COLLATERAL INITIATIVES COORDINATION FORUM

Collateral Fluidity

A White Paper prepared by the

Collateral Initiatives Coordination Forum

November 2012

Abstract

This White Paper examines the topic of collateral fluidity.

The importance of collateral has grown over many years, but has accelerated significantly since the advent of the financial crisis in mid-2007. This is in no small measure related to the shift in risk appetite of market participants, with an increased demand amongst them to secure their credit risk exposures through the taking of high quality collateral. Official policy makers have also significantly fuelled the demand for high-quality collateral as they have advanced steps to make markets more robust, to reduce systemic risk and help mitigate the risks of any future financial crises. The European Government bond market although increasing in size in tandem with the bail-out of the banking system has suffered from the continuous downgrading of debt issues by sovereigns.

It is widely perceived that demands for high quality collateral will significantly outstrip supply, so it is essential that collateral be managed as a scarce resource. Against this backdrop it is essential that efforts be made to ensure that collateral is able to flow as efficiently as possible, matching sources and uses. This White Paper explores this proposition and seeks to articulate a vision regarding what is necessary to achieve desirable improvements in collateral fluidity.

Collateral Initiatives Coordination Forum ("CICF")

Established at the beginning of 2012, the CICF has been conceived as a joint trade associations' body, in order to facilitate appropriate coordination across the private sector of all collateral-related initiatives.

Further information regarding the CICF can be found at: http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/collateral-initiatives-coordination-forum/

CICF, November 2012

CONTENTS

INTRODUCTION

Established at the beginning of 2012, the Collateral Initiatives Coordination Forum (CICF) has been conceived as a joint trade associations' body, in order to facilitate appropriate coordination across the private sector of all collateral-related initiatives. Bringing together a broad range of representation from right across the financial industry, the CICF provides a channel for information sharing, education and joint endeavours in the field of collateral.

The participants in the CICF collectively share a breadth and depth of market user perspective, ideally positioning them to understand how the European market's infrastructure has historically evolved; how it is changing responsive to recent economic and regulatory stimuli; and how it ideally needs to improve in order that it may become well suited to meeting the challenge of delivering the desirable degree of collateral fluidity.

This CICF White Paper accordingly draws upon this perspective to identify key elements which need to be coherently assessed if collateral is to be able to flow as efficiently as possible, matching sources and uses in the European markets; and articulates a vision regarding what is necessary to achieve desirable improvements in collateral fluidity.

TYPE AND ROLE OF COLLATERAL

Many types of collateral exist, including cash; bonds; bills; credit claims; equities; commodities; and funds. In fact any liquid and investment grade product that allows transferability of legal ownership to other parties and is priced regularly should in principle be available as collateral. For risk management reasons, such instruments should not represent either pro-cyclical or positively correlated movements in either the risk positions or credit of the secured party. The population of collateral users is as wide as market participants, including central banks; commercial banks; insurance companies; asset managers; pension funds; CCPs and (I)CSDs. Six simple diagrams, providing schematic illustrations of a series of basic transaction types in which collateral is utilised, are included in an annex to this White Paper.

Collateral is held by one party (the collateral taker) in an agreement in order to provide cover against credit risk exposure taken in respect of another party (the collateral giver). Historically collateral has mainly been used in context of secured lending, repo and listed derivatives. The taking of collateral is a commonplace activity, occurring on a daily basis. In many cases the amount of collateral required is evaluated through a daily mark-to-market process. Currently in excess of US$ 2.5 trillion (85% cash) is employed to secure OTC derivative counterparties. Importantly, the taking of collateral is also used as the secure basis upon which many central bank money market operations (e.g. ECB and Bank of England) are conducted.

Collateral's increasing significance

- *Central Banks, Basel II and the repo market*

Well before the 2007 financial crisis the use of collateral to protect against counterparty risk was common practice in the repo markets. Helped by Basel II reducing the practice of unsecured interbank lending, the repo markets had been created by central banks on the continent (France and Belgium); and throughout the late 1990's all other central banks in Europe endorsed and encouraged repo transactions. Since then the use of various types of collateral has developed and the central bank community's range of eligible collateral for the purpose of liquidity provision within the Eurozone has expanded to marketable and non-marketable assets (including credit claims). The list is in fact still growing.

Initially prime government bonds, corporate bonds, equities and ABS/MBS issues became common types of collateral used for funding of liquidity requirements by the central bank community; and for bilateral collateralisation. The creation of the single currency in Europe brought a wider pallet of collateral to market – this was initially composed of two lists, but after a number of years this was changed in a single list that included also bank loans (credit claims).

- *The ever increasing need for collateral*

The importance of collateral has thus grown over many years, but has accelerated significantly since the advent of the financial crisis in mid-2007. This is in no small measure related to the shift in risk appetite of market participants, with an increased demand amongst them to secure their credit risk exposures through the taking of high quality collateral. Official policy makers have also significantly fuelled the demand for high quality collateral as they have advanced steps to make markets more robust, to reduce systemic risk and help mitigate the risks of any future financial crises. Amongst examples of these increasing demands, which will prove even more significant in case of failure to achieve adequate international consistency or if there is unduly retrospective application, are:

- increased focus on covered bond issuance by banks, secured against high-quality mortgage pools, as against senior unsecured issuance;
- increased use of repo funding to finance assets, including in context of an increase in the use of central bank financing;
- Basel requirements, to be translated in the EU through the CRR/D; introducing the holding of liquidity stress buffers – assets to satisfy these requirements comprise a short list of high-quality collateral;
- the shift of standardised OTC derivatives to CCP clearing, as required in the EU by EMIR, which will give rise to demands for significant amounts of initial margin (as well as some increase in variation margin amounts); and
- increased requirements to margin any bilateral OTC contracts (outside of CCP arrangements), incentivised by penal treatment of uncollateralised exposures in the CRR/D requirements.

With the equivalent G20 agenda demanding ever more collateral, including the need to collateralise bilateral trading between the buy & sell side, coupled with the downgrade of a substantial part of previously reasonable good collateral, the pressure to widen the collateral base is on. Responsively, market participants have recently been looking to use ETF's (of the UCITS compliant type in Europe), commodities, precious metals and even letters of credit as potential additional collateral sources.

- *High-quality collateral shortage?*

Whilst numerous studies have given estimates of the potential shortfall, inevitably nobody actually has the exact answer. Chapter 3 of the April 2012 IMF Global Financial Stability Report[1], which probes the implications of recent regulatory reforms in the financial system for market perception of safe assets, says that the price of assets regarded as safe is on the rise, with supply dwindling and demand rising amid uncertainty in financial markets, regulatory reforms, and increased demand from central banks in advanced economies.

It is therefore essential that high-quality collateral is managed as a scarce resource. Given the competing demands that exist for the use of collateral assets, the management of collateral needs to encompass the deployment of optimisation techniques. These aim to ensure that the available collateral is utilised as effectively and efficiently as possible. This will be best achieved in case minimum acceptable collateral requirements are clearly stated and, wherever appropriate, harmonised, taking due account of the different classes of potential collateral assets. At the same time, although collateral is a good mitigating tool to reduce counterparty risk, there ought also to be focus on how to reduce the risk in the system. Netting through fixed income CCPs is such a measure. Risk reduction tools, like compression in the OTC derivatives markets, are another.

Relating to the collateralisation requirements of central banks faced by market participants, the recent LTRO from the Eurosystem has somewhat increase the pressure on the availability of collateral. As a by-product of the welcome provision of liquidity for some market participants, residual liquidity generated has been placed in the Eurosystem's deposit facility by other financial institutions. However, these deposits are unsecured; and hence overall a substantial amount of collateral has been drained from the interbank market. Adoption of a solution to release such collateral, either through secured lending or some other form of collateralisation of deposits, may decrease the pressure on interbank collateral without exposing the central bank community to undue risk. Whilst some sovereigns/central banks have already started such a process, it would be worthwhile to encourage others as it will benefit the recovery of the markets as a whole.

[1] http://www.imf.org/external/pubs/ft/gfsr/2012/01/pdf/c3.pdf

COLLATERAL FLUIDITY

For market participants to be able to deploy collateral in financial transactions it is necessary that the applicable collateral assets (sources) can be effectively matched with collateral requirements (uses). This gives rise to the need to mobilise collateral assets, both within and between organisations. If this is to occur efficiently it is important that there are no barriers inhibiting such collateral flows. Accordingly the challenge of delivering the desirable degree of collateral fluidity concerns the development of an efficient market infrastructure.

There is a significant and ongoing transformation of markets, within which there is an increasingly crucial role for collateral to play. As the top level regulatory framework is now nearing completion and the realisation of the transformational TARGET2-Securities[2] (T2S) project is taking solid shape, this is a particularly pertinent time at which to take stock of the state of the European market infrastructure for the mobilisation of collateral.

To ensure that collateral is able to flow as efficiently as possible, matching sources and uses in the European markets, it is appropriate to articulate a vision regarding what is necessary to achieve desirable improvements in collateral fluidity.

Improving cross-border settlement

- *TARGET2-Securities – the post-trading infrastructure*

T2S is one of the largest infrastructure projects launched by the Eurosystem so far. T2S will improve the post-trading infrastructure in Europe by providing a single platform for securities settlement in central bank money and will substantially contribute to financial integration in Europe.

T2S will consolidate across all countries in Europe the most fundamental part of the securities infrastructure value chain, namely settlement. It will be a settlement engine offering to the whole European market centralised delivery-versus-payment (DvP) settlement in central bank money. It will be operated by the Eurosystem on a cost-recovery basis, to the benefit of all users. T2S will be neutral towards all countries and market infrastructures and towards the business models adopted by all CSDs and market participants.

The main characteristic of T2S is that it will make cross-border settlement identical to domestic settlement, in terms of cost, technical processing and efficiency. A single set of rules, standards and tariffs will be applied to all transactions in Europe, dramatically reducing the complexity of the current market infrastructure. Over time cross-border fees should be lowered, making the European securities markets more attractive and cost-effective.

This ECB initiative aims to have all CSDs/ICSDs within the single euro currency to exchange settlement of cash and collateral within a real time framework, fully coherent with the existing TARGET (cash) system. Only when T2S is accomplished in 2015/16 can same day settlement happen for all actors in the eurozone. The CICF considers that it is important to resolve previously identified problems in the existing European market infrastructure ahead of the transition to T2S securities processing, in order to ensure that these problems are not imported into the new unified environment.

[2] http://www.ecb.europa.eu/paym/t2s/html/index.en.html

- *The European CSD Regulation*

On 7 March 2012, as part of its on-going efforts to create a sounder financial system, the European Commission proposed to set up a common European regulatory framework for the institutions responsible for securities settlement, i.e. CSDs. This CSD Regulation[3] proposal contains the following key elements:

- the settlement period will be harmonised and set at a maximum of two days after the trading day for the securities traded on stock exchanges or other organised trading venues (currently two to three days are necessary for most securities transactions in Europe);
- market participants that fail to deliver their securities on the agreed settlement date will be subject to penalties, and will have to buy-in those securities in the market and deliver them to their counterparties (significant concerns about this aspect of the proposal have been drawn to the attention of the European Commission and the European Parliament's rapporteur);
- issuers and investors will be required to keep an electronic record for virtually all securities, and to record them in CSDs if they are traded on stock exchanges or other organised trading venues;
- CSDs will have to comply with strict organisational, conduct of business and prudential requirements to ensure their viability and the protection of their users;
- authorised CSDs will be granted a 'passport' to provide their services in other Member States;
- issuers will be able to choose between all (30) authorised CSDs in Europe for depositing their securities; and
- access (so-called "links") between CSDs in the EU and other CSDs, as well as trading venues and CCPs, will be regulated under a single set of rules.

A key element of the proposal concerns the harmonisation of settlement periods, i.e. the time between the conclusion of a transaction and settlement. Currently, European securities markets do not follow a common settlement period (e.g. for equities, regulated markets either settle two days (T+2) or three days (T+3) after trade) – whilst other potential collateral assets such as credit claims can take up to 30 days to be processed from the day of the transaction! Back in 2001, the Giovannini Group[4] already identified the lack of harmonisation of settlement cycles across Europe as a barrier to the single market.

Work was taken forward by the Harmonisation of Settlement Cycles (HSC) Working Group[5] established by CESAME 2 (the European Commission's Clearing and Settlement Advisory and Monitoring Expert Group). In its final report, submitted as a reply to the European Commission's consultation on CSDs and on the harmonisation of certain aspects of securities settlement, the HSC Working Group included a paper on "Principles for the maximisation of settlement efficiency" and one on the "The case for harmonising settlement cycles".

However the European Commission's proposed CSD Regulation would require CSDs to use a separate legal entity for banking-type ancillary services, although it provides for a derogation in certain cases. This could impact the ICSDs' tri-party model, which provides a highly valuable service for all participating banks. To achieve a sound balance of safety and efficiency will be key for CSDR. Regulatory changes that would compromise this tri-party model should be avoided. In the usual way, the European Commission's CSD Regulation proposal has now passed to the European Parliament and the Council (Member States) for negotiation and adoption.

---

[3] http://ec.europa.eu/internal_market/financial-markets/central_securities_depositories_en.htm#proposal
[4] http://ec.europa.eu/internal_market/financial-markets/clearing/communication_en.htm#giovannini
[5] http://ec.europa.eu/internal_market/financial-markets/clearing/cesame2_en.htm#sub

The distinction between central and commercial bank settlement money is of importance in the European clearing and settlement system. In September 2011 the ERC published a report entitled "The interconnectivity of central and commercial bank money in the clearing and settlement of the European repo market[6]". This report explains that while central bank money is an inherently risk-free asset and its use gives confidence in times of crisis that payments will continue to be made, commercial bank money is nevertheless widely used, because the risks can be managed down to minimal levels and because central bank money is not always available.

As the demand for high quality collateral increases, partly at the insistence of regulators, and the supply diminishes, there is a growing need amongst banks to be able to mobilise collateral between currencies and across borders. The above mentioned report calls for balance in re-engineering the payment architecture. It highlights the critical role of commercial bank money in making multi-currency, cross-border payments and cautions that this role is becoming ever more important.

Improving collateral harmonisation and utilisation

- *CCBM – the cross-border collateral management platform*

In March 2007, the Governing Council of the ECB decided to review the current Eurosystem collateral management handling procedures, in particular, the Correspondent Central Banking Model (CCBM). It decided to develop a single platform, Collateral Central Bank Management[7] (CCBM2), to allow the Eurosystem to manage collateral both for domestic and cross-border operations based on the existing systems such as that of the Banque Nationale de Belgique and De Nederlandsche Bank. Work was commenced in parallel with the T2S project in order to exploit all possible synergies and avoid any overlap.

As publicly announced in a 15 June 2012 press release[8], the Governing Council of the ECB has now decided to discontinue the preparations for the CCBM2 project in its current form. The existing CCBM for cross-border collateral management remains in place.

In the immediate future, the Eurosystem will concentrate on implementing enhancements to Eurosystem collateral management services, namely the removal of the repatriation requirement from the CCBM and the support of cross-border triparty collateral management services (as requested by the market) within the CCBM. Both enhancements will be introduced in the Eurosystem collateral management framework in the course of 2014. Furthermore, the Eurosystem will prepare for the support of T2S auto-collateralisation procedures.

The Eurosystem will also continue assessing and developing its collateral management framework and practices, with an initial emphasis on harmonisation. The 3 May 2012 agenda, for the inaugural meeting of an ad-hoc COGESI (the ECB's contact group on euro securities infrastructures) working group on collateral harmonisation, included an update on recent developments in relation to collateral harmonisation and specific reviews of work on (i) triparty settlement interoperability; (ii) the use of credit claims as collateral for bilateral repos; and (iii) existing Eurosystem procedures for credit claims.

To take forward the work in this area 3 workstreams are proposed as follows:

---

[6] http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/short-term-markets/Repo-Markets/European-repo-market-report/

[7] http://www.ecb.europa.eu/paym/ccbm2/html/index.en.html

[8] http://www.ecb.europa.eu/press/pr/date/2012/html/pr120615.en.html

i. gap analysis exercise on collateral eligibility requirements;
ii. extension of operating hours of (I)CSDs/link arrangements; and
iii. elaboration of a report on minimum common features for CCPs / (I)CSDs triparty interoperability.

- *Triparty repo – already improving collateral fluidity*

One of the major initiatives over the last couple of decades has been the development of triparty repo, in which a custodian bank, an international clearing organisation or an (I)CSD, the triparty agent, acts as a facilitator between the two parties to the repo. The triparty agent is responsible for the administration of the transaction including collateral allocation, valuation and substitution. The use of this form of repo, in conjunction with defined baskets of, high quality, general collateral has provided a major boost to collateral fluidity. With a view to further improving the efficient utilisation of collateral, by bringing together separate pools of liquidity, the ERC are discussing triparty settlement interoperability between the ICSDs (and eventually CSDs). This effort has been relatively slow to progress but has recently gained greater traction. When fully realised, this project will ensure that liquidity/collateral can flow freely, independent of the location of the collateral, thereby providing a real level playing field for participants regardless of which ICSD they use.

- *Widening the range of collateral*

The industry is already exploring to what extent regulatory pressures may be mitigated through the acceptance of a broader range of collateral assets. For instance, assets such as gold, equities and high-grade corporate debt may have a role to play alongside other already favoured collateral assets i.e. cash, government bonds and covered bonds. Similar debates are also pertinent in context of collateral for private contracts, where another alternative under discussion is the utilisation of credit claims (loans) as repo collateral, in lieu of the use of the hitherto favoured bond obligations (securities). The ERC has in fact actively pursued the creation of a secondary market for credit claims. Although the project has still not materialised there is good hope that a common database, built on the expertise of both ICSDs in Europe together with Markit and DTCC, will be happening.

At the same time official debates continue about how to define liquid assets available to meet liquidity coverage ratio requirements under the Basel liquidity framework; and similar questions are being examined in the context of other new regulatory requirements – such as in the case of the development of regulatory technical standards to support the EU's new CCP clearing regulation (EMIR), where acceptable collateral standards must be specified for CCPs to conform to when taking margin from clearing members.

The ongoing tensions in financial markets have also seen the adoption by central banks of broadened criteria for eligible collateral assets against which financing may be provided to credit institutions. This encompasses certain credit claims and asset backed securities, in accordance with specified requirements which include valuation haircuts varied responsive to the assets in question.

BROADER INITIATIVES TO IMPROVE POST-TRADE EFFICIENCY

- *Authorities' initiatives to improve post-trade efficiency*

Over the years CICF participants have contributed to many initiatives to improve European market efficiency, both at their own instigation and in support of the efforts of others. This work stretches across the inter-linked areas of trading, clearing and settlement. In particular, collaborative efforts have included prolonged involvement in important market wide expert groups, such as the European Commission's CESAME[9] and the ECB's COGESI[10].

Financial market infrastructure has often been compared to plumbing, being vital, but unglamorous and forgotten until something goes wrong. Rather than just ignore this plumbing, the European Commission prompted work to review it. Two reports, known as the Giovannini reports[11], were produced with the aim of first identifying the barriers existing to cross-border infrastructure and then devising a strategy to eliminate these barriers. On 28 April 2004, the European Commission adopted a Communication[12] which set out, for the first time, overall European Commission policy on this subject and presented possible courses of action to improve the cross-border post-trading environment. The European Commission also established three high-level groups to deal with the market (CESAME), fiscal (FISCO[13]) and legal (LCG – the Legal Certainty Group[14]) barriers to cross-border post-trading. In November 2008 CESAME issued a comprehensive report on its four years of work, which was subsequently continued by its successor the CESAME2 Group established in summer 2008. Then in 2010 on-going work was taken up by the Expert Group on Market Infrastructures[15] (EGMI), which produced a report in October 2011.

The inherent need to coordinate the work of the public and the private sectors in the process to reform post trading in Europe is at the heart of the mandate of the most recently established group to take up this lineage of work, the European Post Trade Group (EPTG). The EPTG was set up in March 2012 to drive reforms that will improve the safety, efficiency and competitiveness of Europe's post trading to the benefit of issuers, market infrastructures, intermediaries and investors. To achieve this, the EPTG should (i) complement the legislative initiatives and T2S; (ii) drive the dismantling of all Giovannini barriers by assigning clear responsibilities and timelines; (iii) support the cohesion of regulatory initiatives as they are implemented; and (iv) avoid the duplication of efforts. The organisation of this group is unique in as much as it is of a quadripartite nature, in that it consists of representatives of the EC, ECB/T2S, ESMA and the industry with a rotating chairmanship hosting three to four meetings per year.

The ECB's COGESI addresses issues and developments which are relevant for the euro securities settlement industry and which are of common interest for the Eurosystem, market infrastructures and market participants. This includes developments in the field of collateral management and liquidity management, infrastructural developments, issues related to regulation, standards and legal framework, and post-trading activities in general. Of particular interest for the ECB is to receive feedback from market participants and infrastructures on the Eurosystem collateral framework and on initiatives related to euro securities clearing and settlement integration.

---

9 http://ec.europa.eu/internal_market/financial-markets/clearing/cesame2_en.htm
10 http://www.ecb.europa.eu/paym/groups/cogesi/html/index.en.html
11 http://ec.europa.eu/internal_market/financial-markets/clearing/communication_en.htm#giovannini
12 http://ec.europa.eu/internal_market/financial-markets/clearing/communication_en.htm#com
13 http://ec.europa.eu/internal_market/financial-markets/clearing/compliance_en.htm
14 http://ec.europa.eu/internal_market/financial-markets/clearing/certainty_en.htm
15 http://ec.europa.eu/internal_market/financial-markets/clearing/egmi_en.htm

- *Further market infrastructure efficiency opportunities*

Incremental to these official efforts a significant contribution to the identification of necessary improvements in European market efficiency came with the July 2010 publication of the ERC's White Paper[16] on the European repo market, including the role of short-selling, the problem of settlement failures and the need for reform of the market infrastructure. This ERC White Paper emphasises the importance of the repo market for the efficiency and stability of the financial system. It was commissioned by the ERC in response to regulatory considerations which will impact the repo market; and given a perceived urgent need for action to remove the barriers to the efficient cross-border transfer of securities posed by the settlement infrastructure. This ERC White Paper highlights infrastructure problems which have caused fails in the system in difficult market conditions and suggests solutions.

A December 2010 update set out responses to this ERC White Paper and described progress that had been made towards the elimination of barriers to interconnectivity; and a further March 2011 update sets out subsequent responses from the Greek authorities and the Italian Central Securities Depository (CSD). Such progress as has been made is very welcome to see, yet more remains to be done in order to iron out the identified inefficiencies. In particular there remain barriers to the smooth interaction of domestic and international markets, which continue to undermine the realisation of a single market. Until work to eliminate these barriers is complete there will continue to be problems with the smooth operation of the markets, leading to undesirable inefficiencies in collateral fluidity.

Furthermore, in the foreword to the ERC's September 2011 report on the interconnectivity of central and commercial bank settlement money it is stated that "The publication of this new paper will facilitate future developments, amongst which high on the list of priorities of the ERC are:

- development of interoperability for triparty between both ICSDs - Euroclear and Clearstream, to avoid fragmentation of liquidity pools
- unfettered access by all types of trading venues, be it electronic or voice, to all CCPs irrespective of the location of the collateral; and
- improved European-wide access to liquidity, fully respecting the level playing field for all users."

Meanwhile, other potential efficiencies being pursued include:

- harmonisation of requirements, for example so that central banks adopt uniform repo collateral pools; or so that each country accepts the same set of assets for liquidity buffer holdings rather than its own tailored set (at the very least within the Euro zone); and
- usage of various forms of collateral swaps, to better match collateral sources to collateral uses.

However, each of these possible refinements comes with its own potential drawbacks, and public authorities understandably challenge the extent to which such refinements may be utilised.

Concurrently firms face significant pressure to upgrade their technology and operational capabilities for the handling and management of collateral. As OTC transactions are pushed into CCPs and onto organised exchanges, new legal arrangements need to be put in place. Procedures will need to support daily confirmations, reconciliations, collateral valuation and not just same-day, but also intra-day, margin calls. Adapting to these needs is particularly challenging for buyside firms and will require the deployment and enhancement of automated solutions; and increased levels of STP.

[16] http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/short-term-markets/Repo-Markets/european-repo-market-white-paper-on-short-selling-and-settlement-failures/

LEGAL ASPECTS OF COLLATERAL

An important element in underpinning the robustness of securities' markets and the use of securities as collateral is ensuring certainty regarding the legal aspects of these transactions – most importantly in a cross-border context. The European regulatory framework provides some comfort as regards securities ownership, although legal barriers have needed to be further analysed by expert groups. Recent regulatory developments have also considered changes to the buy-in procedure – usually included in market master agreements.

- *The two main legal techniques for mobilising collateral*

There are two main techniques for collateral mobilisation in Europe, which the EU's directive on financial collateral arrangements defines in the following way:

(1) **Security financial collateral arrangement**, which means an arrangement under which a collateral provider provides financial collateral by way of security to or in favour of a collateral taker, and where the full or qualified ownership of, or full entitlement to, the financial collateral remains with the collateral provider when the security right is established.

(2) **Title transfer financial collateral arrangement**, which means an arrangement, including repurchase agreements, under which a collateral provider transfers full ownership of, or full entitlement to, financial collateral to a collateral taker for the purpose of securing or otherwise covering the performance of relevant financial obligations.

- *Collateral ownership*

A key element is ensuring certainty regarding the ownership of securities. The EU's Settlement Finality Directive[17], adopted in 1998, is aimed at reducing the systemic risk associated with participation in payment and securities settlement systems, and in particular the risk linked to the insolvency of a participant in such a system. The Directive applies to payment and securities settlement systems as well as any participant in such a system, and to collateral security provided in connection with the participation in a system, or operations of the central banks of the Member States in their functions as central banks.

Additionally the aim of the EU's 2002 Collateral Directive[18] is to create a uniform EU legal framework to limit credit risk in financial transactions through the provision of securities and cash as collateral. Collateral is the property provided by a borrower to a lender to minimise the risk of financial loss to the lender in the event of the borrower failing to meet comprehensively their financial obligations to the lender. The Directive reduces the formal collateral requirements and harmonises and clarifies the collateral process at minimum level.

In its report of 2008, entitled "Second Advice", the LCG put forward detailed solutions to legal barriers related to the cross-border holding and settlement of securities, in order to lead to an improved and harmonised legal framework for holding and settlement of securities through intermediaries and for the processing of corporate actions (barrier 13). Supplementing the work of CESAME, "Second Advice" contains a blueprint for future legal obligations of account providers in the context of the processing of corporate actions (barrier 3). Furthermore, the report explains how to give issuers free choice between European Central Securities Depositories (barrier 9).

17 http://ec.europa.eu/internal_market/financial-markets/settlement/index_en.htm#links
18 http://ec.europa.eu/internal_market/financial-markets/collateral/index_en.htm

Taking up the LCG's 15 Recommendations, the Commission started work which should culminate in a proposal for Securities Law Legislation at the beginning of 2013. It is intended to primarily cover the issues of "who owns what", re-use of collateral / rehypothecation and the rights flowing from securities held through securities accounts.

On 9 October 2009, the UNIDROIT Convention on Substantive Rules for Intermediated Securities (the "Geneva Securities Convention") was adopted, including by the European Commission. This convention overlaps with a substantive part of the projected Securities Law Directive; and they are compatible – opening the possibility for considerably increasing the safety of the international securities' legal framework.

- *Market discipline - the buy-in procedure*

The European Commission's proposed CSD Regulation also calls for mandatory buy-ins after four days if settlement fails. This should be executed by CCPs or trading venues, although the EP has reasonably proposed that buy-in should only be at the instigation of the frustrated purchaser. Since the identification of the Giovannini barriers, evidence has been given that fails in European settlement are not because counterparties like to negate on their obligation. Rather they arise because of domestic market rigidities or the overall lack of investment in a pan-European settlement infrastructure.

The buy-in proposals are of particular significance, as they seek to mandate that an unrelated party (market infrastructure) will, in case of fails, conduct a buy-in after just four days. This is notwithstanding that the current EU post-trade environment is not built in such a way as to ensure that there will be timely trade settlement. Coupled with this there are also proposals for fines. A likely consequence of these new strictures would be an increased reluctance to lend out securities, thereby restricting collateral availability.

There is likely to be even more differentiation between the most obviously liquid collateral and other securities. It is expected that current introduction of such a market discipline regime would reduce cash trading market liquidity, as operational risk costs outweigh expected trading spread gains. Dealers' willingness to make markets, already under stress as a result of market conditions and the impact of other regulations (e.g., on capital adequacy and short selling), could be further damaged if they have to bear potentially significant additional costs under the new regime. A dealer could be heavily impacted by the failure of its client to deliver, including capital charges, funding costs and (in some markets) fines for short selling, but the proposal provides no recourse to recover penalties. Such an impact in cash markets will make it harder to source required collateral assets.

ICMA has created a legal framework for repo trading, the GMRA, which contains a mini-close out procedure for dealing with delivery failures, under which individual transactions may be closed out. In practice it is found that by the next morning most failed to deliver repo trades have cleared up, so the mini-close out does not often need to be utilised. Work is currently in hand at ICMA to promote a smoother alignment of the applicable provisions of the GMRA with ICMA's Secondary Market Rules and Recommendations (for cash securities trading), which have long provided for the possibility of buy-ins upon the incidence of settlement failure.

CICF'S VISION FOR IMPROVEMENTS

More attention urgently needs to be given to collateral fluidity, which in essence concerns the mobilisation of collateral, i.e. allowing it to be in the right place at the right time.

Achieving this requires that the plumbing be properly fixed, including through finally making progress with the continuing Giovannini barriers to EU cross-border clearing and settlement arrangements. The recently established EPTG is revisiting some of these points with a view to resolve them asinefficient domestic solutions currently continue to present barriers, as a result of which different collateral assets trade over different timeframes.

With the identified market infrastructure problems solved and the forthcoming transition to T2S achieved, there would then be an appropriately robust post-trade settlement infrastructure to serve as a basis for the move to standardised T+2 settlement and, if then evidently needed, the market discipline measures, as contemplated by the currently proposed CSD regulation.

So the CICF considers that at this point a compromise is needed.

Since their on-going existence continues to give rise to technical fails, thereby impeding collateral fluidity, work should be urgently advanced to ensure the elimination of already identified infrastructural inefficiencies and other, non-infrastructural, problems[19].

At the same time, whilst already overburdened by global regulatory initiatives European market participants will move to provide shorter settlement cycles as demanded by the CSD legislation. And meanwhile market users have pushed the CSDs/ICSDs to embrace T2S.

Let us deliver on these major IT initiatives and when these latter two massive developments bear fruit we should take stock. If it is then found that there are still fails in the securities markets the time will be right to dig deeper and identify why. In case it is then found that abusive shorts are a problem, we recognise that there would be an appropriate case for mandatory buy-ins to be performed by the right (as yet to be defined) institutions.

[19] Pertinent details of these inefficiencies are elaborated in the various earlier reports which are referenced in this CICF White Paper.

CONCLUDING SUMMARY

Collateral fluidity concerns the flow of collateral within the market place, allowing that the applicable collateral assets (sources) can be effectively matched with collateral requirements (uses).

The importance of collateral has accelerated significantly since the advent of the financial crisis in mid-2007, as both market participants and official policy makers have pursued measures to ensure that risk is better managed. The effect of official measures will be exacerbated in case of failure to achieve adequate international consistency or if there is unduly retrospective application.

It is believed that demands for high quality collateral will significantly outstrip supply, so it is essential that collateral be managed as a scarce resource. At the same time it is essential that the repo market is not hindered from fulfilling its role as the provider of assets in the collateral market place.

Adoption of a solution, either through secured lending or some other form of collateralisation of deposits, to release collateral held by central banks in consequence of their provision of welcome market liquidity, may decrease the pressure on interbank collateral without exposing the central bank community to undue risk.

There are a number of existing initiatives to enhance collateral utilisation. Some, such as the ERC project to establish the safe utilisation of credit claims as collateral for bilateral repos, seek to increase the availability of high quality collateral assets, whilst others, such as the ERC project to establish triparty settlement interoperability between the ICSDs, seek to remove barriers to the free flow of liquidity.

Over many years collaborative efforts have been made between the private sector and the official sector (e.g. via CESAME and COGESI). These have identified European market infrastructure barriers which need to be addressed and ongoing efforts to do so should be strongly encouraged.

The ERC White Paper produced in July 2010 and subsequently updated, provides a benchmark description of the European repo market and highlights certain specific needs for reform of the market infrastructure. Continued progress to close these gaps is an essential precursor for the establishment of an efficient EU single financial market.

T2S is a transformational project which will improve the post-trading infrastructure in Europe by providing a single platform for securities settlement in central bank money and will substantially contribute to financial integration in Europe. Only when T2S is accomplished in 2015/16 will same day settlement be possible for all actors in the eurozone.

Whilst the CCBM2 project has been stopped, essential improvements to the existing CCBM for cross-border collateral management remain promised for delivery and need to be completed. Alongside of this valuable work on collateral harmonisation is now being progressed.

The proposed CSD Regulation is an important plank in the overall building of a sounder financial system; and market participants welcome the proposal to shorten the standard settlement cycle to T+2, but this is a major technology initiative and needs to be complemented by practical steps to ensure the possibility of same day real time settlement for necessary funding and collateral trades.

Current proposals in relation to failed settlements are not well adapted to market realities. Unless infrastructural problems which give rise to fails are first addressed, the impact of such proposals could be to undermine the functioning of the market, harming liquidity and necessary collateral fluidity.

Commercial bank money plays an essential role, complementary to that of central bank money, in the process of settlement. The proposed CSD Regulation complicates the delivery of settlement in commercial bank money, with potentially significant implications for collateral (repo) processing.

An important element in underpinning the robustness of securities' markets and the use of securities as collateral is ensuring certainty regarding the ownership of securities. The forthcoming Securities Law Legislation has an important part to play in eliminating any uncertainties across the single market.

The CICF has a vision for improvements, which calls for an urgent focus on collateral fluidity. Too much haste will lead to adverse consequences, which are already visible through the fear of a shortage of high quality collateral. To pre-empt these potential dangers industry needs to work with policymakers to deliver well thought out measures. Known problems in European financial market infrastructures need to be fixed, alongside the delivery of the major technological developments to realise both T2S and the shift to a standard T+2 settlement period. To support achievement of these major improvements some compromise is necessary in respect to the phasing of certain contemplated elements of the CSD Regulation. Absent effective phasing of change, serious adverse consequences can be anticipated to arise as a result of inadequate collateral fluidity.

GLOSSARY

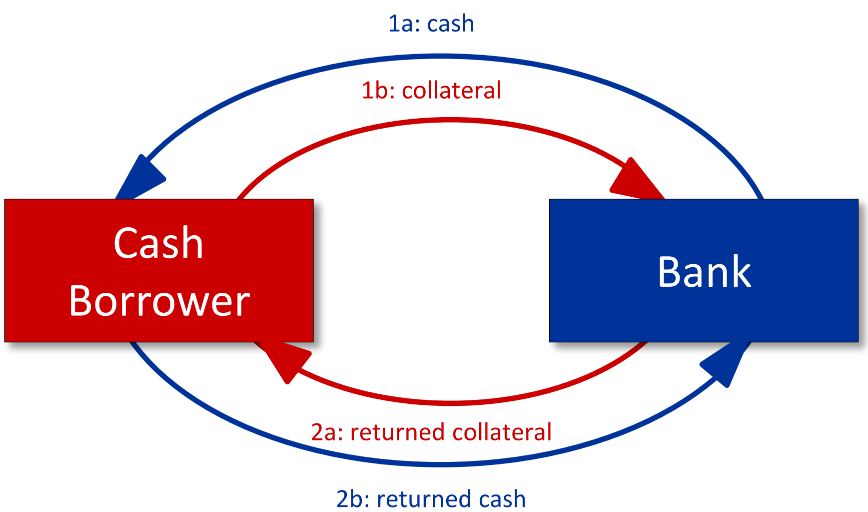
ABS	Asset-Backed Securities
CCBM	Correspondent Central Banking Model
CCBM2	Collateral Central Bank Management
CCP	Central (Clearing) Counterparty
CESAME	Clearing and Settlement Advisory and Monitoring Expert group (of the EC)
CICF	Collateral Initiatives Coordination Forum
COGESI	Contact Group on Euro Securities Infrastructures (of the ECB)
CRR/D	Capital Requirements Regulation/Directive
CSD	Central Securities Depository
DTCC	Depository Trust & Clearing Corporation
EC	European Commission
ECB	European Central Bank
EMIR	European Market Infrastructure Regulation (of OTC Derivatives, CCPs and TRs)
EP	European Parliament
EPTG	European Post Trade Group
ERC	European Repo Council (of ICMA)
ESMA	European Securities and Markets Authority
EU	European Union
G20	Group of Twenty
GMRA	Global Master Repurchase Agreement
HSC	Harmonisation of Settlement Cycles (working group established by CESAME)
ICMA	International Capital Market Association
ICSD	International CSD
IMF	International Monetary Fund
IT	Information Technology
LCG	Legal Certainty Group (of the EC)
LTRO	Long-Term Refinancing Operation
MBS	Mortgage-Backed Securities
OTC	Over-the-Counter
STP	Straight-Through Processing
T2S	TARGET2-Securities
TARGET	Trans-European Automated Real-time Gross settlement Express Transfer system
TR	Trade Repository
T+2	Trade date + 2 days
UCITS	Undertakings for Collective Investment in Transferable Securities

ANNEX

Schematic illustrations of a series of basic transaction types in which collateral is utilised.

Collateral: Secured cash borrowing

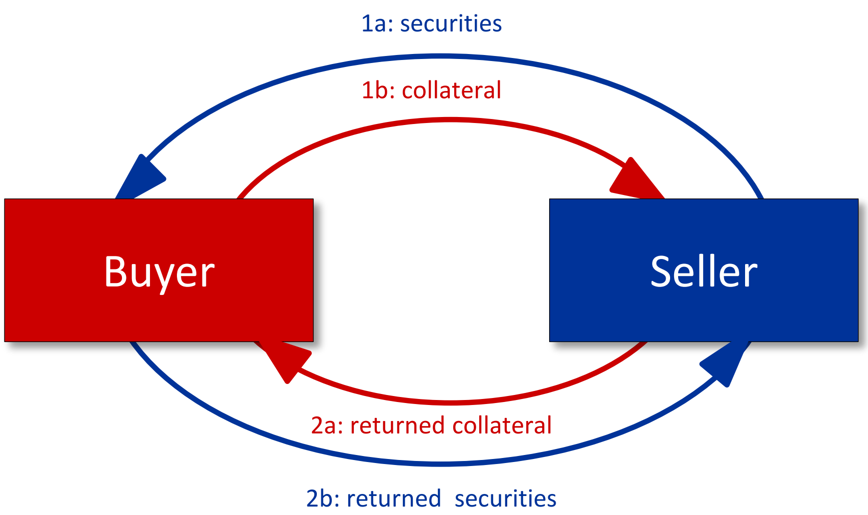
Secured cash borrowing is an arrangement between a borrower and a bank: the bank commits to lending a specific cash amount over a specified period of time in one or more currencies against receipt of collateral



- Collateral adjustments might be provided for by the contract but in many case, like mortgages, this is typically not the case (although the lender will often enjoy the protection of an element of over-collateralisation)

Collateral: Repo

Repo is a two-sided transaction involving one party selling securities to a counterparty with an agreed repurchase on a future date. The collateral in repo transactions is used to mitigate the seller's risk of the buyer failing to return its assets. At the same time the securities bought protect the buyer from the risk that the seller fails to return the collateral, which is typically in the form of cash. To take account of the change in the securities' value, repo transactions are subject to mark-to-market.

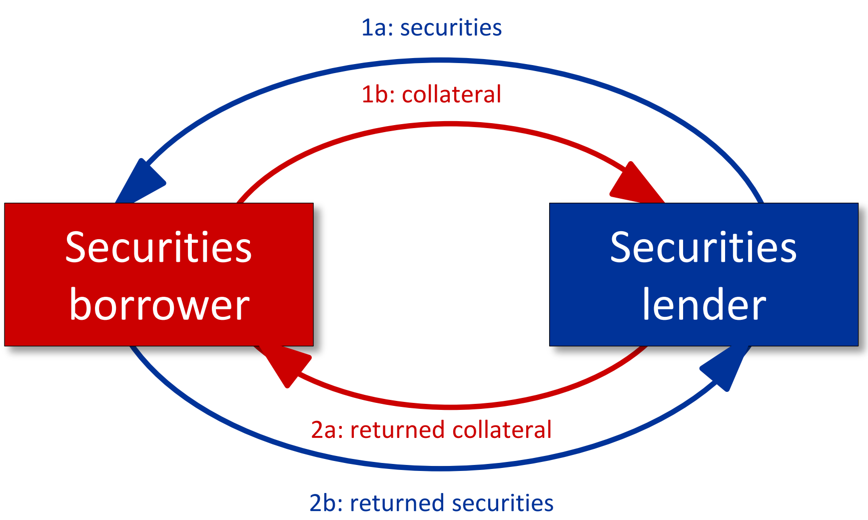


Repo transactions are subject to mark-to market because:

- the value of the primary sold securities will change on a daily basis
- as will the value of any securities collateral
- account must be taken of daily accruals on both the securities and the collateral

Collateral: Securities lending & borrowing

In securities lending and borrowing, the collateral is used to mitigate the lender's risk of the borrower failing to return borrowed securities. At the same time the securities borrowed protect the borrower from the risk that the lender fails to return the collateral, which is typically in the form of cash or other securities.

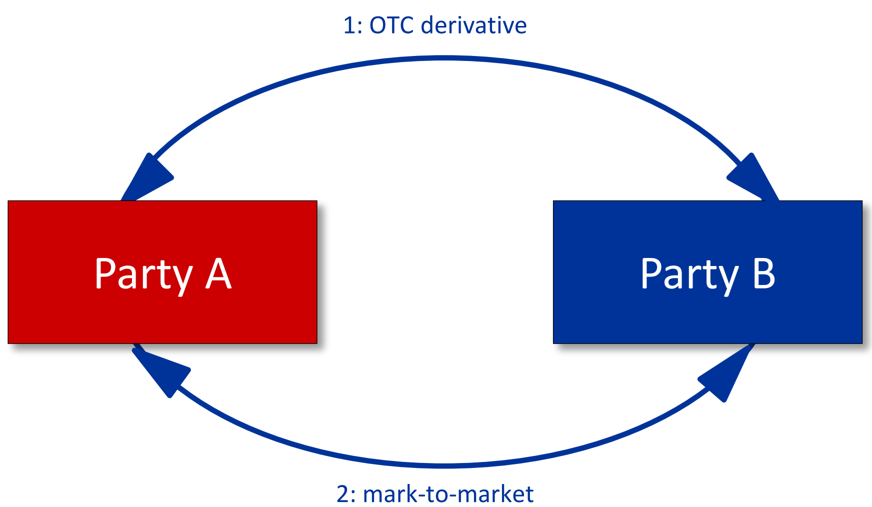


- The agreement is subject to mark-to-market as the value of the securities will change on a daily basis, as will the value of any securities collateral

- Whilst economically similar to repos, different legal agreements apply and the securities lent are often equities (although bonds are also lent) and lenders are typically long term investors such as pension funds and insurance companies

Collateral: OTC derivatives

OTC derivatives trades start from a position of zero value, but over time mark-to-market value will accumulate to one of the parties. Collateral is used to mitigate that party's risk (i.e. counterparty credit exposure).

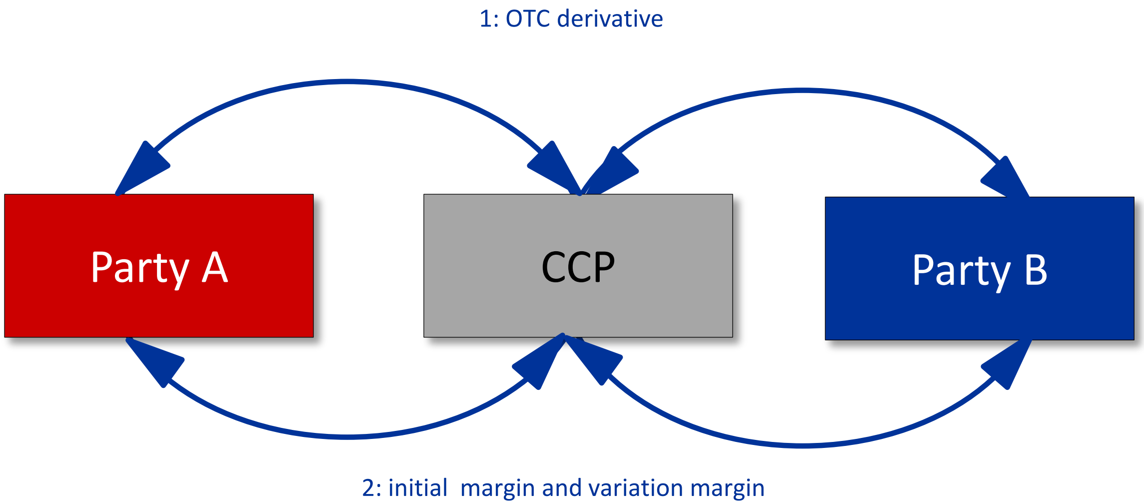


- Mark-to-market~~s~~ is actioned periodically (preferably daily)
- As profits and losses on the derivative contract change, the collateral must be increased/decreased accordingly
- Whilst two way credit support is preferable there are agreements where collateral is only required on a one way basis (eg if B owes A and not vice versa)

Common OTC derivatives are: Interest Rate Swaps (IRSs), Forward Rate Agreements (FRAs), equity derivatives and bond derivatives

Collateral: CCP cleared derivatives

OTC derivatives cleared through central counterparties (CCPs) require clearing members (both Party A and B) to put up margin to the CCP. This margin represents returnable collateral given by each clearing member to cover the CCP's risk.



- The interposition of the CCP relieves clearing members from bi-lateral counterparty credit line

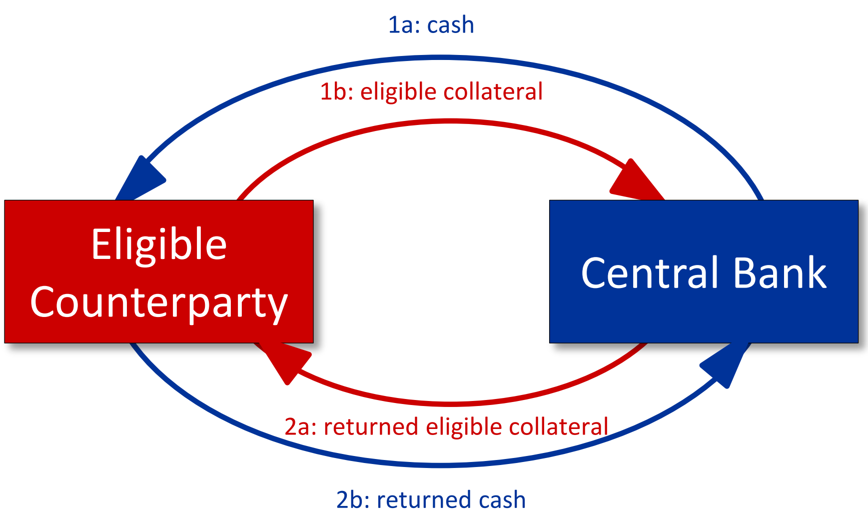
- Margin requirements consist of Initial Margin (IM) and Variation Margin (VM)

- Payable by both parties, IM is applicable to every trade as a protection against default of a clearing member

- VM is applied when price movements occur. In this case the CCP passes cash from one clearing member to another

Collateral: Central bank market operations

Most central banks undertake repo transactions in the market to control short-term interest rates and deliver their monetary strategy. Assets eligible as collateral in market operations have to fulfil certain eligibility criteria



- If the central bank wants to lower interest rates, it buys eligible collateral, subject to applicable valuation haircuts, infusing the banking system with cash. With more money available, interest rates decrease

- On the contrary, if the central bank wants to raise the interest rates, it sells eligible collateral decreasing the amount of cash available in the banking system

- Margin call procedures are applied to maintain the haircut-adjusted market value of the underlying securities collateral over time

- Evaluation of required margin calls should take account for confirmed settlement of the underlying.