

14 January 2013

Secretariat of the Financial Stability Board
c/o Bank for International Settlements
CH-4002 Basel
Switzerland

Submitted to fsb@bis.org

Re: **Strengthening Oversight and Regulation of Shadow Banking**

Dear Sir/Madam:

Markit¹ is pleased to submit the following comments to the Financial Stability Board (“**FSB**”) in response to its Consultative Document on “*Strengthening Oversight and Regulation of Shadow Banking*” (the “**Consultation Paper**” or the “**CP**”).²

Introduction

Markit is a leading, global financial information services company. We provide independent data, valuations and risk analytics across asset classes, products, and regions to a large variety of clients in order to enhance transparency, reduce risk and improve the operational efficiency in their financial market activities. We are also actively engaged in creating transparency in the global securities lending and repo (“**SLR**”) markets through the products and services of Markit Securities Finance:

- a) Securities lending markets
- Markit currently provides rate and availability summaries for over 90% of global securities lending inventories and activity at the asset, security and transaction level twice a day.³

¹ Markit is a financial information services company with over 2,800 employees in Europe, North America, and Asia Pacific. The company provides independent data and valuations for financial products across all asset classes in order to reduce risk and improve operational efficiency. Please see www.markit.com for further details.

² Financial Stability Board Consultative Document: “Strengthening Oversight and Regulation of Shadow Banking – An Integrated Overview of Policy Recommendations”. 18 November 2012.

³ Markit Securities Finance (formerly Data Explorers) collects daily loan values, lendable values, and rates at which securities are lent, inventories and loan balances for 150,000 securities (including equities as well as corporate, government and agency bonds). The data is contributed by custodians, agent lenders, dealer brokers, banks and hedge funds and reflects the lending activities of more than 22,000 pension funds, mutual funds and insurance companies.

- We supply our data to all major agent lenders who have the option for onward distribution to their underlying beneficial owner clients. The data is also used by most prime brokers, by over 250 asset management firms and by a growing number of regulatory authorities.

b) Repo markets

- The demand for repo market data has been somewhat limited in the past.⁴ However, following the default of major counterparties and concerns about the credit quality of some government bond issuers, risk awareness in the repo markets has grown and with it the demand for more timely and accurate data. Given that the repo market data available today⁵ is neither sufficiently timely nor granular to satisfy market participants' needs we have started collecting data with the aim to provide daily transparency to participants in the repo markets in the near future.

Comments

Markit is supportive of the FSB's efforts to understand and address the systemic risks that can arise from "Shadow Banking" entities and activities. For the SLR markets we generally believe that most systemic risk concerns can be best addressed by enabling regulatory authorities to monitor the relevant risk factors on a timely basis and empowering them to act, when and where needed, through the use of specific targeted measures. On this basis, the creation of additional, meaningful transparency should be preferred to intervening directly into market functioning or restricting market participants' ability to agree on appropriate contractual terms.⁶

In summary, we recommend that, for the SLR markets, the FSB (a) aim to increase transparency in a targeted, timely, and cost effective manner by making use of existing infrastructure to the extent possible while further studying the costs and benefits of the creation of Trade Repositories ("**TRs**"), (b) focus on designing a framework for the calculation of appropriate haircuts rather than setting binding numerical haircut floors across the board, and (c) provide more specific guidance on the characteristics of acceptable approaches for collateral valuation.

⁴ We currently collect repo data as part of the securities lending data ingest. The repo dataset continues to expand and we expect in the future for it to include a range of collateralized yield curves associated with different types of collateral, haircuts, and currencies. We currently provide daily total global loan balances with specific detail around the balance of cash and non-cash collateral; covering around USD 2trn of loan activity. We have started collecting daily data from the much larger repo market, which we estimate at more than USD10trn. This information can be cross-referenced with the wholesale funding items in bank balance sheets; it will give an indication of the term, haircut and types of collateral in use on any specific day.

⁵ Data such as month end repo curves, collateral types, and haircuts is currently provided, for example, by the New York Federal Reserve Bank, ICMA, Euroclear, and Clearstream.

⁶ In response to Question 2 "Do the policy recommendations in the document adequately address the financial stability risk(s) identified? Are there alternative approaches to risk mitigation (including existing regulatory, industry, or other mitigants) that the FSB should consider to address such risks in the securities lending and repo markets? If so, please describe such mitigants and explain how they address the risks. Are they likely to be adequate under situations of extreme financial stress?" and Question 3 "Please explain the feasibility of implementing the policy recommendations (or any alternative that you believe that would more adequately address any identified financial stability risks) in the jurisdiction(s) on which you would like to comment?"

1. Enhancing transparency in the SLR markets

- **Q6. Do you agree with the information items listed in Box 1 for enhancing transparency in SL and repo markets? Which of these items are already publicly available for all market participants, and from which sources? Would collecting or providing any of these information items present any significant practical problems? If so, please clarify which items, the practical problems, and possible proxies that could be collected or provided to replace such items.**
- **Q7. Do you agree TRs would likely be the most effective way to collect comprehensive market data for SL and/or repos? What is the appropriate geographical and product scope of TRs in collecting such market data?**
- **Q8. What are the issues authorities should be mindful of when undertaking feasibility studies for the establishment of TRs for repo and/or securities lending markets?**
- **Q9. Do you agree that the enhanced disclosure items listed above would be useful for market participants and authorities? Would disclosing any of the items listed above present any significant practical problems? If so, please clarify which items, the practical problems, and possible proxies that could be disclosed instead.**

The FSB identified several channels that can be used to raise transparency in the SLR markets, including the increased use of market surveys and the development of TRs to collect data. Specifically, the CP stated that there could be a “database of trade level information covering all market activity, populated either by a collection mechanism built into the post-trade clearing and settlement process or via frequent submission by market participants.”⁷

We support the FSB’s goals of increasing the scope, granularity, standardization, and timeliness of transparency in the SLR markets and believe that this should be the initial focus in order to allow regulatory authorities to gain better insights into market activity before establishing any other requirements. We believe that, to best achieve these goals, the FSB should take into account the transparency that is already provided and, to the extent possible and practicable, build on existing infrastructure when further expanding it.

TRs might not be the most effective or efficient way to increase transparency in the SLR markets. Recent evidence in other asset classes⁸ has shown that their creation accompanied by the introduction of mandatory reporting requirements for counterparties can be a huge undertaking for market participants, providers of market infrastructure, and regulatory authorities alike that can take many years, even if much of the relevant infrastructure existed already.⁹ At the same time, the increase in transparency that TRs provide to the various recipients might often only be marginal compared to what is provided today. We therefore urge the FSB to perform, by relevant asset classes and regions, thorough further analysis of the costs and benefits of establishing TRs before considering mandating their creation in the SLR markets. Following the above principles will not only help avoid duplicative efforts and the creation of unnecessary cost, but will also enable a timely implementation.

⁷ FSB Consultative Document, Box 2: Alternative ways to collect data

⁸ OTC derivatives in particular on the basis of the 2009 Pittsburgh Commitments of G20 Leaders. “Leaders’ Statement: The Pittsburgh Summit” (Sept. 24-25, 2009), available at http://www.g20.org/pub_communique.aspx.

⁹ The implementation of a legal requirement across all G20 jurisdictions for counterparties to report their transactions to TRs might, to some extent, even derail established procedures, create fragmentation and significant additional cost, and increase the risk of double reporting and errors.

Use of existing infrastructure

We support the FSB's recommendation that, to the maximum extent possible, existing initiatives should be used as the basis for increasing transparency.¹⁰ In this context, the FSB should note that several data vendors, including Markit Securities Finance, already collect most of the data points that the FSB identified as relevant:

- Markit's securities lending data services capture most of the data fields listed in the CP for around 90% of the global lender activity and the majority of broker-to-broker transactions. The relevant datasets are reported daily by the leading custodians, agent stock lenders and bank or hedge fund borrowers. While our highest frequency of publication is twice daily at the moment, we are actively discussing the capture and publication of intraday files.
- In the repo markets, we aim to capture a significant portion of the global market through a combination of triparty and bilateral transaction data.¹¹ Triparty and bilateral repo data provides security level information for repo collateral. While we generally have not collected stock lending non-cash collateral information in the past we are planning to start this collection later this year. This will be facilitated by our existing data links with the major triparty collateral providers.

The FSB should note that the benefits of leveraging existing infrastructure do not only accrue in relation to the mechanisms of collecting data but also in ensuring that it is both accurate and complete. For example, Markit's stock loan and repo data is cleaned, mapped, processed and aggregated by a large, dedicated team. We have also developed translators to allow clients to submit files in a wide range of formats and, in the process of processing the data, we routinely identify data and trade input errors. Finally, existing providers of data services in the SLR markets are also experienced in ensuring that the resulting information is provided in a format that is most useful for its recipients.

We therefore strongly encourage the FSB to further discuss the potential for using existing datasets as well as data collection and delivery mechanisms for the purpose of creating additional transparency in SLR markets. This does not preclude further analysis on the need and feasibility for the creation of TRs for these markets.

2. Minimum haircut levels and calculation methodologies

- ***Q12. What do you view as the main potential benefits, the likely impact on market activities, and possible unintended consequences of introducing a framework of numerical haircut floors on securities financing transactions where there is material procyclicality risk? Do the types of securities identified in Options 1 and 2 present a material procyclical risk?***
- ***Q13. Do you have a view as to which of the two approaches in section 3.1.3 is more effective in reducing procyclicality and in limiting the build-up of excessive leverage, while preserving liquid and well-functioning markets?***

¹⁰ "Authorities should collect more granular data on securities lending and repo exposures amongst large international financial institutions with high urgency. Such efforts should to the maximum possible extent leverage existing international initiatives such as the FSB Data Gaps Group, taking into account the enhancements suggested by the Workstream." FSB Consultative Document, Recommendation 1.

¹¹ The addition of triparty repo data which is a direct result of the Federal Reserve requirement for more transparency in this area is likely to add a further \$1.3 to \$2trn of USD and possibly EUR transactions.

- **Q15. In your view, how would the numerical haircut framework interact with model-based haircut practices? Also, how would the framework complement the minimum standards for haircut methodologies proposed in section 3.1.2?**

The FSB recommended that “minimum standards for methodologies used by market participants to calculate haircuts should be established”. It further stated that “there is a case in principle for introducing a framework of binding numerical haircut floors on securities financing transactions to limit the build-up of excessive leverage and procyclicality.”¹²

In principle, the use of numerical haircut floors for transactions in the SLR markets could be an effective means to prevent excessive collateralized leverage and, therefore, assist in controlling systemic risk. However, we believe that it will be very difficult to set any specific minimum haircut levels for categories of SLR transactions without unintentionally harming the functioning of SLR markets, e.g., by preventing transactions from occurring that provide essential financing and ensure the efficient allocation of capital. We therefore recommend for the FSB to focus its efforts in relation to haircuts on the design of an appropriate framework for their calculation and consider the use of numerical haircut floors only in specific situations as described below. Through this approach, the FSB will be able to help limit systemic risks while avoiding unintended consequences. Please find below our observations and suggestions on current market practice and appropriate principles for the calculation of haircuts.

Framework for the calculation of haircuts

We believe the FSB could design a framework for the calculation of appropriate haircuts for certain SLR transactions that would apply during normal trading conditions and in the absence of significant systemic risks. Such framework could be modeled upon the regulatory regimes for risk-based calculations in other markets, e.g., the calculation of Initial Margin for OTC derivatives transactions that remain uncleared.¹³ Once the framework was in place, the need to set any numerical haircut floors would be reduced to specific situations depending on market circumstances.¹⁴

Based on our experience in performing various risk-based calculations in the financial markets¹⁵ we have started developing a framework for the calculation of haircuts for SLR transactions. In case the FSB decided to require a risk-based calculation of haircuts, we believe it should consider the following aspects in its design: (a) relevant inputs into the calculation, (b) use of portfolio offsets, and (c) approaches to addressing the issue of pro-cyclicality.

a) Relevant inputs

- **Q11. Are the factors described in section 3.1.2 appropriate to capture all important considerations that should be taken into account in setting risk-based haircuts? Are there any other important**

¹² FSB Consultative Document, Recommendation 6.

¹³ “Potential methods for determining appropriate haircuts could include either internal or third-party quantitative model-based haircuts or scheduled-based haircuts.” BCBS IOSCO Proposal for margin requirements for uncleared swaps. 28 September 2012.

¹⁴ For example when systemic risks emerge in specific areas of the market or where it seems that the framework leads market participants to systematically under-estimate certain risks.

¹⁵ Markit Analytics provides a large number of participants in the global financial markets with state-of-the-art analytical services across asset classes, often in conjunction with our pricing and valuation services. These services support, for example, the calculation of regulatory capital requirements, including measures such as the CVA Capital VaR charge, PFE, IMM EAD, IRC and CRM. Markit Securities Finance provides reporting and consultancy for stock lending clients who need to set haircuts, value indemnities and compare stock loan returns against risk benchmarks.

considerations that should be included? How are the above considerations aligned with current market practices?

In our experience, market participants generally employ risk-adjusted approaches for haircut calculations today. The following risk factors will typically be reflected in their haircut calculations, either implicitly, based on expert judgment, or explicitly via model calibration:¹⁶

- Mark-to-market risk
 - Potential price change of loans and collateral, as well as the price and currency covariance between them, taking into account the diversification of the holdings on both sides of the trade and the time required for the liquidation of the position
- Counterparty risk
 - The risk of outright default of the counterparty as well as its linkage with the expected value of the collateral received (“wrong-way risk”)
- Prudential adjustments
 - The uncertainty of the exit price of the collateral, resulting from the volatility of its market price, its bid/offer spread, adjustments for liquidity/concentration, and other factors where relevant.¹⁷

We believe that the range of modeling techniques that is currently used for risk and capital calculation purposes might also be helpful for the calculation of haircuts for SLR transactions. Calculations would simulate above variables under various scenarios so as to calibrate the haircut associated with desired risk levels for an individual program or financial institution. The precise simulation technique used to calibrate haircuts will determine what market assumptions are embedded. For example, it may be appropriate to employ a combination of historical simulation, Monte Carlo techniques and stress testing in conjunction with risk measures such as Value at Risk and Expected Shortfall.¹⁸ Regardless of the approach taken to the haircut calculation it should be designed to capture historic stress periods, reflect as yet unrealized potential future stress periods, and avoid potential pro-cyclical effects triggered by the re-calibration of haircuts during a period of stress.¹⁹ It might also be useful to combine any framework for the calculation of haircuts with heuristic rules, e.g. the use of minimum haircut levels as backstop, in order to ensure that these models are deployed with common sense.

b) The use of portfolio offsets

- ***Q18. In your view, how should the framework be applied to transactions for which margins are set at the portfolio basis rather than an individual security basis?***

Many participants in the SLR markets actively seek to reduce their overall risk exposure by diversifying their portfolios, for example in terms of underlying exposures and counterparties. We believe that the FSB,

¹⁶ Or some combination of the two approaches.

¹⁷ The EBA proposed that in order to produce prudent value firms will need to identify and quantify a number of Additional Valuation Adjustments on a position level including concentration and liquidity, price uncertainty and bid-ask spreads. EBA Discussion Paper Relating to Draft Regulatory Technical Standards on prudent valuation under Article 100 of the draft Capital Requirements Regulation (CRR). 13 November 2012.

¹⁸ Some of our clients will use a non-parametric Monte Carlo simulation to measure VaR and Expected Shortfall given its desirable properties in capturing key market behaviors and properties.

¹⁹ The FSB should note that several central banks and academics, including the Bank of England, the ECB and the MIT based Systemic Risk Consortium, are currently actively researching contagion and linkage frameworks that can be used for applied systemic risk analysis.

consistent with the regulatory approach in other asset classes,²⁰ should be supportive of such risk-reducing behavior by allowing counterparties to calculate haircuts on a portfolio basis provided that the framework used for the calculation of assumed diversification benefits can accommodate adjustments for periods of elevated systemic risk.

However, with any minimum haircuts being set on a transactional basis, they would conflict with such portfolio-based calculation approach. In case the FSB decided to require minimum haircut levels, it could address this conflict by use of a two-pronged approach, similar to other asset classes, where counterparties could calculate haircuts based either by using an approved risk-based model (that allows for portfolio offsets) or a grid (that is transaction-based).²¹

c) Addressing concerns about pro-cyclicality

We recognize that regulatory authorities are concerned about the potential pro-cyclical effects of the use of haircuts (specifically, the fact that they might be dynamically adjusted in response to market moves). However, we believe that this concern can be mitigated in an effective manner by requiring, as part of the design of the calculation framework, the use of data histories that are sufficiently long.²² We note that the FSB already considers requiring counterparties to base their haircut calculations on data histories that include at least one stress period.²³ We believe that such kind of requirement should adequately address regulatory concerns about the pro-cyclicality of haircuts.

3. Standards for collateral valuation

- ***Q21. Do you agree with the proposed minimum standards for valuation and management of collaterals by SL and repo market participants? Are there any additional recommendations the FSB should consider?***

The FSB recommended that regulatory authorities should adopt “minimum regulatory standards for collateral valuation and management for all securities lending and repo market participants.” Such standards should require collateral and lent securities to be marked-to-market at least daily and variation margin to be collected at least daily where amounts exceed a minimum acceptable threshold.²⁴

Based on our experience in the SLR markets we believe that such principles for the frequency of valuation and VM collection respectively are generally sensible and broadly in line with current market practice. However, we believe that market participants might benefit from further, more specific guidance on how valuations should be

²⁰ In the BCBS IOSCO Proposal for margin requirements for uncleared swaps, BCBS IOSCO states that the Quantitative Portfolio Margin model (QPMM) allows for portfolio offsets within the 4 stated asset classes. 28 Sept. 2012.

²¹ Alternatively, this issue could be addressed by either not prescribing any minimum haircut or by capping the permitted offset for portfolio effects in relation to the minimum haircut on an instruments basis. For example, the CFTC proposal on margin requirements for uncleared swaps addresses portfolio offsets for swaps with correlated risk profiles by stating that “No reduction may exceed 50% of the amount that would be required for the swap in the absence of a reduction.” “Margin Requirements for Uncleared Swaps for Swap Dealers and Major Swap Participants” 76 Fed. Reg. 23738. April 28, 2011.

²² This seems consistent with developments in the OTC derivatives markets where some CCPs are in the process of moving to 10 year data histories as the basis for their Initial Margin calculations.

²³ 3.1.2 Minimum standards for methodologies used by market participants to calculate haircuts. FSB Consultative Document.

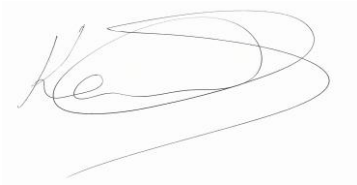
²⁴ 3.4 Minimum regulatory standards for collateral valuation and management. FSB Consultative Document.

performed in order to be acceptable.²⁵ Additionally, given the prevalence of the use of model-based valuations for many cash instruments, market participants might benefit from receiving some further guidance on the use of marking-to-model.²⁶

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Markit appreciates the opportunity to comment on the FSB's Consultation Document on *Strengthening Oversight and Regulation of Shadow Banking*. We would be happy to elaborate or further discuss any of the points addressed above. In the event you may have any questions, please do not hesitate to contact the undersigned or Marcus Schüler at marcus.schueler@markit.com.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Kevin Gould', is written over a light gray rectangular background.

Kevin Gould
President
Markit

²⁵ For example, under AIFMD, entities are to put in place appropriate and consistent procedures for the proper and independent valuation of the assets they manage, including the validation of valuation models, adjustments for liquidity and size of positions, and the calculation of valuation sensitivities under stress conditions while also requiring corroboration of data from various sources. See Directive 2011/61/EU of the European Parliament and of the Council of 8 June 2011 on Alternative Investment Fund Managers and amending Directives 2003/41/EC and 2009/65/EC and Regulations (EC) No 1060/2009 and (EU) No 1095/2010.

²⁶ For example, under EMIR, entities that mark-to-model shall, to the maximum extent possible, incorporate marking-to-market information and observable market data. See ESMA Final Report: Draft Technical standards under the Regulation of the European Parliament on OTC Derivatives, CCPs and Trade Repositories (27 September 2012).