Focus
n° 12 – 8 September 2014

BANQUE DE FRANCE
EUROSYSTÈME

Collateral: towards a sustainable growth

The financial crisis has significantly increased the demand for collateral in market operations. This can be ascribed to both market participants' greater aversion to counterparty risk and regulatory incentives. In order to address this rising demand for collateral, market participants face a two-fold challenge: expanding the available collateral pool, and developing collateral management tools and operational procedures to optimise the use of this pool. This focus presents these collateral developments, the availability problems that they raise and the steps taken by market participants to remedy this situation, particularly in the Paris financial centre.

Collateral: an insurance against the risk of default

Transactions on financial markets are exposed to the risk of default by one of the parties due to, in particular, a deterioration in their liquidity or solvency position. To guard against this risk, collateral, in the form of financial assets (securities, credit claims or cash for example), can be pledged as a guarantee. In the event of a default of one of the parties to the transaction, its counterparty has the right to keep the assets put forward as collateral and sell them in order to cover the financial loss incurred. This practice is used in a vast range of financial transactions, and involves all public and private market participants: central banks, financial market infrastructures,[1] financial institutions and non-financial corporations.

Assets accepted as collateral are generally very liquid and have a high credit quality. Risk management arrangements have also been established to define the collateral eligibility criteria. In particular, valuation haircuts are usually applied to these assets, to include the risk of residual losses that could arise in the event of their sale in adverse market conditions. Should the value of the initial collateral become insufficient to adequately cover the credit risk, the collateral taker may issue margin calls, and thus request additional collateral in the form of securities, credit claims or cash.

1 *A financial market infrastructure is defined as a multilateral system among participating institutions, including the operator of the system, used for the purposes of clearing, settling, or recording payments, securities, derivatives, or other financial transactions.*

The day-to-day use of collateral

Whenever a Eurosystem central bank grants intraday credit or longer-term credit through refinancing operations they must be backed by assets appearing on the ECB's list of eligible collateral.

Financial market infrastructures must take collateral to cover the exposures of their participants if any credit risk is involved. This is notably the case for payment systems and deferred net settlement systems. In such systems, in the event of one of their participants defaulting and in order to continue to ensure the settlement of transactions, their participants generally set up a guarantee fund. Another example is when a central counterparty (CCP) is involved in the transaction. Given their key role in managing counterparty risk, CCPs have developed mechanisms to manage this risk which use the collateral that their clearing members are obliged to provide. This collateral takes the form of individual margins and a mutual guarantee fund. Collateral may also be used to secure bank loans, upon agreement of both parties.

The parties to such transactions may decide on the type of collateral to be provided.

- *In the framework of interbank lending, lenders can use collateral to limit their exposure to loss should the borrower default and thus immediately obtain a replacement asset.*

- *Collateral is also used in transactions involving covered bonds issued by banks and acquired by investors. These instruments give holders a legal claim to the pool of assets (usually housing loans or loans to the public sector) used to secure the bond if the issuer becomes insolvent (see below).*

- *Counterparties may also choose to use collateral in derivatives transactions, even if they are not traded on an organised market and are not cleared. In this case, an exchange of collateral allows both counterparties to cover the replacement risk, by ensuring that the financial terms of the contract are met even in the event of a default by one of the counterparties.*

Challenges related to collateral availability: a shortage risk?

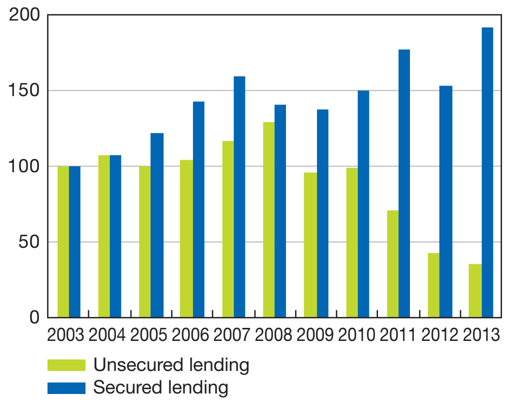
The demand for collateral has increased

A rise in the demand for counterparty risk protection

Since 2007, this rise has resulted in an increased demand for secured financing for both short and long-term loans. Thus, as regards short-term secured borrowing, the euro interbank repo market has grown by 39.6% since 2009 whereas the unsecured money market has shrunk (Chart 1). At the same time, credit institutions' recourse to Eurosystem refinancing increased sharply, to make up for the shortage of market financing and to guard against any liquidity risk.

Chart 1 – Secured and unsecured lending, daily average volume

(index in 2003 = 100)

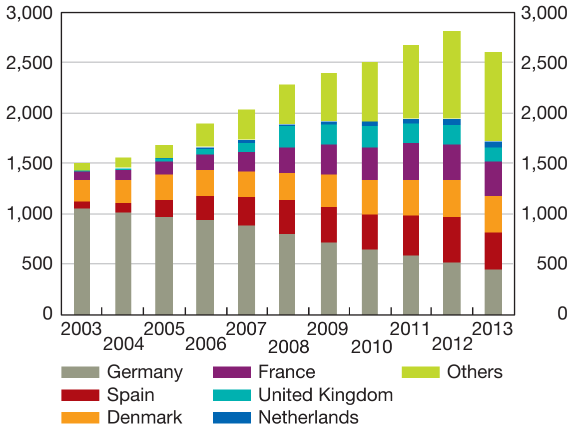


Source: ECB, Euro Money Market Survey, November 2013.

As regards banks' long-term funding, a significant increase in covered bond issuance[2] has been observed (up 73.4% between 2003 and 2013). This trend, which started before the crisis, gained pace as of 2008. It was mainly observed on the euro market but with differences across European countries (Chart 2).

Chart 2 – Covered bonds, outstanding in Europe

(EUR billions)



Source: Houben (A.) and Willem Slingenberg (J.W.), Banque de France's Financial Stability Review No.17, April 2013.

New regulatory requirements

In addition to markets' pronounced and endogenous preference for secured financing, new regulatory requirements will increase the demand for collateral.

Regulatory requirements for over-the-counter (OTC) derivatives

At the G20 Pittsburgh summit of September 2009, a number of initiatives were taken to improve the functioning of the OTC derivatives market, because this market, which had been opaque until then, encouraged excessive risk taking and increased spillover effects among participants. As well as strengthening transparency requirements, the derivatives market reform, aiming to improve risk management, focused on two main areas:

- the mandatory clearing of all standardised OTC derivatives through central counterparties (CCPs);
- defining minimum standards for margin requirements for non-centrally cleared OTC derivatives transactions.

In the United States and Europe, these regulations are set out respectively in the Dodd-Frank Act of 21 July 2010 and in the European Market Infrastructures Regulation (EMIR) of 4 July 2012 on OTC derivatives, CCPs and central trade repositories. These reforms, which are currently being implemented by the markets, should result in an increase in the demand for very high quality collateral.

New liquidity requirements under Basel III

These reforms improve bank liquidity risk management through the creation of two ratios: a one-month liquidity coverage ratio (LCR), and a one-year net stable funding ratio (NSFR). They require banks to hold sufficient amounts of high quality liquid assets to weather a severe liquidity crisis during the period in question.

The Committee on the Global Financial System (CGFS) estimates that these new regulations will increase the demand for collateral by some USD 4 trillion.[3]

2 *Covered bonds are fixed-rate securities issued by financial institutions to refinance debt, typically mortgages or public sector loans. Generally subject to national law, these bonds offer a particular system of protection, i.e. a claim on all the assets that cover or secure the bond if the issuer becomes insolvent, giving holders a legal claim to this pool of assets. These debt securities are very attractive given their low level of risk and are often rated AAA by ratings agencies.*

3 *Report by the Committee on the Global Financial System, No.49,* "Asset encumbrance, financial reform and the demand for collateral assets", *May 2013. Cf. http://www.bis.org/publ/cgfs49.pdf, p.1,* "Current estimates suggest that the combined impact of liquidity regulation and OTC derivatives reforms could generate additional collateral demand to the tune of USD 4 trillion." *(or around EUR 3.1 trillion).*

The new bank resolution regimes

The principles established at the international level by the Financial Stability Board–FSB (Key attributes for effective resolution regimes) and at the European level by the Bank Recovery and Resolution Directive (2014/59/EU) rule out all collateralised instruments from the scope of liabilities that could absorb losses in the event of a bank failure (bail-in). Consequently, in the longer term, there is likely to be a stronger demand by investors for secured liabilities that are deemed to be safer. Indeed, the advantage of collateralised liabilities in terms of cost should become greater, especially if regulations force banks to issue additional non-collateralised or subordinated debt to absorb the losses of a bank under resolution.

An abundant supply but unevenly distributed

This increase in the demand for collateral fuels fears of a collateral shortage. But this risk seems unlikely at the global level given the ample supply.[4] Indeed, overall bond issuance (sovereign, corporate and covered bonds) has increased by 51.5% compared with 2008.[5]

However, situations vary across countries, raising the question as to whether there is a sufficient supply of collateral in countries with low government bond outstandings or whose sovereign debt is considered risky by market participants. Moreover, a fragmentation can also be observed among economic players; with insurers and asset managers generally holding high quality assets[6] as opposed to non-financial corporations that can use derivatives, particularly for hedging purposes, and do not hold high quality assets.Furthermore, in order to address the uneven distribution of good quality collateral between or within countries, central banks, and in particular the Eurosystem have, over the years of the crisis, relaxed their collateral eligibility rules, thus allowing a broader range of assets to be accepted as collateral.

Measures to meet growing collateral needs

Private players and public authorities are striving to enhance collateral management arrangements

These improvements have three main aims: to expand the available collateral pool, transform it and optimise its management.

Expanding the collateral pool: securitisation of credit claims

For banks, securitisation is primarily a way to remove loans from their balance sheets, but this mechanism also makes it possible to expand the collateral pool. Indeed, central banks wish to promote the use of high quality loans as collateral in market operations. Consequently, the Banque de France initiated and supported the creation by the main Paris financial institutions of a collective special purpose vehicle that is simple,[7] secure and transparent in order to use corporate loans as collateral on the interbank market, and thus facilitate their refinancing. An initial securitisation transaction was carried out on 11 April 2014 in the amount of EUR 2.65 billion.

4 *Report by the Committee on the Global Financial System, No.49, "Asset encumbrance, financial reform and the demand for collateral assets", May 2013.*
5 *Source Dealogic.*
6 *However, their cautious risk management approach usually implies low loan volumes backed by this high quality collateral relative to lendable securities (around 20% according to the International Securities Lending Association), but this percentage may be much higher when it is compared to all bonds or to the stock of high quality collateral.*
7 *This Special Purpose Vehicle does not remove securitised assets from the issuer's balance sheet and is used for refinancing the loans in question.*

Collateral transformation

Financial intermediaries have also developed collateral transformation activities, by allowing non-eligible assets to be exchanged for assets meeting the eligibility criteria of the different categories of collateral taker. This transformation activity involves traditional repo or securities borrowing and lending transactions, which are subject to market framework agreements. While such activities are not new, they are being increasingly used.

Optimising collateral management:

Triparty collateral management

For the past few years, triparty collateral management services have led to an optimisation of collateral management between two counterparties through the intervention of a third party (traditionally a national or international central securities depository (CSD or ICSD)) in Europe and a custodian bank in the United States. This tri-party agent acts on behalf of the lender and the borrower by selecting for the lender the assets available within a basket of securities put together by the borrower. This agent also permanently optimises the assets selected by dynamically substituting the collateral for other securities in the same basket throughout the lifetime of the repo. For borrowers, this service has the advantage of centralising their securities in a basket of assets that can be used as guarantees for all counterparties. For lenders, the involvement of a tri-party agent ensures that they receive assets meeting the quality criteria, without having to bear the cost of choosing or processing them.

The presence of a central counterparty improves the security of these transactions by making the CCP the sole counterparty for each of the transactions and by jointly managing the risks involved in these transactions with the central counterparty.

The Paris financial centre has recently launched a centrally cleared triparty repo secured financing platform called €GC Plus. It uses the collateral management system of the central securities depository Euroclear (Autoselect) and offers a netting solution via the CCP LCH.Clearnet SA. Furthermore, this service allows counterparties to benefit from refinancing facilities in central bank money at the Banque de France.

Centralised management services

Custodians and ICSDs, in particular the groups Euroclear and Clearstream, have developed new services (Collateral Highway and Liquidity Hub Connect respectively) that aim to offer their customers the broadest possible view of the securities they hold, irrespective of the location of this collateral. This centralised view of the assets held by several custodians and CSDs allows banks to make fragmented collateral pools operationally fungible, thus ensuring that these assets do not remain fragmented and under-used.

Implementation of T2S

Like TARGET2 for large-value payments in euro, Target2 Securities (T2S) is a Eurosystem initiative providing the financial community with a technical platform for the real-time settlement of securities transactions in central bank money. This activity is currently carried out by the systems of the different CSDs. This single platform contributes to the harmonisation of settlement rules in Europe, thus enabling cross-border securities transactions to be settled effectively and securely in the same conditions as domestic transactions. The implementation of T2S in 2015 should therefore simplify and improve the efficiency of procedures for the exchange of collateral.

The risks arising from the new collateral management services need to be dealt with

Since market players are more interconnected, these new services create fresh operational risks in the event of a malfunctioning of IT or internal control systems. The higher number of transactions, due to the greater mobility of collateral, may also contribute to increasing the pro-cyclicality[8] of the financial system.

More specifically, collateral transformation activities, which result in a reallocation of assets among market participants, may also contribute to increasing the interlinkages between players. Other practices, such as the re-use of collateral, also further complicate, particularly in times of stress, the management of risk because of competing rights to the same assets re-used in successive collateralisation operations. Indeed, in the event of a default of the market participant who received and then re-used this collateral (or of the final recipient), the collateral is no longer available for the intermediate lender(s) or for its initial holder. This can generate a mismatch between the market value of the transaction and the value of the collateral actually available. According to a recent study by the European Systemic Risk Board (ESRB), 94% of the collateral pledged in the form of securities and taken by banks would be eligible for re-use. The study shows that the collateral received by banks is re-used once on average. The practices of transforming and re-using collateral must therefore be thoroughly regulated.

International initiatives are underway to limit these risks, in particular those stemming from the re-use of collateral:

In the framework of initiatives by the FSB[9] to strengthen the regulation of the securities lending and repo markets, financial intermediaries will have enhanced transparency obligations towards their clients and regulators with respect to the amount of collateral re-used and the way in which the collateral is held (e.g. segregated accounts).

The Revised CPSS-IOSCO[10] Principles for Financial Market Infrastructures have strengthened the regulatory framework applicable to financial assets used as collateral by enhancing in particular the segregation and portability obligations of collateral provided by customers.[11]

Lastly, the BCBS/IOSCO[12] set out margin requirements for non-centrally cleared derivatives, whereby the re-use of initial margins aimed to cover counterparty risk will be specifically regulated to ensure one-time re-use only.

8 *Procyclicality can be explained as follows: in periods of stress, asset price fluctuations and/or the increase in haircuts applied to collateral exchanged in the framework of secured transactions generates higher margin calls, which results in a rise in the demand for collateral that can only be satisfied by borrowing securities (if the collateral initially exchanged is in the form of securities) or by sales of securities (if the collateral initially exchanged is in the form of cash), which accentuates the decrease in asset prices, etc.*

9 *Financial Stability Board, http://www.financialstabilityboard.org/publications/r_130829b.pdf*

10 *Committee on Payments and Settlements Systems – Internatinal Organization of Securities commissions.*

11 *See, in French,* Banque de France Focus N°7 « Infrastructures des marchés financiers : un nouvel environnement normatif pour une sécurité renforcée », May 2012.

12 *Basel Committee on Banking Supervision/International Organization of Securities Commissions http://www.bis.org/publ/bcbs261.pdf*