateral with the central bank. Second, non-marketable assets and above all, credit claims (i.e. normal bank loans) have become the largest single asset class in our collateral portfolio. Third, uncovered bank bonds constituted the largest marketable asset type in 2009, mostly in non-guaranteed forms. However, the absolute amounts and the share started to decline sharply thereafter, due to subdued issuance volumes, increased risk aversion and concerns about the counterparty risk. In addition to the decrease in issuance, downgrades of banks have rendered a large part of this collateral non-eligible for Eurosystem operations. As a result, guaranteed unsecured bank bonds now dominate non-guaranteed bank bonds. Finally, due to the implementation of the two 36- month refinancing operations conducted in December 2011 and February 2012, posted collateral in general increased, and in particular the use of covered bank bonds, which has lately become the largest marketable asset type in our collateral framework.

It is equally important to analyse whether the observed scarcity of collateral in some regions follows a cyclical or a structural pattern.

If it is cyclical it is mainly the result of the prevailing uncertainties in the markets and the perceived heightened counterparty risk that leads market participants to move from unsecured to secured funding, thus increasing their needs for collateral. Such moves could in principle be reversible, once confidence in banks' resilience improves again. It has been argued however that a continued decline in, or even disappearance of, unsecured funding could have permanent effects on the balance sheet structure of banks. So, although central banks may have taken a number of measures to address the current stress on banks' balance sheets (enlarging the collateral framework, purchasing assets, extending longer term

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[4] This figure includes the haircuts applied by the Eurosystem.

liquidity, implementing non-recourse repos or swapping them with more liquid assets), these measures can be rolled back or discontinued as soon as the crisis subsides.

A structural change in the demand for collateral, on the other hand, would be more the result of a series of regulatory changes (such as the liquidity coverage ratio under Basel III, regulatory changes on derivatives trading, the proposed capital charges in Solvency II for insurers, making it more attractive to hold covered bonds, and the Dodd-Frank Act) as well as a structural move away from unsecured towards secured funding arrangements. It would be of a permanent nature. This may warrant changes to central banks' eligibility criteria for collateral to prevent central bank operations adding to the overall demand and competition for high-quality and liquid collateral for banks. Thus, central banks would need to consider extending collateral eligibility beyond these demanded assets. In fact, central banks are not subject to liquidity risk in their national currency, implying that they could choose to accept high-quality assets, but not necessarily liquid assets. In any case, the optimal choice of eligible assets for a central bank would be the one minimising cost for the whole financial system, taking into account the need to protect its own balance sheet to ensure its independence and maintain confidence in the currency.

Potential policy measures – concluding remarks

In general, to increase access to available collateral, for use in central banks operations and in private repo markets, the three typical medium to long-term wholesale funding sources need to function properly, adding value to both issuers and investors. During the crisis, the importance of being able to have recourse to the three sources of funds (secured, unsecured and securitisation) was confirmed. Indeed, the force of diversification works fully on the liability side. This is due to the fact that each type of security slices risk in a different way. This factor makes these three markets for long-term instruments act as complements rather than substitutes. This may be of particular relevance to the ABSs, since unlike covered bonds, they are based on an extremely versatile underlying pool of assets, and therefore the underlying economic sector that it is funding. This makes it somewhat different to other secured assets, for example, covered bonds. Maintenance work is ongoing especially in respect of the covered bond and the ABS market segments, which is indeed a welcome move.

But let me finally offer you some potential policy responses to mitigate or to address the negative effects of collateral scarcity, and some forward-looking thoughts.

Addressing collateral scarcity

As regards the supply of collateral assets by financial institutions, the Eurosystem has taken several steps to make it more elastic by encouraging the creation of new assets or making it easier to mobilise existing ones. These steps have also contributed to restore the impaired monetary policy transmission mechanism. Let me list five of them here.

i) its interventions in support of the covered bond markets through the two Covered Bond Purchase Programmes (CBPPs), aiming at reactivating the primary market. Both programmes had the objective of easing funding conditions and encouraging institutions to maintain or expand lending to their clients, thereby contributing to the Eurosystem's role in supporting the functioning of financial markets. By performing this catalytic function, the first purchase programme was very successful in restarting activity in primary covered bond markets, and thus creating private collateral of good quality;

ii) lowering the minimum rating requirements at issuance for specific ABSs and allowing the use of additional credit claims, and

iii) leading or acting as a catalyst in efforts to improve financial market conditions and to increase transparency and standardisation in some market segments such as the

Prime Collateralised Securities (PCS) initiative in the ABS market, our own loan-level data requirements for ABSs, and the covered bond label initiative, initiated by the European Covered Bond Council. A common objective for these market-led initiatives is to restore confidence among investors in these market segments, and to re-introduce them as sustainable funding tools for banks. We would be happy to engage in further initiatives to foster market functioning and the creation of good and fairly safe assets that could be used in various collateral systems. In this regard I take the opportunity to refer to a fourth initiative which is currently being worked on by the Eurosystem.

iv) A fourth initiative is the implementation of cross-border triparty collateral management services within the Eurosystem's collateral framework. Today, these services are only available to a limited number of Eurosystem counterparties in a small number of countries (Germany, Luxembourg, France and very recently, Italy). In 2014 however, the Eurosystem will go-live with the support of cross-border use of triparty collateral management services via the Correspondent Central Banking Model (CCBM), thereby making them equally available to all euro area counterparties. While triparty services do not increase the availability of collateral as such, they allow for a considerably more efficient delivery of collateral to the Eurosystem, in turn allowing counterparties to optimise the use of their collateral assets with central banks and in the market. To enhance this process even further, the Eurosystem is also cooperating with the market to achieve interoperability between the different triparty offerings.

v) In addition, the Governing Council of the ECB decided on 6 September to widen its collateral framework to accept marketable assets denominated in foreign currencies. In fact, looking beyond this non-standard and temporary measure, it is a moot point whether these types of collateral denominated in internationally accepted currencies and stemming from efficient financial systems should be allowed on a longer-term basis, in particular if collateral becomes scarce across several regions. More generally, some studies have highlighted the relative scarcity of high-quality financial assets. In particular, while advanced economies are able to generate relatively safe assets which appeal to international investors, emerging market economies are less able to do so.[5] In this context, fostering the international role of the currencies of some emerging economies could help the creation of safe, liquid and internationally accepted transaction instruments. While the positive aspects of accepting foreign-denominated collateral are fairly clear in terms of collateral availability for counterparties and for monetary policy, payment systems and financial stability, several challenges nevertheless emerge, such as legal complications, exchange rate risks and operational risks, as pointed out in a study by our host.[6]

Last but not least, in order for banks to attract investors to the unsecured bank funding market as well, confidence in the euro area must be restored. Through the restoration of fiscal discipline and implementation of structural reforms, euro area sovereign debt will be viewed once again as risk-free and thus contribute to a collateral supply of good quality. In addition, in the last couple of years we have also made significant progress regarding the institutional framework, with the establishment of the EFSF, the launching of the ESM, the approval of the "six-pack" legislation and of the fiscal compact, and the steps towards a banking union including the single supervisory mechanism. But let me emphasise that the

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[5] See, for instance, Caballero, R. J. (2006), "On the Macroeconomics of Asset Shortages", NBER Working Paper No 12753; Caballero, R. J., E. Farhi, and P. O. Gourinchas "An Equilibrium Model of 'Global Imbalances' and Low Interest Rates", American Economic Review 2008, 98:1, pp. 358–393.

[6] Capel, J. "How does cross-border collateral affect a country's central bank and prudential supervisor?", DNB Occasional Studies, Vol. 7/No. 1. 2009.

only fundamental way to overcome collateral scarcity is to ensure private and public de-leveraging as well as sustainable growth. It is growth that generates sound assets, i.e. securities which guarantee a high likelihood stream of revenues.

Thank you for your attention.

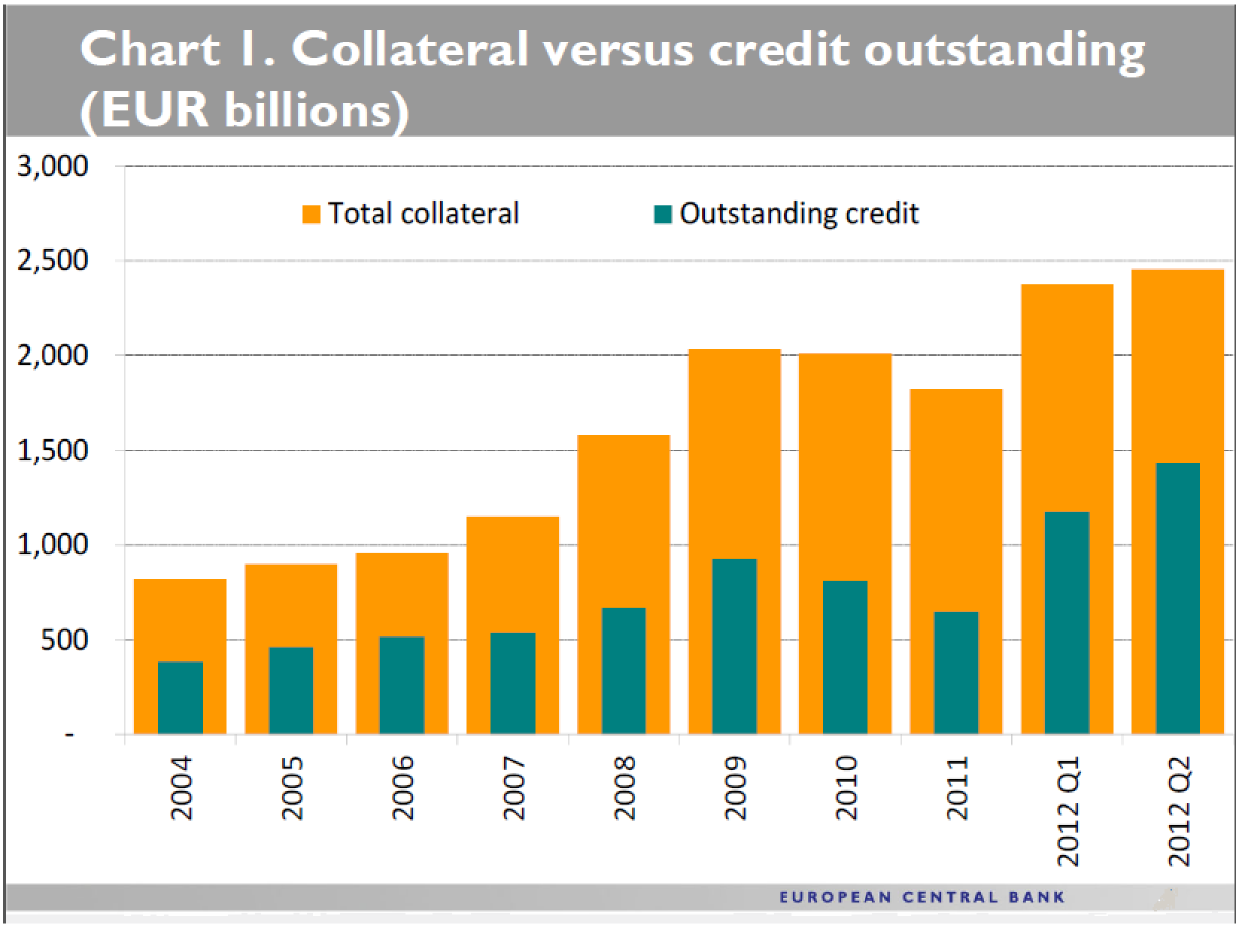


Chart 1. Collateral versus credit outstanding (EUR billions)
Total collateral
Outstanding credit
3,000
2,500
2,000
1,500
1,000
500
-
2004
2005
2006
2007
2008
2009
2010
2011
2012 Q1
2012 Q2
EUROPEAN CENTRAL BANK

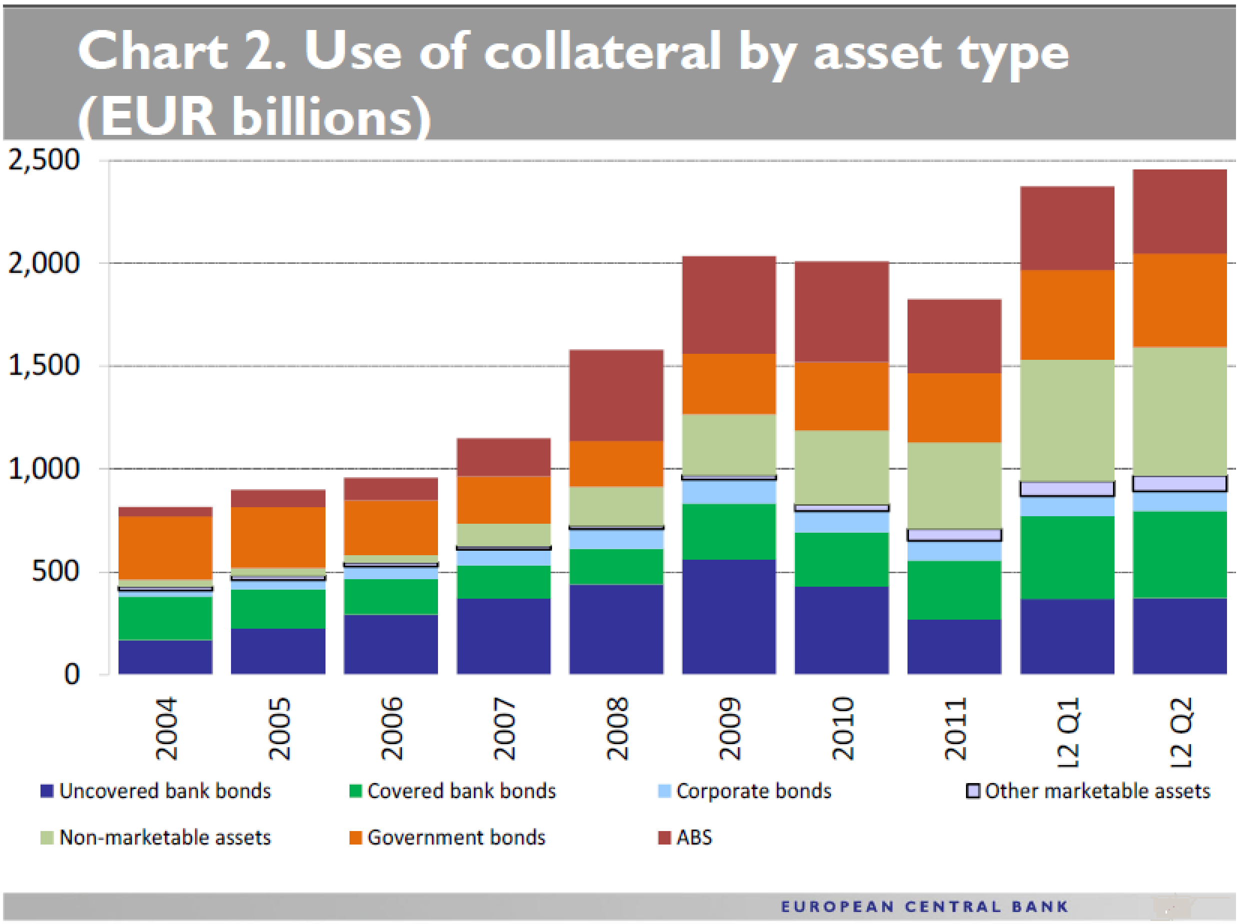
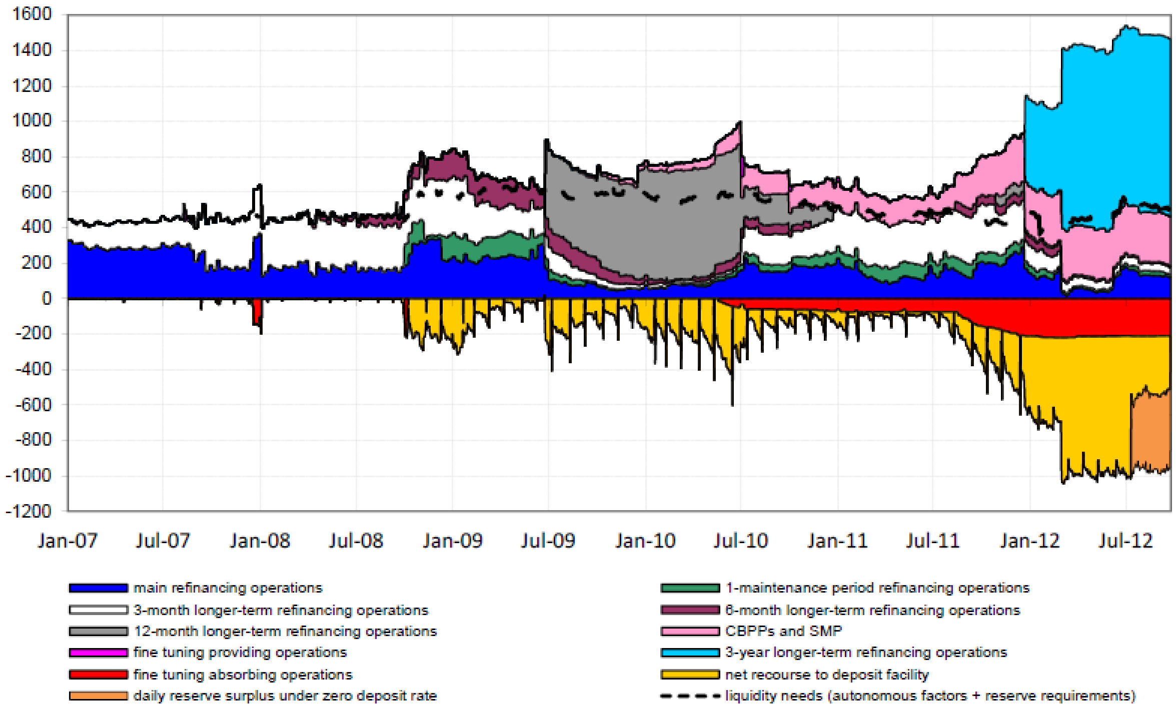


Chart 2. Use of collateral by asset type (EUR billions)
2,500
2,000
1,500
1,000
500
0
2004
2005
2006
2007
2008
2009
2010
2011
12 Q1
12 Q2
Uncovered bank bonds
Covered bank bonds
Corporate bonds
Other marketable assets
Non-marketable assets
Government bonds
ABS
EUROPEAN CENTRAL BANK

Chart 3. Liquidity operations (EUR billions)



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