

Basel Committee on Banking Supervision Bank for International Settlements CH-4002 Basel Switzerland

6 July 2016

Dear Sirs,

Response submission from the ICMA European Repo Council

Re: Basel Committee on Banking Supervision consultation on "Revisions to the Basel III leverage ratio framework"

Introduction:

The purpose of this letter is to provide feedback on behalf of the International Capital Market Association's ("ICMA's") European Repo and Collateral Council ("ERCC"), concerning the Basel Committee on Banking Supervision's (BCBS's) consultative document on "Revisions to the Basel III leverage ratio framework", as published on 6 April 2016 (and revised on 25 April 2016).

The ICMA ERCC notes that this consultation considers revisions to the simple, transparent, non-risk based leverage ratio, which has been introduced into the BCBS prudential regulatory framework for banks to act as a credible supplementary measure to the risk-based capital requirements. The overall scope of this is broader than the ICMA ERCC's repo and collateral market focussed remit and accordingly the ICMA ERCC looks to others to comment on the full range of questions which the consultation raises. Nevertheless, one specific and significant aspect of the consultation, namely the treatment of securities financing transactions (SFTs), falls squarely within the ICMA ERCC's remit; and consequently this response submission focusses on this particular aspect.

Executive Summary:

Repo and collateral markets lie at the heart of today's financial market system and are vital to its smooth functioning. This has significant implications for both financing, of business and governments, and the effectiveness of financial regulatory measures designed to provide financial stability – each of which will be adversely impacted if the operation of repo and collateral markets becomes impaired.

The cumulative impact of the pressures being imposed on the repo market, most particularly by the leverage ratio, are such that it is already a market under significant stress.

Without dropping the worthwhile effort to enhance long term financing stability through the imposition of the leverage ratio, there are a number of ways in which its details could be calibrated in order to better smooth its effects on repo and collateral markets. To avoid undesirable consequences from the imposition of the leverage ratio, the ICMA ERCC believes there should be further detailed study of possible more detailed specific treatments for special asset types such as holdings of high quality liquid assets, or in relation to desirable financing activities such as matched book repo facilitation; and that there is a need to introduce specific refinements to:

- exempt central bank reserves from the leverage exposure measure;
- exclude potential grossing up when conducting repos with central banks;
- eliminate double counting stemming from the required current exposure add on;
- reduce, or eliminate the leverage ratio impact of forward starting repos;
- allow for open and callable repos to be netted on the basis that they end on the earliest possible date for which they can be closed; and
- ensure that detailed provisions concerning CCP activities are applied across asset classes.

The benefits of making such market sensitive adaptations would be felt by borrowers, both corporate and governmental, and investors; and would help underpin the effective functioning of other regulations designed to deliver increased financial stability.

Detailed Commentary:

a. Repo and collateral markets – the heart of the financial market system:

The ICMA ERCC wishes to highlight that repo plays a vital role within the financial system. It underpins the functioning of secondary and primary capital markets, where corporate and government borrowers raise money to finance their long-term needs. The cost of borrowing in the capital markets will be increased in case there is not a well-functioning repo market. Repo is also the key component of the shorter-term money markets, which provide an essential mechanism to allow for the efficient management of short-term cash and collateral requirements. Since repo provides a secured means of financing in this market it is the instrument of choice, with market participants and public authorities keen to avoid the proliferation of unsecured counterparty exposures. In case the repo market is unable to fulfil this role, commercial banks would have no choice other than to conduct all their liquidity management through central banks.

The ICMA ERCC also observes that collateral now plays a key role in financial markets, in no small part as a result of official policy interventions designed to mitigate the risks of financial market activities. For these measures to work as intended, it is essential that there is sufficient collateral fluidity – such that the right amount, of the right type, of collateral can be available whenever and wherever needed. This needs a good infrastructure for the movement of collateral, but also a robust repo market, since the repo market provides the principal mechanism for the transfer of collateral.

b. Repo and collateral markets already face significant stresses from the leverage ratio:

The ICMA ERCC has published a number of papers to illustrate the importance of repo and collateral and in its <u>most recent paper</u> has drawn attention to the state of the repo market. The cumulative impact of the pressures being imposed on the repo market, most particularly by the leverage ratio, are such that it is already a market under significant stress. Given the role of repo and collateral markets at the heart of the financial system, this has negative implications for the smooth functioning of broader financial markets — which will, in turn, lead to increased costs and risk for market participants, including those corporates and governments borrowing to finance their economic needs. At the same time there also risks being a detrimental impact on the effectiveness of many of the measures put in place to improve the stability of the financial system, dependent as they are on high quality collateral.

c. Carefully considered refinement of the leverage ratio can help to mitigate concerns:

Without dropping the worthwhile effort to enhance long term financing stability through the imposition of the leverage ratio, there are a number of ways in which its details could be calibrated in order to better smooth its effects on repo and collateral markets. These include the possibility to identify more detailed specific treatments for special asset types such as central bank reserves, holdings of high quality liquid assets (HQLAs – as required for liquidity coverage ratio purposes), or in relation to desirable financing activities such as matched book repo facilitation; and relaxing the conditionality for SFT netting. The IMCA ERCC believes that those responsible for the leverage ratio's implementation should give careful consideration to its impacts, conducting full and deep impact studies to support informed decisions regarding which specific details to adopt.

The ICMA ERCC's own considered view is that the one important aspect to review is the inclusion of central bank reserves in the leverage exposure measure. The ICMA ERCC observes that the Bank of England has expressed its support for such a review in its, 1 February 2016, response to the European Commission's call for evidence on the EU regulatory framework for financial services (at paragraph 11 in the high-level overview and in example 3 on page 4 of the detailed answers). There would appear to be a strong case to adopt an exemption of central bank reserves, avoiding the undesirable way in which the leverage ratio otherwise serves to impede the flow of funds through the banking system and thus alleviating some part of the pressure on repo and collateral markets.

Furthermore, the ICMA ERCC wishes to highlight that borrowing money from central banks where, as in the case of the Bank of England, collateral must be provided against the borrowing on a full title transfer (as opposed to a pledge) basis, potentially leads to a grossing up of the borrowing bank's balance sheet (as the securities delivered as collateral remain in the borrowing bank's balance sheet despite having been sold to the central bank). This would of course lead to a deterioration in the borrowing bank's leverage ratio and is another undesirable effect which the ICMA ERCC believes should, for the avoidance of doubt, be the subject of a specific exemptive treatment.

One specific element introduced in the BCBS leverage ratio is the current exposure add-on for SFTs, as detailed in paragraph 33(ii) of the framework. The ICMA ERCC appreciates that this risk add-on is designed to capture a bank's exposure in case it has SFTs which are under-collateralised. Such risk add-ons are a feature of risk-based capital requirements; in which context they make perfect sense. However, in the case of the leverage ratio they appear to give rise to an inappropriate element of double counting. This stems from the impact of the add-on in relation to the asset side of SFTs (ie reverse repos / cash out), where the underlying exposure is already captured by the leverage ratio. This contrasts with the case of the liability side of SFTs (ie repo / cash in), where the add-on makes perfect sense given that the underlying exposure is not itself captured by the leverage ratio. Accordingly, the ICMA ERCC considers that the framework should be refined to eliminate this double counting by only requiring that the add-on be applied where there is exposure stemming from the liability side of SFTs.

An additional point of concern is that forward-starting repos are treated as "commitments" in the leverage ratio framework and receive a 20% - 50% CCF of the notional amount based on the remaining maturity. The reason this causes concern is that forward starting repos are regularly used to replace existing repo transactions that mature on the settlement date of the forward starting repo. Therefore, forward starting repos are not themselves an incremental source of leverage to the balance sheet, as they instead simple maintain the existing leverage when their start date is reached. Consequently, there is a double counting effect where the open repo exposures on the balance sheet are caught by the leverage ratio as well as the leverage charge attached to the replacement forward start repo. Hence, the ICMA ERCC proposes that off balance sheet forward-starting SFTs should be excluded from the calculation, or should, at least, attract a significantly lower CCF.

Within this current BCBS consultation paper, section III.5 concerns the treatment of SFTs. The ICMA ERCC welcomes the fact that the BCBS leverage ratio framework makes some provision for the netting of SFTs, but considers that this has been done on a very restrictive basis and sees that allowing further netting would be a potential way in which to recalibrate the stressful impact of the leverage ratio on repo and collateral markets. One specific extension to netting could concern open and callable SFTs, which the ICMA ERCC would expect the leverage ratio netting rule to treat as ending on the earliest possible date for which they can be closed.

The IMCA ERCC observes that the BCBS is also, in section II.1.2 of this consultation paper, carefully considering concern about the treatment of client margins, which has the potential to constrain the provision of client clearing services. The ICMA ERCC is concerned about this way in which the leverage ratio negatively impacts, thorough its treatment of collateral, on CCP related derivative activities and supports that there should be an adaptation of the rules to mitigate this undesirable effect. The ICMA ERCC notes that in Europe around half of all repo market activity is centrally cleared and thus sees that it is important to develop refined leverage ratio rules in a way which suitably considers all CCP activity, rather than one which might solve problems linked to derivatives activities only.

d. Additional detailed information:

For further information, the pages annexed to this response letter provide more detailed explanation of a number of aspects pertinent to the consideration of the impacts of the leverage ratio on repo and collateral markets.

Concluding remarks:

The ICMA ERCC appreciates the valuable contribution made by the BCBS through its examination of the issues articulated in this public consultative document and would like to thank the BCBS for its careful consideration of the points made in this response. The ICMA ERCC believes that, in order to avoid undesirable consequences from the imposition of the leverage ratio, there is a need to introduce refinements, including to exempt central bank reserves from the leverage exposure measure. The ICMA ERCC remains at your disposal to discuss any of the above points.

Yours faithfully,

Godfried De Vidts

Chairman

ICMA European Repo and Collateral Council

Annex:

For further information, the following annex pages provide more detailed explanation of a number of aspects pertinent to the consideration of the impacts of the leverage ratio on repo and collateral markets:

	Page
Repo and collateral support essential components of financial markets	7
Key functions of the repo market	9
The growing importance of collateral	11
Repo and collateral markets – the heart of the financial market system: illustration	12
Mitigating leverage ratio impacts in the context of repos and collateral	13
The essential need for collateral fluidity	14
Impact of leverage ratio on repos and collateral and cumulative effect	15
Illustration of the new regulatory challenge for banks	16

Repo and collateral support essential components of financial markets:

Financial markets bring together buyers and sellers wishing to engage in transactions in cash, such as lending and borrowing or deposit taking, or cross currency exchanges; or in financial assets such as equities, bonds and derivatives. Amongst the essential components of financial markets are money markets, capital markets and derivatives markets. Money markets primarily comprise short-term (up to one year) cash or collateral oriented activities, whilst capital markets are based upon the longer-term (greater than one year) equity and bond (debt)) market activities. Derivative markets provide an overlay to both money and capital markets, with a range of derivative contracts having evolved linked to the underlying cash and securities market products. Collectively these components comprise the major part of financials market and, in combination with each other, they service the needs of companies, governments and individuals.

Given their shorter-term nature, money markets provide investors with relatively lower risk, lower return ways in which to invest and manage their risks. They can access these markets with a higher degree of confidence in the liquidity of their positions, including by investing on an overnight basis. Borrowers meanwhile can equally benefit from the possibilities these markets present for the management of their liquidity needs. For instance, short-term debt can be issued, say in the form of commercial paper, to cover needs arising in respect of operating expenses, including payroll, or working capital. Market participants can also easily be involved on both sides of the money market, as their liquidity positions fluctuate – perhaps one day borrowing some cash to meet a required outbound payment and the next day finding themselves with some surplus cash to invest following a large payment receipt.

For bank treasurers, as for those in other firms, the money market plays a vital part in allowing them to manage their daily liquidity, without falling short and needing a more expensive loan or without holding excess funds and missing the opportunity of gaining interest on funds. Without access to this market banks would be wholly reliant on central banks to provide them with any required liquidity, or to take in any surplus liquidity. Repo plays a vital part in the money market, as it offers a secure way to transact, largely avoiding the principal risk experienced in unsecured money market activities. The liquidity of high quality liquid assets (HQLA), held for LCR purposes, depends upon a robust repo market able to support the conversion of HQLA securities for cash. Also, formulation of new transaction-based indices presupposes suitable transaction volumes in money markets. And repos are the mechanism for the transmission of monetary policy from central banks to the market.

And, at the same time, repo comprising an exchange of cash for collateral securities, also serves as the conduit for collateral market activity which has taken on an increasingly important role in financial markets (as further elaborated in the growing importance of collateral further below).

On the other hand, capital markets allow governments and corporates, including banks, to raise the long-term finance which they require, either as equity or debt. Investors in these instruments typically assume more risk than in the money markets and hence also enjoy higher returns. Whilst the borrowers long term prospects and credit standing are key factors in determining how high these returns need to be in order to attract the desired level of investment, another important factor which investors need to consider is the degree of liquidity risk which they will face in making their investment. In this regard the repo market again plays a vital role, as it is the possibility to lend out such securities as collateral, or to sell them to dealers, whose risk taking depends on their own access to repo markets, which is one of the key determinants of the extent of this investment liquidity risk.

Repo and collateral markets also play an essential part in the activities of buy-side firms. For short-term funds, particularly money-market funds, reverse repos provide an important, safe way in which to invest cash. Repos may be used as a way for investors to finance inventory, or to facilitate borrowing in case short positions need to be taken to provide risk hedges. Repos may also be as a way to enhance yields, by securely lending out securities from inventory in order to earn incremental returns. Increasingly repo activities are also essential tools for the liquidity management needs of investors – cash buffers being held for liquidity purposes can safely be invested in reverse repos; and repos can be used to quickly generate cash against investment portfolio holdings, allowing the meeting of short-term cash outflows whilst avoiding the need to actually sell down portfolios (or hold larger cash buffers). The need to manage increasing margin collateral requirements, being imposed in relation to essential derivatives hedging activities, is an important factor increasing the cash management needs of investors.

Derivatives markets activities meanwhile complement activities in the money and capital markets, better enabling the tailoring of transactions to manage, risks to factors such as interest rates, foreign currency exchange rates and counterparty credit. This again improves the overall effective cost of borrowing. And, once more, repo and collateral markets play a vital role, supporting and enhancing the functioning of derivatives markets. The use of repo, both to fund long positions and cover short positions in underlying securities; and to source collateral as margin and the availability of a collateral funding curve, is fundamental to the hedging and pricing of derivatives — which are the essential tools of risk management for both financial intermediaries and end-users of the financial markets.

Collateral meanwhile is an essential element in the risk management of CCP exposures, either in relation to the provision of initial margins, required to cover exposure to the closing out of positions in case of counterparty default, or variation margins, required to cover daily fluctuations in the value of open positions. Both these components are standard and essential elements in the risk management processes of those CCPs involved in clearing derivatives, and new regulations agreed at international level are moving the derivative market to equally utilise these two margin components in relation to non-CCP cleared derivatives. Furthermore, CCPs themselves depend upon the repo market as a safe way to invest cash margin receipts, against high quality collateral; and as a way to support the rapid realisation of collateral in case this needs to be sold responsive to a default.

Key functions of the repo market:

The repo market is pivotal to the efficient functioning of financial markets. A liquid and efficient repo market is a necessary precondition for an efficient functioning bond market which, in turn, is crucial to lowering issuer costs (both government and corporate) and reducing portfolio management risks for end-investors. More broadly, the repo market promotes the more efficient use of available tradable stock for collateral management, increasing the speed and efficiency of the settlement process, and mitigating disorderly or volatile price action of narrowly held bonds. Key repo market functions are:

- 1. **Low-cost, widespread access to funding:** Repo represents a source of low cost funding which, because of its collateralised nature, can (a) extend more easily to counterparties that have limited access to unsecured funding; and (b) can be used to secure longer term funding than typically is on offer in unsecured markets.
- 2. Bond Market Liquidity Regulator: Liquidity support is hugely important to the efficient functioning of bond markets, which are typically less liquid than equity or foreign exchange markets. For issuers (both corporate and government), good liquidity lowers interest payments: for end-investors, it reduces the cost of managing portfolio risk. The repo market acts as a bond market liquidity regulator of sorts, responding to shortages of bonds by automatically raising the return offered to bondholders for releasing scarce stock into the market, and lowering the return when excess demand has been satiated. Aside from directly supporting bond market liquidity through regulating the amount of tradable stock, this function provides important guidance to issuers about liquidity conditions across their respective bond maturity curves. Many regular issuers (governments, supranational and larger corporates) appreciate the value in supporting liquidity across their respective maturity curves, and the information from liquid repo markets enables them more efficiently and cost effectively to protect the liquidity of their bond curves. The role repo plays in helping to iron out short-term demand-supply imbalances in the bond market contributes to more stable valuations of government debt and smoother, more consistent yield curves, which are essential for the accurate pricing of other financial instruments, and thus the efficient allocation of capital by financial markets. In this way, repo also acts as a force against disorderly market conditions that can occur if the tradable supply of a particular bond is held with a very small number of investors, and thus "squeezed".
- 3. **Primary Dealer Support:** Primary dealers are significantly exposed to market risks through their role in allowing end-investors to trade against their balance sheets in all market conditions, which provides crucial liquidity support to bond markets. Repo plays a very important role, both in facilitating their ability to manage this risk and in lowering their operational costs. In particular, the repo market allows primary dealers to post continuous bids and offers without having to hold large inventories of stock. In addition, the repo market enables primary dealers to manage more efficiently the significant market risk their balance sheets are exposed to, both because of their commitments to post continuous bids and offers across the yield curve and their support for primary issuance. For example, a primary dealer underwriting the syndication of a new issue may sell a bond of equivalent risk, borrowed from the repo market, in order to protect its downside and ultimately lower the cost of its insurance to the issuer.

- 4. Additional Benefits to Bond Holders: Repo markets allow natural holders of bonds to extract additional value from otherwise inactive inventory holdings of bonds. This enhancement of the value that can be extracted from bond holdings tends to raise their demand and ultimately tends to lower issuer interest costs.
- 5. **Support for Central Bank Liquidity Management:** The collateral management framework necessary to support this market also indirectly provides support to central bank liquidity management, which is largely effected through repo, as it uses the same framework. Central bank repo feeds seamlessly into the commercial repo market.
- 6. **Hedging and Pricing Derivatives:** An active repo market is an absolute prerequisite for liquid markets in derivative instruments. The use of repo, both to fund long positions and cover short positions in underlying securities; and to source collateral as margin and the availability of a collateral funding curve, is fundamental to the hedging and pricing of derivatives which are the essential tools of risk management for both financial intermediaries and end-users of the financial markets, including official debt and reserve management agencies.
- 7. **Preventing Settlement Failures:** Repo plays a critical role in supporting the day-to-day operational efficiency of securities markets by allowing issues to be borrowed in order to ensure timely onward delivery, where short positions have arisen unintentionally, usually because of unexpected lags between inward and outward deliveries of securities, infrastructure frictions or the tight supply of particular issues.
- 8. **Permitting Faster Settlement Times:** The role of repo as a means of borrowing securities has been, and will continue to be, crucial in allowing settlement periods to be shortened in order to reduce systemic risk in securities settlement systems. Faster settlement leaves less time for delivery problems to be corrected and therefore requires an efficient source of securities borrowing to prevent delivery failures. As required by the EU's CSD Regulation, standard bond settlement periods across the EU have been compressed to T+2.
- 9. **Collateral Management:** Trading in the repo market is key to the valuation and management of collateral, and allows collateral resources to be more fully mobilised and efficiently allocated. Collateral management is becoming ever more important. Demand for collateral for use in payments and settlement systems, as well as in the exchange-traded and OTC derivatives markets, is being compounded by regulatory pressure on market users to hold larger liquidity reserves and make greater use of (collateralised) CCPs. At the same time a loss of confidence in some sovereign debt is creating uncertainty over the future supply of high-quality collateral.
- 10. Allowing More Efficient Employment of Capital: The global economic impact of the increasing regulatory risk capital charges introduced since the 1980s was mitigated by the more efficient use of capital that was allowed by the underlying shift from unsecured to secured financing. The capital efficiency of repo will become even more important in the future as regulators increase capital charges and impose new liquidity requirements.

The growing importance of collateral:

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.

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 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, translated in the EU through the CRR; introducing the holding of liquidity stress buffers – collateral assets to satisfy these requirements comprise a short list of high-quality liquid assets (HQLA);
- the shift of standardised OTC derivatives to CCP clearing, as required in the EU by EMIR, which gives rise to demands for significant amounts of initial margin; and
- increased requirements to margin any bilateral OTC contracts (outside of CCP arrangements),
 incentivised by penal treatment of uncollateralised exposures in the EU 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.

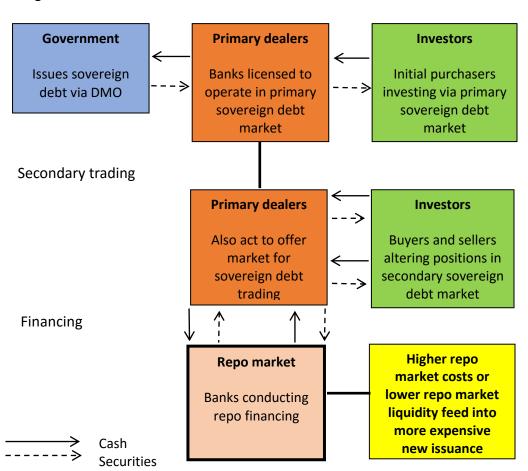
Given the competing demands that exist for the use of collateral assets, the management of collateral needs to encompass the deployment of optimisation techniques. These aim to ensure that the available collateral is utilised as effectively and efficiently as possible. This will be best achieved in case 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.

Repo and collateral markets – the heart of the financial market system:

Repos underpin longer term capital market financing, having a direct role in supporting the trading of debt and equity and associated implications for the cost of originating financing in these markets. Having a more efficient and robust repo market leads to lower long-term financing costs and hence benefits real economy borrowers.

The following is a diagrammatic illustration of these relationships, based on the case of government bond financing:

Origination



New issue price reflects secondary trading prices for existing issues



Secondary trading price depends upon the cost for the dealer to finance positions (long or short) taken to satisfy demand



Financing cost for dealer set by repo market cost to lend or borrow sovereign securities

Mitigating leverage ratio impacts in the context of repos and collateral:

Given that it effectively achieves full elimination of leverage ratio impact for the assets involved, the availability of netting is one essential way to potentially mitigate the impact of the leverage ratio. Paragraph 33(i) of the Basel III leverage ratio framework and disclosure requirements document sets out the extent to which netting of SFTs is permissible for leverage ratio purposes, stating as follows "cash payables and cash receivables in SFTs with the same counterparty may be measured net if all the following criteria are met:

- (a) Transactions have the same explicit final settlement date;
- (b) The right to set off the amount owed to the counterparty with the amount owed by the counterparty is legally enforceable both currently in the normal course of business and in the event of: (i) default; (ii) insolvency; and (iii) bankruptcy; and
- (c) The counterparties intend to settle net, settle simultaneously, or the transactions are subject to a settlement mechanism that results in the functional equivalent of net settlement, that is, the cash flows of the transactions are equivalent, in effect, to a single net amount on the settlement date. To achieve such equivalence, both transactions are settled through the same settlement system and the settlement arrangements are supported by cash and/or intraday credit facilities intended to ensure that settlement of both transactions will occur by the end of the business day and the linkages to collateral flows do not result in the unwinding of net cash settlement.

These conditions describe a minimal approach to allowable netting, being focussed on the actual offset of physical cash settlements. This is the opposite end of the spectrum from the counterparty portfolio default netting which is supported under the provisions of the Global Master Repurchase Agreement (GMRA), together with its suite of applicable legal opinions, and similarly under other master agreements such as the Global Master Securities Lending Agreement (GMSLA). So it is helpful that the BCBS leverage ratio framework provides for SFT netting, but the extent of this mitigating factor is quite limited; and it would be quite conceivable to recalibrate the regime by altering the decision regarding how much netting should be permitted.

The limits on when netting can be utilised to mitigate the impact of the BCBS leverage ratio framework may force increased focus on the structure of repo and collateral contracts. In particular, equivalent economic outcomes may be achievable – using off balance sheet collateral versus collateral exchanges, as opposed to cash versus collateral, or by way of synthetic structures, such as total return swaps – at the same time as more favourable regulatory outcomes are achieved.

The essential need for collateral fluidity:

Whilst numerous studies have attempted to estimate whether there is an adequate supply of collateral to meet these rising demands or whether there might be a shortfall, inevitably nobody actually has the exact answer. Yet with the supply of safe assets dwindling at the same time as demand for them is rising, it is plainly essential that high-quality collateral be managed as a scarce resource. The ICMA ERCC considers that the aggregate amount of collateral is likely to prove large enough to meet the demands, but sees the risk of suffering from more localised demand-supply imbalances. These will arise in case it is not possible to ensure that the right amount of the right type of collateral is available at the right time, in the right place to meet applicable requirements.

Given this, the ICMA ERCC has already done much over the last couple of years to emphasise the importance of collateral fluidity, which allows collateral to move around the system to meet varying demand requirements across the financial markets landscape. Concretely, at the beginning of 2012, ICMA convened the Collateral Initiatives Coordination Forum ("CICF"), which was conceived as a joint trade associations' body, in order to facilitate appropriate coordination across the private sector of all collateral-related initiatives. Whilst it has not proved easy to maintain the impetus for such a broad ranging body to act, this CICF initiative did lead to the production of the CICF's <u>Collateral Fluidity White Paper</u>, which was published on 7 November 2012.

A further ICMA ERCC paper, <u>Collateral is the new cash: the systemic risks of inhibiting collateral fluidity</u>, was published on 3 April 2014. This describes the increasing importance of collateral and calls for regulators to consider the impact of financial regulation on the movement of collateral, highlighting the potential risks of inhibiting collateral fluidity. The paper explains why it is that achieving an adequate degree of collateral fluidity requires the simultaneous existence of robust and efficient settlements infrastructure (the "plumbing"), as well as bank funding desks that are able to source, price, manage, and mobilise collateral (the collateral "pump").

Yet in the European markets both these elements evidence significant need for improvement. Notwithstanding the efforts made over many years, currently most visible in the process of transition to the use of T2S by many of the EU's CSDs, the European market settlements infrastructure remains subject to many inefficiencies associated with its historic evolution in individual EU Member States. The ICMA ERCC is closely involved in work to address this, albeit that the European Commission has shockingly failed to fully involve the ICMA ERCC in its latest infrastructure review effort, being conducted by the newly formulated European Post-Trade Forum ("EPTF"). At the same time, the ICMA ERCC's November 2015 study into the state of the repo market (see next page) records growing concern that the cumulative impact of various prudential and market regulations, along with extraordinary monetary policy, could be affecting the ability of the European repo market to function efficiently and effectively. Uncoordinated measures by public authorities are radically altering the short term secured financing market, degrading the performance of the pump, which may even compromise the success of regulatory measures such as EMIR which depend on the fluidity and availability of collateral.

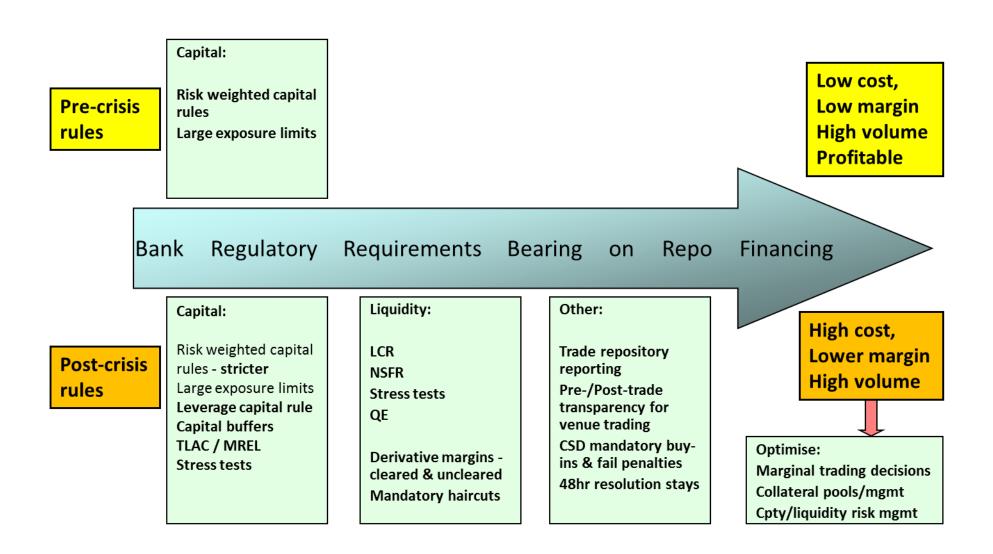
Impact of leverage ratio on repos and collateral and cumulative effect:

In November 2015, the ICMA ERCC launched a study "Perspectives from the eye of the storm: the current state and future evolution of the European repo market", which looks at how the repo market in Europe is changing in response to regulatory pressures. This study is a qualitative assessment of the current state and future evolution of the European repo market, based on interviews with a wide range of market participants and stakeholders, including bank repo desks, fund managers, inter-dealer brokers, electronic trading platform providers, agency lenders and triparty agents. The study records growing concern that the cumulative impact of various prudential and market regulations, along with extraordinary monetary policy, could be affecting the ability of the European repo market to function efficiently and effectively. This could, in turn, have wider repercussions for the broader capital markets and so for the real economy.

In the Executive Summary this includes a bullet point stating that "The Leverage Ratio (with the Supplementary Leverage Ratio for larger US banks), where it is being applied, is having the most profound impact on the repo market, to the point where repo is becoming unprofitable as a traded product"; and in chapter 1 of the study, regarding the various BCBS rules, there is then quite an extended section specifically regarding the leverage ratio.

Whilst commenting on the leverage ratio, the study notes "that when the Leverage Ratio is applied to a repo book, the cost of capital required to support on-balance-sheet repo activity increases dramatically." The study then goes on to explain why for a number of reasons the full impact of the introduction of the leverage ratio is still feeding through into volumes and pricing; and highlights a quote from one repo trader, warning "Once everybody moves to average daily reporting, expect volumes to plummet." And further on, considering cumulative effect, the study states "However, what seems to cause the most disquiet among interviewees is the uncertainty of how NSFR will interplay with the other tenets of Basel III, not least the Leverage Ratio, and to what extent perseverance with matched-book trading will remain a commercially viable option."

"Another observation made by a number of banks, as well as brokers and trading platforms, is that term repo activity related to exchange traded futures markets has reduced dramatically, again as a direct result of the increased capital costs of the Leverage Ratio. Historically, sovereign bond market-makers, arbitrageurs, as well as repo desks, would look for trading opportunities between exchange traded futures markets and the underlying deliverable bonds, in particular the cheapest-to-deliver bond (or 'CTD'), which would usually require taking a term repo position in the relevant bond that spanned the futures delivery date. Post Leverage Ratio, term 'deliverable' repo markets would seem to be a novelty, even for something as widely traded as the 10-year Bund contract"; and it is "felt that the lack of term markets for futures deliverables" is "leading to increased over-night volatility in the repo for the CTD."



Appendix:

ICMA ERCC Background

Since the early 1990's, the <u>International Capital Market Association</u> (ICMA) has played a significant role in promoting the interests and activities of the international repo market, and of the product itself.

The European Repo Council (ERC) was established by the ICMA in December 1999, to represent the cross-border repo market in Europe and has become the industry representative body that has fashioned consensus solutions to the emerging, practical issues in a rapidly evolving marketplace, consolidating and codifying best market practice.

Consistent with the fact that it is repo desks which can increasingly be equally considered to be collateral desks, it has been the ICMA ERC which has served to guide the ICMA's work on collateral, providing support to its broader efforts and driving many of the ICMA's specific collateral related initiatives. Thus, just as repo and collateral are intimately related in the market, so the ICMA ERC and the ICMA's work on collateral are also intimately related. In recognition of these intimate relationships, with effect from 4 December 2015, the ICMA ERC has been renamed as the ICMA ERCC, the "European Repo and Collateral Council".

The ICMA ERCC also plays a significant role in nurturing the development of the repo market and supporting its wider use in Europe, particularly among banks, by providing education and market information. The ICMA <u>bi-annual survey of the European repo market</u> has become established over more than a decade as the only authoritative indicator of market size and structure and the dominant trends.

ICMA is an active force in the standardisation of repo documentation. <u>The GMRA</u> is the most predominantly used standard master agreement for repo transactions in the cross border repo market.

<u>Membership of the ERCC</u> is open to ICMA members who transact repo and associated collateral business in Europe. The ICMA ERCC currently has about 90 members, comprising the vast majority of firms actively involved in this market.