

01 June 2012

European Commission
DG MARKET Unit 02
Rue de Spa
2 1049 Brussels
Belgium

Submitted to markt-consultation-shadow-banking@ec.europa.eu

Re: **Green Paper: Shadow Banking**

Dear Sir/Madam:

Markit¹ is pleased to submit the following comments to the European Commission (the "**Commission**") in response to its Green Paper *Shadow Banking* (the "**Green Paper**").

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 operational efficiency in financial markets. We are also actively engaged in creating transparency in the global securities lending and repo markets through Markit Securities Finance services:

- 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.² 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.
- As repo transactions tend to have short maturities and are collateralized by "risk-free" government bonds demand for repo market data was limited in the past.³ However, following the default of major counterparties and rising concerns about the credit quality of some government bond issuers,

¹ Markit is a financial information services company with over 2,400 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 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.

³ We currently collect repo data as part of the securities lending data ingest. The repo dataset continues to expand and we expect it to include the range of collateralized yield curves associated with different types of collateral, haircuts, and currencies in the future. 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.

awareness of risks in the repo markets has grown and created demand for more timely and accurate data. While some repo market data is provided today⁴ we do not believe that it is sufficiently timely or granular to satisfy market participants' needs. We have therefore started collecting data to provide daily transparency to participants in the repo markets.⁵

Comments

Markit is supportive of the efforts of the Commission and other authorities to identify, monitor, and reduce systemic risks that might arise on the back of shadow banking activities. We believe that many of the systemic risk concerns related to the securities lending and repo markets can be best addressed by enabling regulatory authorities to monitor the relevant risk factors on a timely and accurate basis and by empowering them to act when and where needed through the use of specific, targeted measures. When discussing how more transparency to regulators in the securities lending and repo markets should be created the Commission should take into account transparency that is already provided in these markets and build on existing infrastructure. Following these principles will not only help avoiding duplication and the creation of unnecessary cost but it will also enable a timely implementation.

That said, please find below our comments in relation to some of the specific questions asked in the Green Paper.

Question a) Do you agree with the proposed definition of shadow banking?

We generally agree with the proposed definition of shadow banking and the classification of "Securities lending and repo" as shadow banking activities. However, while the Commission includes using "direct or indirect financial leverage⁶ in pillar one of its definition, we believe it is debatable how much leverage is actually created in the European securities lending markets. The Commission may therefore want to revise its definition in recognition that there is less leverage in the European markets than in the markets globally.

Further, we believe the Commission might benefit from our views on the size of these activities as part of the estimated EUR 46trn total size of the shadow banking system in 2010.⁷ As mentioned above, we currently provide daily total global loan balances with specific detail around the balance of cash and non-cash collateral. The current level of loan activity that we capture is USD 1.8trn, and this number has ranged from USD 1.6trn to USD 2.1trn over the last three years. We believe that this number represents around 90% of the global securities lending loan volume. We have also started collecting daily data from the much larger repo market, which we estimate at more than USD10trn.

Question c) Do you agree that shadow banking can contribute positively to the financial system? Are there other beneficial aspects from these activities that should be retained and promoted in the future?

As has been highlighted in several speeches at the Commission's Shadow Banking conference,⁸ the securities lending and repo markets perform an important role in the functioning of the financial markets, as they provide liquidity both on a micro and on a macro level.

In this context, one should keep in mind that the core function of securities lending is to allow market participants to avoid settlement failure by borrowing securities (on a temporary basis) that they cannot buy

⁴ 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.

⁵ We also provide a range of liquidity measurement services that help addressing the cash market issues.

⁶ European Commission Green Paper: Shadow Banking, Section 3.

⁷ European Commission Green Paper: Shadow Banking, Section 3.

⁸ "Shadow banking activities perform basic functions of the financial system." Speech by Victor Constâncio, Vice-President of the ECB, Towards Better Regulation of the Shadow Banking System, European Commission Conference, Brussels, 27 April 2012.

outright. Experience has shown that market making activities and the provision of liquidity for bonds, equities and ETFs is facilitated through the existence of a well-functioning securities lending market. That said we expect the importance of these markets to grow further over the coming years given the enormous needs for collateral that will be created by requirements to centrally clear all standardized OTC derivatives on the back of the G20 Pittsburgh commitments. This effect will be further boosted given expected requirements to post initial margin for all uncleared OTC derivatives.

On that basis, there will be a large additional demand for liquid collateral, which some studies estimate to be at around USD 1.5trn.⁹ Access to liquid collateral, and the ability to perform services such as collateral transformation, will therefore be hugely important over the coming years. We believe that not only many cash markets but also the OTC derivatives markets will only be able to continue to function properly as long as the securities lending and repo markets are there to support them with appropriate collateral. We therefore strongly advise the Commission to design any measures in relation to the securities lending and repo markets as such that they do not harm their proper functioning.

Question d) Do you agree with the description of channels through which shadow banking activities are creating new risks or transferring them to other parts of the financial system?

We generally agree with the Commission's description of the channels through which shadow banking activities can inject risks into the financial system. We believe that it is appropriate that systemic risk regulators monitor deposit-like funding structures that might create hidden leverage and that can be exposed to similar financial risks as banks.

There is little doubt that secured lending is generally safer than unsecured lending. However, like in any trading activity, some 2nd order risks, such as "crowding", can develop systemic importance, particularly for the less liquid asset types.¹⁰ Specifically, systemic risks can arise if a large number of loans are secured by the same type of collateral. This might lead to situations where collateral holders find themselves competing to liquidate the same collateral during a wave of deleveraging or as result of a default, and it can cause the price of this collateral to fall before it can be sold, a classic "run" situation.

A regulatory requirement that specified "acceptable" collateral for securities lending or imposed limits of use on individual participants could potentially limit risk and achieve some diversification for individual participants. However, we are concerned that such requirements would risk harming market functioning and, ultimately, are also unlikely to prevent systemic crowding. Neither do we believe that it would be practical for the Commission to superimpose collateral haircuts for specific asset classes against collateral. As risk in the market evolves and can change quickly, it is important for market participants to be able to set their own haircuts and have the ability to adjust to changes in the market. Further, any rigid rules such as caps on leverage or minimum haircuts that would indiscriminately curtail activity and risk harming market functioning should be avoided. However, we believe that the Commission, to allow regulatory authorities to monitor and control the systemic risk created by potential fire sales, should require the provision of increased transparency to regulators (on a granular level) about collateral holdings. Such transparency, which could also be provided to market participants on an aggregate level, would help identifying any potential crowding, highlight it to regulators and market participants, and trigger any necessary adjustments.

While some surveys¹¹ provide regular snapshots of repo collateral today, they do not seem sufficiently timely given that systemic risk can evolve and change quickly, particularly during a crisis. We believe that any systemic risk monitoring framework for repo collateral would provide both high level monitoring on a weekly or monthly basis, and allow detailed assessments of collateral crowding at higher frequencies when necessary. The assessment should include overall collateral use¹² and offer regulatory authorities the ability

⁹ "Initial Margin for OTC Derivatives: The Burden of Opportunity Costs," TABB Group Research. August 2011.

¹⁰ This could be observed, for example, for certain categories of asset-backed securities.

¹¹ These surveys are conducted, for example by ICMA or FICC, on a monthly or quarterly basis.

¹² For example by asset class.

to perform a more detailed drilldown into individual asset classes, sub asset classes, or individual securities.

Question g) Do you agree with the suggestions regarding identification and monitoring of the relevant entities and their activities? Do you think that the EU needs permanent processes for the collection and exchange of information on identification and supervisory practices between all EU supervisors, the Commission, the ECB and other central banks? Question i) Do you agree with the general principles for regulatory responses set out above?

We support the general approach proposed by the Commission in its Green Paper. We believe that it will be of crucial importance for systemic risk regulators to be in a position to "identify and monitor" risks in the securities lending and repo markets, we agree that there is a "need to fill the current data gaps on the interconnectedness", and that any measures should be "targeted" and "proportionate" where excessive risks have been identified. Specifically, we believe that transparency in the area of shadow banking should focus on quantifying and monitoring the level of interconnectedness in the system as well as the degree of "crowding" in terms of risk management approaches and we provide the following advice in these areas.

- Interconnectedness

When trying to determine the level of interconnectedness in financial markets, and hence the vulnerability to a chain of linked defaults, exposure in the securities lending and repo markets has to be seen in the overall context of counterparty exposures in their entirety. Specifically, we believe that one can only understand the impact of a default by any one counterparty once a connectivity matrix for the entire system has been created.

To create measures of interconnectedness regulatory authorities will need knowledge of the current exposure of each participant to every other participant across asset classes and products. In this context, the Commission should note that Markit has provided its anonymized data of the securities lending markets to support some academic work¹³ that aims at quantifying the level of connectedness of parts of the financial system. We believe that a similar analysis of repo market data could be helpful.

In this context, the Commission will need to address the question how one can ensure that regulatory authorities get access to the "full picture", including the ability to aggregate counterparty exposures across asset classes. We believe that, as the creation of Trade Repositories ("**TRs**") is well underway for OTC derivatives, it might be a preferable approach to also create similar TRs in other asset classes such as securities lending and repo. In the meantime one could rely on the provision of the relevant position data across asset classes from individual firms and/or existing services.

- Crowding

The Commission should also consider that procyclical behaviour is often caused by the reliance of many market participants on similar or even identical market risk models and agency credit ratings¹⁴ and should hence try to gain more transparency of these aspects. On the basis of the available information, regulatory authorities should focus their efforts on monitoring whether the overall system is sufficiently diversified without excessive dependence on any one model, rating agency, asset class, or counterpart, and act where they have identified excessive risks. In addition to targeted, meaningful transparency the use of exposure rules might be appropriate as long as they are simple and easy to implement. We believe that such

¹³ Conducted at MIT by Andrew Lo and Roger Stein building on previous academic work by the same authors. For example, "Econometric Measures of Systemic Risk in the Finance and Insurance Sectors" by Billio, Getmansky, Lo and Pelizzon. (August 2011).

¹⁴ The recent financial crisis demonstrated that excessive reliance on VaR modelling can lead to excessive leverage; for the specific reason that VaR models include estimates of correlation to allow for risk offsets, while correlations in practice are often unstable.

approach is preferable to establishing rigid rules such as caps on leverage or minimum haircuts that would indiscriminately curtail activity and risk harming market functioning.¹⁵

Question I) Do you agree with the analysis of the issues currently covered by the five key areas where the Commission is further investigating options?

We agree with the key areas of prudent collateral management, reinvestment practices of cash received against collateralized securities, re-use of collateral, ways to improve transparency and the role of infrastructure that the Green Paper identifies in the area of securities lending and repurchase agreements. We believe that the Commission should consider the following approaches to address concerns in these areas:

- Prudent collateral management

Standard collateral tends to be both liquid and relatively easy to value. However, the valuation of less liquid collateral might sometimes be inaccurate and/or only performed infrequently. Systemic risk concerns might arise in this context where the reinvestment cash of market participants is concentrated in such hard-to-value collateral.¹⁶

We believe that, to address regulatory concerns in relation to collateral valuation, the Commission should consider establishing requirements for collateral valuations to be sufficiently frequent, accurate and independent, which would bring standards in these markets in line with valuation requirements that have been established for other market participants and markets.¹⁷ The creation of additional transparency might also be useful in relation to liquidity and up to date pricing, with an indication of the risk of the valuation for assets that are less actively traded.

- Reinvestment practices

While most US domiciled beneficial owners are legally required to accept cash as collateral, which can lead to a number of unintended consequences,¹⁸ some recent high profile losses¹⁹ have highlighted the risks that can arise in relation to cash reinvestment. However, one should note that in Europe most repo transactions take place against non-cash collateral and funds that take cash tend to be very cautious and mindful of avoiding cash reinvestment risk.

However, the creation of additional transparency might be useful to allow regulatory authorities to gain a better understanding of reinvestment practices. Relevant indicators could include, for example, the scale of the participant's reinvestment activity,²⁰ the type of assets held by the reinvestment account,²¹ and the legal

¹⁵ We believe it would also be preferable to the use of CCPs as central clearing would impose costs for the frequent situations where counterparties are well known to each other. It would also lead to further risk concentration in a small number of entities.

¹⁶ It is worth noting that cash reinvestment generally tends to be conservative. Most market participants are only investing in liquid instruments and the amount of hard-to-value collateral being accepted is generally small.

¹⁷ This mark-to-market is often performed by tri-party collateral agents today, who also ensure that it is the correct collateral clients want to receive.

¹⁸ For example, a) increased shorting activity in equities resulted in large supplies of cash being supplied as collateral; new yield producing products – including asset backed bonds – were launched partly in response to this demand. Recent investment policies have been much more conservative, b) some agents encouraged lending as a way of increasing their cash reserves; in some cases investing the cash in the assets of the borrowing counterparty, c) some money market funds were advertised as '2(a)7 – like' referring to the stringent money market fund rules; in practice some of these quasi-2(a)7 funds did not follow the same investment guidelines, d) some pooled money market funds did not function on the same basis as mutual funds (with equal treatment for all investors) and instead operated variants of FIFO, LIFO, or used other criteria to determine client redemption priorities, e) cash reinvestment funds are not uniform in their use of amortization vs mark-to-market accounting; in some cases, this favours positive carry strategies (borrowing short and lending long) or use of Floating Rate Notes that have low duration mismatch but high maturity mismatch and are subject to credit spread changes.

¹⁹ See Williamson, Christine. "Northern Trust sued over cash collateral losses." Pensions and Investments 31 March 2009 www.pionline.com/article/20090331/REG/903319958.

²⁰ For example, for 401K plan holders, it was not previously clear that their funds were lending stock or that cash collateral was being reinvested in vehicles that could lock cash up for years.

status of the fund.²² As portfolio structures tend to change only slowly we believe that monthly transparency to regulators in relation to these parameters should suffice.²³

- Collateral re-use

The Lehman default provided evidence of the risks that can arise on the back of collateral re-use.²⁴ It also highlighted that, while repo collateral is usually subject to a transfer of title, stock loan collateral is not.²⁵ This is a difference that many market participants were not aware of at the time.

In theory one could address the associated risk by aligning the nature of the contracts that are used for repo transactions with those that are used for securities lending. However, we strongly advise the Commission and the industry to further study the feasibility of such alignment as it might lead to a temporary disruption to the repo market and create significant legal cost. Such burden would need to be balanced against the increased confidence and corresponding increase in the depth and range of availability of collateral it might create.

That said we believe that any efforts to reduce the risks that are created by collateral re-use should focus on the legal status of repo collateral compared to securities lending. Additional transparency might also be useful, for example if it provided a collateral audit trail.²⁶

- Improving transparency

As stated before, we generally believe that the creation of additional, meaningful transparency is preferable to intervening directly into market functioning or restricting the ability of market participants to agree on appropriate contractual terms. Specifically, transparency on the level of interconnectedness in the system as well as potential “crowding” in terms of risk management approaches could help alleviating concerns about procyclicality. At the same time, it would allow market participants to choose a haircut level that meets their risk control criteria and balances the other transaction characteristics, such as rates or terms.

Question m) Are there additional issues that should be covered? If so, which ones?

We believe that in addition to the above issues the Commission might also want to consider risks created by the provision of indemnities. Indemnities are offered by agent lenders on the ‘intrinsic’ securities lending – that is, the actual loans of securities. Such indemnities might raise regulatory concerns in situations where the party offering them may effectively over-commit its balance sheet and, in the event of a collateral fire sale, may find that the total mark-to-market losses on all client programs exceed the reserve that it created for this activity.²⁷

²¹ For example, one could impose limits on the percentage of asset-backed securities, the distribution of credit ratings, the duration, maturity, or number of assets.

²² Pooled or segregated; 2(a)7 compliance; indemnity status; accounting policy (mark-to-market vs amortized)

²³ Some of this information would also be useful to market participants on an aggregate level, for example the frequency distribution of the funds assets in terms of duration, maturity, and credit, or the largest exposures to individual issuers.

²⁴ That said, it is worth noting that the large majority of custodians that had lent to Lehman were able to sell their collateral and buy back their loans to Lehman and ended up flat or with a surplus on the basis of appropriate haircuts that they had put in place.

²⁵ In the United States, where most stock loans are collateralized by cash, any subsequent reinvestment risk is that of the asset owner who delegates cash management to its custodian. In contrast, repo collateral can be transferred multiple times and may be unrecoverable in the event of a default.

²⁶ This can be achieved for equities by registering collateral transfers in the same way as other title changes; depositories can track collateral reassignments. There are challenges with the bearer nature of some fixed income securities that may be accepted as collateral but not tracked in the FICC, for example. Effective collateral tracking will require the collateral title to be identified. We believe that a collateral register within a depository would, in theory, address this issue.

²⁷ Such over-indemnification reduces the true value of the indemnity considerably; the alternative for clients is to purchase 3rd party insurance. Further, the terms of indemnities are variable – they may offer full stock replacement or cash equivalent - which will leave the client to actually transact in a disorderly market to buy back their stock.

We believe that, to address the systemic risk that might be created by such indemnities, it could be useful for lending agents to provide explicit descriptions of the indemnity types on offer²⁸ for specific lending programs; in addition to measures already under discussion such as setting limits or imposing capital charges.²⁹ Further, the creation of additional transparency about indemnity terms and reinsurance costs would allow beneficial owners to make better-informed lending decisions and would help regulatory authorities to identify and monitor evolving risks.³⁰ We believe that such transparency would only need to be infrequent and program-specific and should identify the type of indemnity on offer from agents at point of contract.

Questions k) and n) What are your views on the current measures already taken at the EU level to deal with shadow banking issues? What modifications to the current EU regulatory framework, if any, would be necessary properly to address the risks and issues outlined above?

We agree with the Commission that regulatory authorities would benefit from additional transparency in the securities lending and repo markets. That said we believe that any need for transparency in these markets would best be addressed based on the following principles:

1. Instead of simply demanding “more transparency” only to find out later how challenging it is to deal with a wealth of granular transaction data, it would be most effective if regulatory authorities focused on receiving those specific pieces of information that will enable them to identify and monitor evolving systemic risks. These indicators could be, for example:
 - The overall size of the repo market,
 - Average repo rates, maturities and haircuts,
 - Absolute borrow rates,
 - Cross sectional standard deviation of borrow rates across different government bond markets,³¹ and
 - The crowdedness of asset holdings across entities.
2. One needs to distinguish between transparency to regulators and transparency to the market. We believe that regulatory authorities need to be provided with the relevant data in both sufficiently timely and granular fashion. In contrast, market participants’ appetite for real-time data has generally been limited³² and excessive public transparency could severely harm the functioning of these markets.³³ Any additional transparency to market participants and the public should therefore be provided only on a regular basis, e.g. weekly or monthly, and on an aggregate level. Such approach to addressing the specific transparency needs of the various stakeholders seems consistent with the one that is being established in the OTC derivatives markets.³⁴

²⁸ E.g. full replacement, cash equivalent, or collateral delivery.

²⁹ See Baker, Sophie. “Stock on loan: At the Crossroads.” Financial News 27 Feb. 2012, www.efinancialnews.com/story/2012-02-27/securities-lending-regulation

³⁰ The Commission should keep in mind though that such requirement would change the economics of the industry. For example, some agents with weaker balance sheets would have to curtail their lending activities that had become unprofitable and volumes would reduce; but the added security of properly priced indemnities might encourage other lenders.

³¹ In late 2011, for example, borrow rates on some government bonds were very high while the cost of borrowing government bonds of some issuers was negative. This divergence disappeared as soon as the second LTRO came into force.

³² Most of our clients rely on less frequent, summarized data to inform lending activities and monitor short selling activity.

³³ Experience has shown that the ability of market makers to provide liquidity in more specialized and less liquid markets can be harmed by real-time transparency. This is because it can prevent them from exiting a position that they entered into to facilitate a client transaction.

³⁴ For example, under the CFTC Final Rule Part 45, for each swap creation data and continuation data have to be reported to the swap data repository. The timing of the reporting, in addition to the party responsible for reporting, is based on execution, clearing, asset class and nature of the counterparties. (Part 45 Swap Data Recordkeeping and Reporting Requirements 77 Fed. Reg. 2136 (Jan.13, 2012).) Also, according to the CPSS IOSCO Principles for financial market infrastructures trade repositories are required to disclose only aggregate data on open positions and transaction volumes and values. (CPSS IOSCO: Principles for financial market infrastructure (April 2012))

3. Any resulting information should be sufficiently refined and presented in a meaningful way in order to be useful to its recipients and justify the cost of creating it.

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We appreciate the opportunity to comment on the European Commission's Green Paper on *Shadow Banking*, and we thank the Commission for considering our comments. 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", written over a light gray rectangular background.

Kevin Gould
President
Markit North America, Inc.