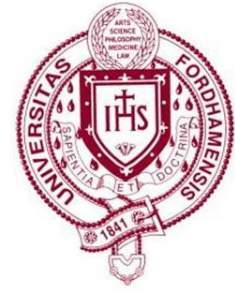


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April 15, 2015

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

Re: Comment on consultative document on “Standards and Processes for Global Securities Financing Data Collection and Aggregation” (Dated: 13 November 2014)

Introduction

The Regulatory Outreach for Student Education (ROSE) Program places students in the middle of the regulatory rule-writing process, asking the participants to write a Response Letter to a Consultative Document in the financial regulatory space. Working with the Center for the Study of Financial Market Evolution (CSFME)¹, this year, we tasked five academic research teams with examining the FSB Data Expert Group’s *Consultative Document on Standards and Processes for Global Securities Financing Data Collection and Aggregation*.² Each team, representing a different school within Fordham University, approached the task from a unique philosophical stance and in accordance with its disciplinary skillset.

The results of those efforts are consolidated within this document, which includes a Response Letter, Supporting Materials (Appendix A) and Task Force Report (Appendix B). We thank you for the opportunity to provide the results of this program and we welcome inquiries and suggestions in order to either explicate our proposals or to refine them in the future.

Best personal regards,

A handwritten signature in black ink, appearing to read 'B - Cole', is positioned below the text 'Best personal regards,'.

Benjamin M. Cole, Ph.D.
Faculty Director
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¹ Center for the Study of Financial Market Evolution (2015) “Additional data for financial stability purposes,” filed February 12: <http://www.financialstabilityboard.org/wp-content/uploads/CSFME-on-1411DEG.pdf>

² Financial Stability Board (2014) “Standards and Processes for Global Securities Financing Data Collection and Aggregation.” *Financial Stability Board: International Organization of Securities Commissions*

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April 15, 2015

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

Re: Comment on consultative document on “Standards and Processes for Global Securities Financing Data Collection and Aggregation” (Dated: 13 November 2014)

Introduction

We are candidates for the Bachelor of the Arts in Economics at Fordham University where we are participating in the *Regulatory Outreach Student Education Program* (ROSE) in association with the *Center for the Study of Financial Market Evolution* (CSFME).¹ We have been selected as representatives of Fordham College at Lincoln Center and as Economics students to comment on the consultative document proposed by the Financial Stability Board, which aims to address the standards and processes for global securities financing data collection and aggregation.²

We recognize and understand the FSB’s goal to be concerned with the need for consistent collection and aggregation of data at both the national and international level to ensure that supervisors can recognize and address the build-up of risks in the economy, but we would like to present our concerns regarding such homogenous standards of data aggregation in a heterogeneous global market environment composed of many unique markets and entities. We believe that the FSB is underestimating the potential costs and implications of the proposed data aggregation on the global industry and the global economy.

Situation

The events of the financial crisis beginning in 2007 brought to light the “vulnerabilities of financial firms whose business models depended too heavily on uninterrupted access to secured financing markets.”³ In the years following the crisis, improvements have been made towards increased risk management but gaps in information persist, making it difficult to evaluate weaknesses that could raise awareness to instability in the financial system and allow authorities to address it in a timely and efficient manner. The persistent weaknesses present in “informative and responsive risk measurements and management reporting” are of particular concern in order to ensure appropriate data collection.⁴ The measures for managing financial stability risks

¹ Center for the Study of Financial Market Evolution (2015) “The CSFME’s Regulator Outreach Programs” Accessed March 24, 2015: <http://csfme.org/Outreach.aspx>

² Financial Stability Board (2014) “Standards and Processes for Global Securities Financing Data Collection and Aggregation.” *Financial Stability Board: International Organization of Securities Commissions*

³ Senior Supervisors Group (2009) “Risk Management Lessons Learned from the Global Banking Crisis of 2008,” p.2. Accessed March 24, 2015: http://www.financialstabilityboard.org/wp-content/uploads/r_0910a.pdf?page_moved=1

⁴ Ibid

associated with securities lending and repos are addressed by the FSB in the 2014 consultative document.⁵

Scope of Commentary

Data aggregation for the purpose of regulating financial markets is important to the monitoring of financial activities that may lead to systemic failure in the economy. Yet given the heterogeneity of global markets, in particular in their ability to carry out complex and costly data aggregation procedures, it is not feasible to expect less developed markets and institutions lacking the technological infrastructure and capital to satisfy a homogeneous set of definitions and granularities necessary for high quality global data aggregation. We do not intend to undermine the importance of financial oversight, rather, we aim to challenge the FSB's suggestion of a homogeneous set of definitions and granularities that the FSB believes is necessary for global aggregation. In contrast, we believe that this homogeneity would be too dismissive of the heterogeneous nature of the global markets, creating practical and logistical difficulties, in particular in terms of infrastructure and the costs associated with it. We fear that the implications of these costs on the economy would have two dimensions worth addressing: (i) the costs would be burdensome to certain firms which (ii) would restructure the industry in terms of consolidation. Therefore, we wish to ask the FSB to elaborate on how it plans to address the dangers of this two dimensional impact of its proposed standards on the economy before finalizing its proposal.

Summary of Comments

We believe that the FSB has overlooked and should address the following factors and their implications:

- I. The FSB should address the implications of the high costs of data collection and aggregation for smaller entities as well as for the economy as a whole and how it plans on ensuring that these costs are consistent with the assumed benefits.
 - A. According to cost benefit analysis, increased data complexity does not necessarily lead to increased benefits.*
 - B. More complex regulation causes large financial institutions to disproportionately benefit from increased levels of regulation while smaller financial institutions fall behind due to increased costs.*
 - C. The burdens of high data reporting costs are so large and disproportionate for certain smaller entities which have negative implications on the economy as a whole that it could lead to a restructuring of the financial industry through consolidation.**
- II. The data requested by the FSB will present technical and financial difficulties for the reporting entities in emerging markets and developing economies.
 - A. Reporting entities may lack the necessary human capital for data extraction and reporting.*
 - B. The high quantity and quality of required data elements will be too costly for reporting entities in emerging markets.**
- III. The definitions and granularities proposed by the FSB are too homogenous in nature and therefore are unfeasible in a globally heterogeneous context.*

⁵ The consultative document aims to set clear guidelines for data aggregation at the national, regional, and global levels so that meaningful data may be collected using consistent definitions and standard for granularity.

- A. *Negative implications of applying homogenous standards to heterogeneous entities can be exemplified by the current situation in Greece within the European Union.*
 - B. *While beneficial for developed markets and large entities (i.e. “too-big-to-fail” institutions), complex data reporting has been found to be burdensome to smaller entities and less developed markets, hurting their competitiveness.*
- IV. *Heterogeneity in markets promotes competition and growth and should be recognized and acknowledged in the formulation of data reporting requirements.*
- A. *There has been a shift towards a two-tier system for data reporting, which has the capacity to allow for heterogeneity in markets.*
 - B. *Less complex data reporting requirements are cost saving and more beneficial to entities with less access to capital and resources and allow for economic growth.*

Detailed Comments

- I. The FSB should address the implications of high costs of data collection and aggregation for smaller entities as well as for the economy as a whole and how it plans on ensuring that these costs are consistent with the assumed benefits.**
- A. According to cost benefit analysis, increased data complexity does not necessarily lead to increased benefits.**

We believe that the FSB should address how it will ensure that the costs for smaller and less developed entities associated with enforcing a homogenous global standard for data collection and aggregation would be “justified by the benefits of the new information.”⁶

We would like to draw attention to an analysis performed by The Bank of England that shows the relationship between complexity in regulation and higher benefits. This analysis has shown that there is an inverse relationship between marginal costs and benefits as well as total costs and total benefits.⁷ The Cost-Benefit Analysis of data collection performed by The Bank of England found that “as data quality rises, improvements in data quality become progressively more costly to achieve and they deliver fewer incremental results.”⁸

This suggests that data collection has two extremes:

1. “Low marginal costs for producing data of moderate quality,” which leads to relatively high benefits, and
2. “Data [of] exceptionally high quality” whose “increases in quality are likely to be particularly costly,” thus rendering limited additional gains and becoming burdensome to the reporter.⁹

⁶ Bank of England (2006) “Cost Benefit Analysis of Monetary and Financial Statistics,” p.12.

⁷ Please refer to Chart 6 in the Appendix.

⁸ Bank of England (2006) “Cost Benefit Analysis of Monetary and Financial Statistics,” p.10.

⁹ Ibid

Data collection requiring a set of homogenous standards to be met would result in disproportionate costs for under equipped parties with fewer resources to match the costs of complex data reporting and result in limited gains in security for the financial markets as a whole.¹⁰

B. More complex regulation causes large financial institutions to disproportionately benefit from increased levels of regulation while smaller financial institutions fall behind due to increased costs.

We find the responses of smaller entities to increasing complexity of regulation to be troublesome as the impact falls hardest on community banks, which has made them less competitive and more likely to be bought up by larger players, ultimately restructuring the financial industry.

Berger, Dick, Goldberg, and White argue that “large financial institutions disproportionately enjoy the efficiency gains from technological progress...because the benefits of the new technology are more likely to outweigh the upfront fixed investment costs for large firms.”¹¹ We would like to apply this understanding to how we perceive various entities’ capacity to carry out the reporting procedures necessary to satisfy the proposed globally accepted definitions and granularities. We find it of utmost importance to stress the gaps in capital particularly pertaining to infrastructure¹² that less developed nations and smaller financial institutions would face if expected to satisfy these demands. Such gaps are “resource- and time-intensive” and would force firms to make a tradeoff between revenue generating activities and reporting activities, a tradeoff that is even more pronounced for smaller and less developed entities.¹³

We would also like to highlight some of the burdens that smaller parties—particularly in less developed markets—would face if required to use a globally homogenous set of definitions. The financial costs of collecting high quality data much outweigh the benefits for smaller entities. In a meeting with the US House of Representative in December 2014, the Committee for Small Business addressed the burdens that smaller entities face under more stringent regulation outlines, concluding that lack of resources available to smaller institutions make them less

¹⁰ Please refer to Chart 7 in the Appendix in which The Bank of England depicts the inverse relationship between marginal costs and marginal benefits as well as total costs and total benefits.

¹¹ By the Chairperson of the Financial Stability Oversight Council (2011) “Study of the Effects of Size and Complexity of Financial Institutions on Capital Market Efficiency and Economic Growth,” p.10. Accessed March 24, 2015: <http://www.treasury.gov/initiatives/fsoc/studies-reports/Documents/Study%20of%20the%20Effects%20of%20Size%20and%20Complexity%20of%20Financial%20Institutions%20on%20Capital%20Market%20Efficiency%20and%20Economic%20Growth.pdf>

¹² According to the SSG, “two factors in particular drive the gaps between current practices and those advocated by industry groups and supervisors. First, many firms’ information technology (IT) infrastructure is inadequate to monitor risk exposures accurately, a problem long in the making that will also take time to remedy. Second, firms need to reexamine the priority they have traditionally given to revenue-generating businesses over reporting and control functions.” SSG (2009). “Risk Management Lessons Learned from the Global Banking Crisis of 2008,” p.4. Accessed March 24, 2015: http://www.financialstabilityboard.org/wp-content/uploads/r_0910a.pdf?page_moved=1

¹³ As noted by the SSG, “firms are constrained in their ability to effectively aggregate and monitor exposures across counterparties, businesses, risk strands, and other dimensions because of ineffective information technology and supporting infrastructure.” SSG (2009) “Risk Management Lessons Learned from the Global Banking Crisis of 2008,” pp.4-25.

flexible to increasing regulation, in extreme circumstances even forcing some firms to “close doors or merge with others.”¹⁴ We see this argument as applicable to the concerns we have with the FSB’s desire to integrate data collection globally, irrespective of the varying capacities individual entities may have. Moreover, we recognize the detrimental effects that increasing levels of regulation have had on smaller entities, mainly stunting their growth and pushing them out of the market. The Committee for Small Business also addressed the issue that “while credit unions did not cause the financial crisis [and actually helped blunt the crisis by continuing to make loans], they are still firmly within the regulatory reach of the Dodd-Frank Act.”¹⁵ The impact of the growing compliance burden is demonstrated in the declining number of credit unions, dropping by more than 800 institutions since 2009.¹⁶ A main reason for this decline is increasing costs and complexity of regulatory compliance. Many smaller institutions “simply cannot keep up”^{17,18}.

C. The burdens of high data reporting costs are so large and disproportionate for certain smaller entities which have negative implications on the economy as a whole and could lead to a restructuring of the financial industry through consolidation.

We question whether the costs of complex data reporting will be justified in the benefits it provides for both large and small entities. It worries us that the disparity in costs and benefits present here will create costs on a very frequent basis with no outline for how the data should then be reviewed and used for actual prevention of systemic failures in the economy.

“[Larger] banks are better suited to handle heightened regulatory burdens than are smaller banks,” the study notes, “causing the average costs of community banks to be higher” and while Dodd-Frank has not eliminated the risks associated with institutions deemed as “too-big-to-fail,” its approach towards smaller institutions is reminiscent of homogenizing the data aggregation system as proposed by the FSB which we see as having been overlooked.

The Consultative Document proposes various ways of organizing data¹⁹ in order to deal with such issues; however we believe that these suggestions continue to overlook the costs and their

¹⁴ According to the committee for small businesses meeting at the US House Of Representatives, “Burdens are higher because small businesses do not have the capacity, compliance staff, and the ability to do regulatory arbitrage as large organizations do.” US House of Representatives (2013) “Regulatory Landscape: Burdens on Small Financial Institutions,” Accessed March 24, 2015: <http://www.gpo.gov/fdsys/pkg/CHRG-113hhr85741/html/CHRG-113hhr85741.htm>

¹⁵ US House of Representatives (2013) “Regulatory Landscape: Burdens on Small Financial Institutions,” Accessed March 24, 2015: <http://www.gpo.gov/fdsys/pkg/CHRG-113hhr85741/html/CHRG-113hhr85741.htm>

¹⁶ Ibid

¹⁷ Ibid

¹⁸ According to a survey of community bankers conducted by George Mason University: “(i) over four-fifths of respondents stated that Dodd-Frank had increased their banks’ compliance costs by more than five percent, (ii) many respondents said that their banks would need to hire additional staff members to meet their new compliance requirements, and (iii) over four-fifths of respondents viewed Dodd-Frank as being even more burdensome for their banks than the Bank Secrecy Act.113 [and] Other anecdotal reports indicate that growing compliance burdens and costs are major factors.” Wilmarth, Arthur. (2011) “The Dodd-Frank Act: A Flawed and Inadequate Response to the Too-Big to-Fail Problem.” Mason Univ. Mercatus Center Working Paper No. 14-05: p.994.

¹⁹ As stated in the Consultative Document, “wide divergence in the national/regional data collection processes may pose practical challenges in the aggregation of data at the global level and compromise the quality of the global aggregates. To overcome such problems, there should be consistent data elements definitions as well as minimum

impact on the economy. Having acknowledged this, we would like to ask the FSB to elaborate more on the inevitable presence of such challenges and how the Board plans on handling them.

The numerous data elements proposed in the Consultative Document are problematic from the perspective of smaller entities such as community banks and developing nations' markets because of the costs they imply for such entities. Indisputably, the health of the economy is crucial for the functioning of every market, large or small, but we question whether even in times of economic stability such costs outweigh their benefits. Section 3.1 of the FSB consultative document acknowledges that there will be numerous "practical challenges" in the aggregation of data at the global level due to the heterogeneity of global markets and financial institution which will make it difficult for some parties to fulfill all the necessary data elements.

II. The data requested by the FSB will present technical and financial difficulties for reporting entities in emerging markets and developing economies.

A. Reporting entities may lack the necessary human capital for data extraction and reporting.

We have reason to believe that because of the lack of technical skills and human capital available in staff of the respective sources, the collection of data on the level of granularity requested by the FSB will provide serious extraction-related challenges for many reporting institutions in emerging economies, which may lead to limited data that does not accurately reflect actual systemic risk.

The granular data requested by the Financial Stability Board, with regards to the national/regional level, would be aggregated from three possible sources: i) bilateral counterparties in a trade, ii) trading venues, securities settlement systems, CCPs and tri-party agents, and iii) trade repositories.²⁰

Clearly, the regional/national data is aggregated from a diversity of sources in heterogeneous markets with varying levels of development. Though these three sources may have the technological sophistication to accurately report the high-quality granular data related to these transactions in advanced economies, emerging markets may lack the ability to report such data.

A previous study by the FSB reported that:

"Many EMDEs face capacity and resource constraints that hamper their ability to implement the internationally agreed reforms. Effective implementation of the global regulatory agenda can only take place if there are strong supervisory regimes that are adequately staffed with the appropriate levels of expertise. Several EMDEs have noted that hiring and retaining qualified staff, particularly those with technical skills that are in high demand, presents a significant challenge. The challenge stems partly from the scarcity of qualified individuals

granularity and collection frequency, in order to produce meaningful global aggregates. In addition, the data collection and aggregation procedures should address the double-counting issues that appear whenever two sides of the same transaction are reported." Financial Stability Board (2014) "Standards and Processes for Global Securities Financing Data Collection and Aggregation," p.24.

²⁰ Financial Stability Board (2014) "Consultative Document: Standards and Processes for Global Securities Financing Data Collection and Aggregation," pp.10-20.

in those countries, and partly from the frequently more attractive remuneration and retention incentives in the private sector (emphasis added).”²¹

Because of this, the FSB may receive incomplete or inaccurate data. As a result, this data will not be reflective of actual systemic risk in financial markets and, therefore, may lead to inaccurate risk assessments.

B. The high quantity and quality of required data elements will be too costly for reporting entities in emerging markets.

To reduce the costs incurred as a result of reporting data, we suggest that the FSB seek to minimize costs by requesting fewer, but critical, data elements for aggregation in emerging economies.

Currently, several highly specific data elements are being requested for each transaction of margin lending, repo lending, and securities lending.

Repo Lending: 31 data elements, per transaction

Securities Lending: 28 data elements, per transaction

Margin Lending: 23 data elements, per transaction

The Bank of England reports that, “*Data collection inevitably imposes some costs upon reporting institutions... (and) the scale of these costs will reflect factors such as the difficulty of extracting information.*”²² Given the highly-specific elements requested per transaction, as well as the fact that many of these elements may be significantly more difficult to extract than others and the high volume of transactions occurring in each market, the financial costs of reporting this data may be exorbitant.

The US Federal Reserve, in its risk analyses for repo and securities lending, requests a minimum of six crucial data elements in its reporting: principal amount, interest rate, collateral type, haircut, tenor, and counterparty.²³ We encourage that, in the case of repo and securities lending, the FSB consider adopting this model to minimize reporting costs, while still gathering crucial data, for those institutions reporting in emerging markets.

C. Loan terminations as an additional required data element may help the FSB analyze systemic risk.

²¹ Financial Stability Board (2014) “Monitoring the effects of agreed regulatory reforms on emerging markets and developing economies,” p.9. Accessed March 26, 2015: <http://www.financialstabilityboard.org/wp-content/uploads/Monitoring-the-effects-of-reforms-on-EMDEs.pdf>

²² Bank of England (2006) “Cost Benefit Analysis of Monetary and Financial Statistics,” p.13. Accessed March 24, 2015: <http://www.bankofengland.co.uk/statistics/Documents/about/cba.pdf>

²³ Federal Reserve Bank of New York (2013) “Repo and Securities Lending,” p.1. Accessed March 26, 2015: http://www.newyorkfed.org/research/staff_reports/sr529.pdf

By requesting loan terminations for margin lending, securities lending, and repo lending, the FSB will be able to identify fire sales in financial markets and have data that helps reflect systemic risk.

In its consultative document, the Financial Stability Board identifies, defines, and requests a long series of data elements. Yet, none of the data elements are related to the termination of these various forms of lending – despite the crucial information they can provide. In its response to the consultative document, the Center for the Study of Financial Market evolution asserts that “terminations can lead to forced redemptions of cash collateral and the untimely sale of pool investments,” thereby increasing liquidity risk that result from fire sales in financial markets.²⁴ Should this occur on a market-wide level, these terminations will intensify systemic risk in markets. By including this information the Financial Stability Board will be able to identify spikes in untimely terminations and be able to better analyze systemic risk.

III. The definitions and granularities proposed by the FSB are too homogenous in nature and are therefore unfeasible in a globally heterogeneous context.

A. Negative implications of applying homogenous standards to heterogeneous entities can be exemplified by the current situation in Greece within the European Union.

We see the events that have transpired in Greece to reflect the proposed data homogeneity by the FSB which by imposing homogenous data collection standards at the global level would burden smaller parties and could potentially have negative effects for the economy as a whole.

While the FSB has set out specific guidelines for the collection of data at the global level, we believe that such a command and control approach is too dismissive of the heterogeneous nature of the global markets. We see the omission of concessions for less developed markets as reminiscent of the European Union’s consolidation of 27 heterogeneous countries with “different value systems, work ethics, factor endowments, dogmas, languages, and objectives in life,” which has resulted in a “cost of integration [that] has exceeded the benefits for the Europeans.”²⁵ The disparity between the markets of smaller less developed nations such as Greece and those of larger, financial developed nations such as Germany has led to disastrous results for the smaller players. “Prices have increased because of the common market, goods are moving to markets with higher income and prices—to attract them you have to pay the same high prices, which is impossible for Greece because income there is lower compared to the wealthy manufacturing EU members of the North.”²⁶ The challenges that Greece has faced under the monetary policy and austerity imposed by the EU and its need for flexibility, its own currency and exchange rate in order to have a chance at recovery demonstrate that the rules that apply to a developed market

²⁴ Center for the Study of Financial Market Evolution (2014) “Re: ‘Additional data for financial stability purposes,’ per the FSB Consultative Document” Accessed March 26, 2015: <http://www.financialstabilityboard.org/wp-content/uploads/CSFME-on-1411DEG.pdf>

²⁵ Kallianiotis, John. (2012) “If Greece Stays in the Eurozone it has no Future.” US News & World Report Accessed March 24, 2015: <http://www.usnews.com/debate-club/should-greece-leave-the-eurozone/if-greece-stays-in-the-eurozone-it-has-no-future>

²⁶ Ibid

like that of Germany cannot simply be imposed on a less developed market like that of Greece. Heterogeneity in markets does not allow for homogenous treatment and doing so has implications for all of the Eurozone as the member countries are all interrelated.²⁷ Just as the implementation of a homogenous monetary policy in the Eurozone has had a negative effect on not only smaller nations and markets such as Greece and will have an impact on the economy of the zone as a whole, homogenous data standards proposed by the FSB carry similar implications. We have interpreted the situation in Greece to reflect the proposed data homogeneity by the FSB. The FSB fails to recognize the varying degrees of capacity for high quality financial reporting necessary to satisfy a homogeneous set of definitions and granularities necessary for aggregation of data at the global level.

Greece cannot keep up with the EU's monetary policy, the impact of which has been seen on Greece's community banks. Currently, Greece is in a lot of debt and due to its lack of infrastructure, it does not have the resources necessary to comply with the measures outlined by the EU. Greece's financial situation requires bailouts from other countries and this is highly costly. The heterogeneous nature of various countries makes it difficult for them to follow the same policies outlined by the EU. One can see the impact on community banks in Greece by looking, for example, at Attica Bank, a small community bank in Greece which has experienced negative growth rates that reflect its inability to keep up with the rest of EU.²⁸

B. While beneficial for developed markets and large entities (i.e. “too-big-to-fail” institutions), complex data reporting has been found to be burdensome to smaller entities and less developed markets, hurting their competitiveness.

With each new act of regulation, items per filing increase complexity to the reporting process not just for the supervisors but for the firms that have to comply with these new laws and regulations. We believe that this is an issue that has been overlooked and propose that the FSB look further into addressing the detrimental effects of compliance on smaller entities such as community banks.

Community banks and larger financial institutions are important for the economy in different respects, yet are not given the same importance.²⁹ After the financial crisis, regulations favoring “too-big-to-fail” institutions have come into effect, which help larger financial institutions in the face of financial instability, allowing them to make riskier decisions because they are guaranteed governmental assistance.³⁰

²⁷ According to Kallianiotis, “smaller countries like Greece, Portugal and Spain cannot keep up with bigger countries like Germany, France and Italy. Being a part of the Eurozone puts a lot of financial pressure for them that they cannot keep up with. The interconnection between countries causes a strain on their economies and puts them in a risky situation.” Ibid.

²⁸ Please refer to Chart 5 in the Appendix. There have been negative growth rates and Attica Bank has faced major losses in Q3.

²⁹ Community banks are institutions that have assets of \$10 billion or less, whereas larger financial institutions have over \$10 billion worth of assets to \$250 billion or more. Wilmarth, Arthur. (2011) “The Dodd-Frank Act: A Flawed and Inadequate Response to the Too-Big-to-Fail Problem,” Mason Univ. Mercatus Center Working Paper No. 14-05. Accessed March, 25, 2015:

http://www.law.gwu.edu/Academics/research_centers/C-LEAF/Documents/WilmarthDFAct.pdf

³⁰ “The big banks’ size and interconnectedness led to ‘too-big-to-fail’ interventions, which shielded troubled big banks from the full consequences of their decisions.”

Community banks have been hurt by such regulation, and measures have been taken to assuage these issues. Still, we see the need for the continuation of such measures.³¹ Businesses in the community depend on small banks for small businesses loans, and their growth is dependent on community banks.³² Increasingly more complex regulation is burdensome to smaller entities such as community banks. “The length of financial laws reveals further evidence of mounting regulatory complexity.”³³ This increase in complexity can be seen in the international accords of Basel I, II, and III. Complexity has vastly increased from Basel I (1988) to Basel III (2010) in terms of items per filing. Basel III grew 20 times larger than Basel I, reflecting the increase in data requirements amongst the extensive pages.³⁴

IV. Heterogeneity in markets promotes competition and growth and should be recognized and acknowledged in the formulation of data reporting requirements.

We would like to suggest for the FSB to investigate the implications of a homogenous set of definitions and granularities in data collection and aggregation, for both individual financial institutions as well as for the markets and economy as a whole, before finalizing the proposed requirements. We believe that the FSB should address the issues of complex data reporting for smaller entities especially in less developed markets.

A. There has been a shift toward a two-tier system for data reporting, which has the capacity to allow for heterogeneity in the markets.

With the passage of Dodd-Frank, one can see that there has been a shift toward a two-tier system already. Some provisions have exempted community banks from particular statutory requirements.

“...The provisions of Titles I and II dealing with systemically significant financial institutions (SIFIs) apply only to bank holding companies larger than \$50 billion. Title X exempts banks smaller than \$10 billion from direct supervision and enforcement by the Consumer Financial Protection Bureau (CFPB) but still

Gunther, Jeffrey and Klemee, Kelly. (2012) “Financial Stability: Traditional Banks Pave the Way. Community Banks Withstand the Storm.” Accessed March 26, 2015:

<http://www.dallasfed.org/microsites/fed/annual/2012/e1/1201e1.cfm>

³¹ “The traditional, relationship-based model followed by community banks requires its own regulatory framework, one more streamlined than the increasingly complex and formulaic rules being applied to larger, more transaction-oriented banks. Such a streamlined framework should include flexibility to account for the diversity among community banks, as reflected in their customized approaches to individual customer needs and preferences. Additionally, smaller banks cannot easily absorb the cost of new regulation. More complicated regulatory compliance will force community banks to increase staff relative to assets to a greater degree than at large banks, further undermining competitiveness. Adjustments to new, complex regulatory requirements represent costs that spread over fewer assets, are more burdensome for smaller institutions.”

Kotch, Christoffer (2012) “Financial Stability: Traditional Banks Pave the Way. Regulatory Burden Rising,” Accessed March 26, 2015: <http://www.dallasfed.org/microsites/fed/annual/2012/e4/1201e4.cfm>

³² Mitchell, Stacy. (2010) “Why Small Banks Make More Small Business Loans,” Institute for Local Self-Reliance, Accessed March 25, 2015: <http://ilsr.org/banks-and-small-business-lending/>

³³ Please refer to Charts 1, 2, and 3 in the Appendix which reflect the increased complexity of regulatory reporting. Kotch, Christoffer. (2012) “Financial Stability: Traditional Banks Pave the Way. Regulatory Burden Rising,”

Accessed March 26, 2015: <http://www.dallasfed.org/microsites/fed/annual/2012/e4/1201e4.cfm>

³⁴ Ibid

requires smaller banks to comply with the CFPB's rules. Two provisions of Title III assist community banks by raising the per-account deposit insurance ceiling from \$100,000 to \$250,000 and by requiring the FDIC to amend its deposit insurance assessment formula so that larger banks pay a higher (and fairer) percentage of deposit insurance assessments. Two other sections of Dodd-Frank benefit smaller banks by (i) removing a requirement that previously compelled small publicly-traded banks to include in their annual audits a report on the effectiveness of their internal controls over financial reporting."³⁵

Furthermore, The SAFE Banking Act exemplifies that actions have been taken to help smaller banks and there should be a continuation of this focus.^{36,37,38}

Although some provisions of Dodd-Frank aid community banks and reflect the need for two separate regulatory regimes for small and large financial institutions, Dodd-Frank does not specify those standards. We suggest that the FSB considers a two-tier regulatory system which would allow for less complexity and lower costs associated with compliance and data aggregation that may benefit smaller financial institutions in addition to larger ones.

B. Less complex data reporting requirements are cost saving and more beneficial to entities with less access to capital and resources and allow for economic growth.

We suggest that the FSB reevaluate the granularities and definitions it has proposed for global data aggregation in terms of quality and quantity so that they reflect the wide scope of reporting capacities of market participants.

A two-tier regulatory system would minimize the costs incurred by underdeveloped markets and smaller financial institutions thereby allowing the global economy to expand as a whole. Regarding data aggregation for smaller less developed markets, we suggest the FSB considers collecting only six data elements as done by the US Federal Reserve. We suggest that for underdeveloped countries data aggregation be limited to the principal amount, interest rate, collateral type, haircut, tenor, and counterparty.³⁹ A two tier system of data collection and aggregation would have more consideration for the heterogeneity of global markets without sacrificing the benefits of financial oversight for the economy as a whole and would minimize the burdens on smaller entities and prevent a restructuring of the financial industry by consolidation.

³⁵ Wilmarth, Arthur. (2011) "The Dodd-Frank Act: A Flawed and Inadequate Response to the Too-Big-to-Fail Problem," Mason Univ. Mercatus Center Working Paper No. 14-05, p.994.

³⁶ The SAFE Banking Act reduces the financial power given to megabanks which receive subsidies from the government when they face potential failure. This helps level the playing field for community banks. Brown, Sherrod (2012) "Brown Introduces Bill to End "Too Big to Fail" Policies, Prevent Mega-Banks from Putting our Economy at Risk," Office of Senator Sherrod Brown. Accessed March 25, 2015: <http://www.brown.senate.gov/newsroom/press/release/brown-introduces-bill-to-end-too-big-to-fail-policies-prevent-mega-banks-from-putting-our-economy-at-risk>

³⁷ Wilmarth, Arthur (2009) "The Dark Side of Universal Banking: Financial Conglomerates and the Origins of the Subprime Financial Crisis," Accessed March 25, 2015: http://scholarship.law.gwu.edu/cgi/viewcontent.cgi?article=2156&context=faculty_publications

³⁸ Morrissey, Edward (2015) "The Spectacular Too Big Failure of Dodd-Frank," *The Fiscal Times*, Accessed March 25, 2015: <http://www.thefiscaltimes.com/Columns/2015/02/12/Spectacular-Way-Too-Big-Failure-Dodd-Frank>

³⁹ Federal Reserve Bank of New York (2013) "Repo and Securities Lending," p.1.

Final Notes

We would like to take this time to thank the Financial Stability Board for opening up its consultative document for comments and discussion. We would also like to thank the CSFME and Fordham University for the opportunity to represent the two institutions in front of the FSB. We hope that our comments will be constructive and helpful for the FSB as it continues its work on the consultative document.

Thank you.

Regards,

Aleksandra Antolak

Aleksandra Antolak

Israel Munoz

Israel Munoz

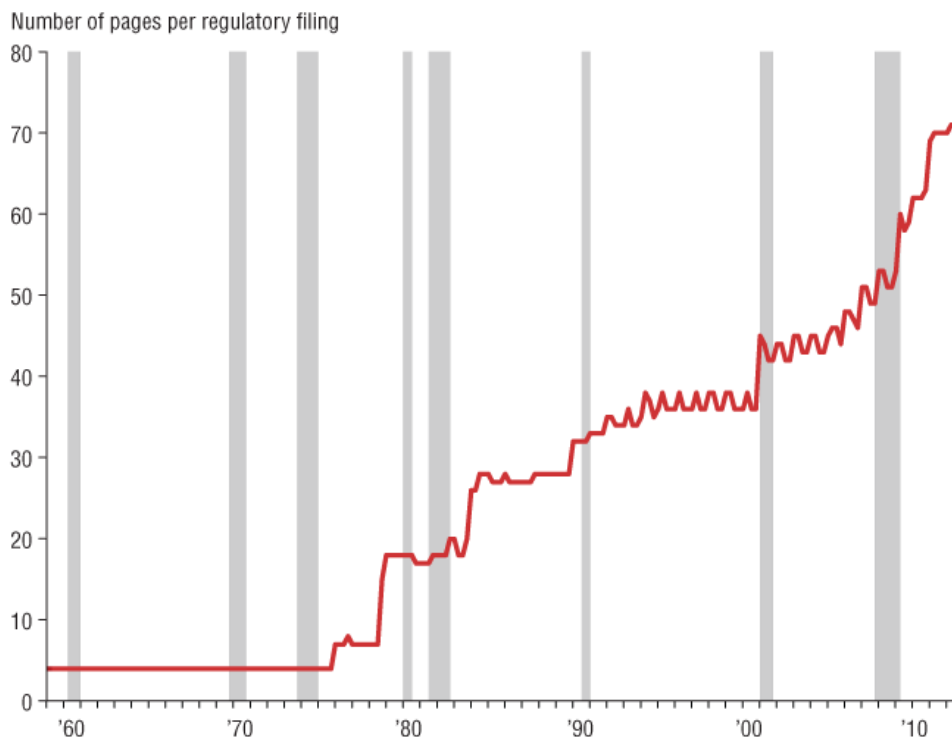
Nalina Bhasin

Nalina Bhasin

Appendix A

Chart 1

Pages in U.S. Regulatory Filings Rapidly Increase



NOTES: Gray bars indicate recessions. Maximum number of report pages for domestic banks only.

1959:Q4–1983:Q4: Forms FFIEC 010, FFIEC 011, FFIEC 012, FFIEC 013, FFIEC 015 and temporary reporting supplements.

1984:Q1–2000:Q4: Forms FFIEC 032, FFIEC 033, FFIEC 034.

2001:Q1–present: Form FFIEC 041.

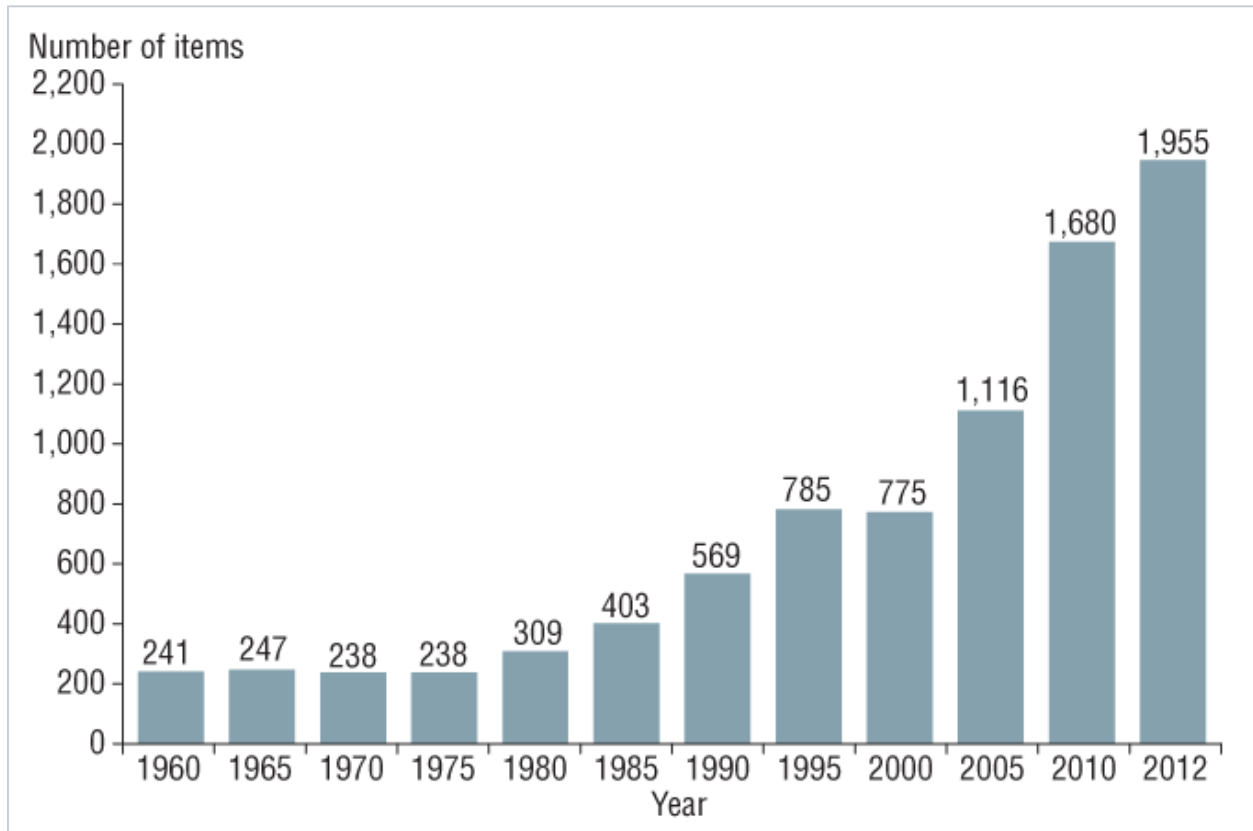
Data Source: Call Report, Federal Financial Institutions Examination Council.

Kotch, Christoffer (2012) “Financial Stability: Traditional Banks Pave the Way. Regulatory Burden Rising,” Accessed March 26, 2015: <http://www.dallasfed.org/microsites/fed/annual/2012/e4/1201e4.cfm>

The number of pages for regulatory filings has increased between the 1960s and 1970s when reports were only about 5 pages long to 30 to 40 pages in the 1980s and 1990s, to hundreds of pages today. This reflects the growing complexity of data requirements which have been very costly for financial institutions to provide.

Chart 2

Items per Filing Rise as Complexity Increases



NOTES: Maximum number of reporting items for domestic banks only. Q4 of each year.

1960:Q4–1980:Q4: Forms FFIEC 010, FFIEC 011, FFIEC 012, FFIEC 013, FFIEC 015 and temporary reporting supplements.

1985:Q4–2000:Q4: Forms FFIEC 032, FFIEC 033, FFIEC 034.

2005:Q4–present: Form FFIEC 041.

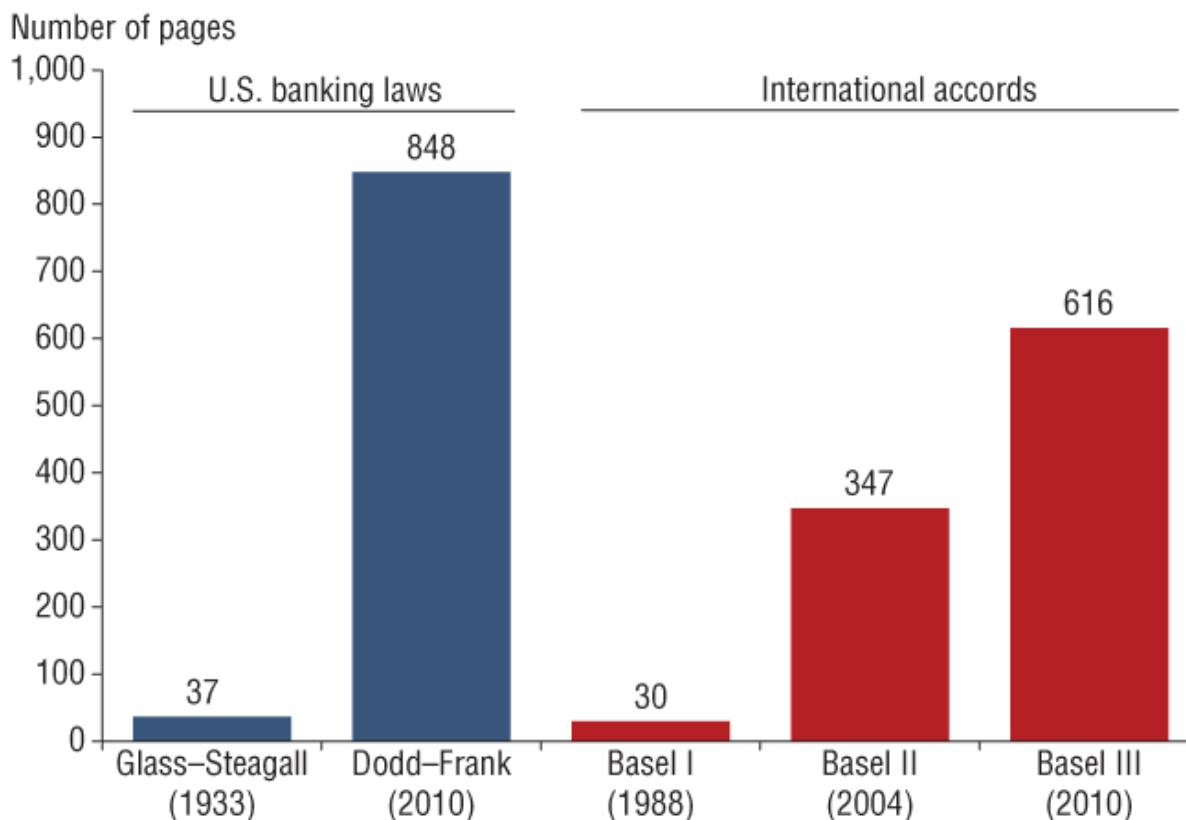
Data Source: Call Report, Federal Financial Institutions Examination Council.

Kotch, Christoffer (2012) “Financial Stability: Traditional Banks Pave the Way. Regulatory Burden Rising,” Accessed March 26, 2015: <http://www.dallasfed.org/microsites/fed/annual/2012/e4/1201e4.cfm>

The number of data elements required has drastically changed between 1960, where solely 241 items were required to 2012 where 1,955 items were required. This has been especially burdensome for smaller entities to keep up with such high costs of data reporting and regulation.

Chart 3

Rising Page Count Mirrors Heightened Oversight



Data Source: Haldane, Andrew G. & Madouros, Vasileios (2012) “The Dog and the Frisbee” paper presented at “The Changing Policy Landscape” symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, Aug. 30-Sept. 1.

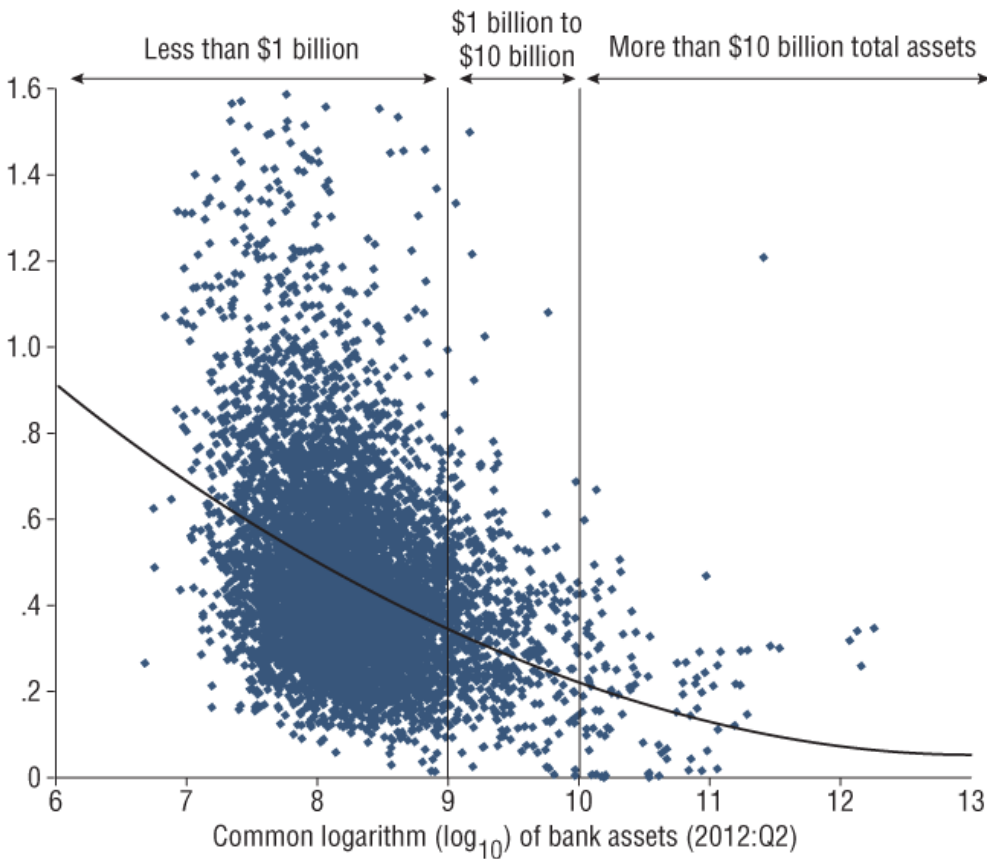
Kotch, Christoffer. (2012) “Financial Stability: Traditional Banks Pave the Way. Regulatory Burden Rising,” Accessed March 26, 2015: <http://www.dallasfed.org/microsites/fed/annual/2012/e4/1201e4.cfm>

The length of financial regulation on both the national and international spheres has grown, adding tremendous pressure to financial institutions to comply with such requirements. The Glass-Steagall Act (1933) was 37 pages and Dodd-Frank (2010) is over 800 pages. The third version of the International Basel Capital Accord grew to 20 times the length of the first one, reflecting the growing complexity and expansion of requirements imposed on financial institutions.

Chart 4

Smaller Banks Require Relatively More Personnel

Full-time-equivalent employees per \$1 million of bank loans (2012:Q2)



NOTE: A few outliers with above 1.6 FTE/\$1 million loans fall outside plot area.

Data Source: Call Report, Federal Financial Institutions Examination Council.

Kotch, Christoffer (2012) "Financial Stability: Traditional Banks Pave the Way. Regulatory Burden Rising," Accessed March 26, 2015: <http://www.dallasfed.org/microsites/fed/annual/2012/e4/1201e4.cfm>

The number of employees required per bank loan is reflected in the chart above by the size of the bank. Smaller banks require more workers than larger banks, and face challenges with the growing complexity of regulation due to the high costs.

Chart 5

Attica Bank is an example of a smaller entity in Greece negatively affected by the monetary policy in the EU.

* Q3 interest revenue at 19.9 million euros versus 15.95 million euros year ago

* Q3 net loss at 24.93 million euros versus 9.56 million euros year ago

* Net cash on Sept. 30, 2014 at 0.14 billion euros versus 0.08 million euros year ago

There have been negative growth rates, reflecting the negative economic situation that Greece has been in. A small community bank like Attica Bank cannot keep up with larger banks in the EU.

PROFITABILITY RATIOS			
	Company	Industry	Sector
Gross Margin (TTM)	--	0.10	5.11
Gross Margin - 5 Yr. Avg.	--	0.14	4.36
EBITD Margin (TTM)	-79.89	--	--
EBITD - 5 Yr. Avg	-79.90	56.66	54.10
Operating Margin (TTM)	-82.25	44.80	42.74
Operating Margin - 5 Yr. Avg.	-100.30	45.79	44.03
Pre-Tax Margin (TTM)	-82.25	45.08	44.09
Pre-Tax Margin - 5 Yr. Avg.	-100.30	45.91	44.49
Net Profit Margin (TTM)	-52.84	35.53	34.88
Net Profit Margin - 5 Yr. Avg.	-94.10	35.74	34.89
Effective Tax Rate (TTM)	--	21.28	20.98
Effective Tax Rate - 5 Yr. Avg.	--	22.39	23.42

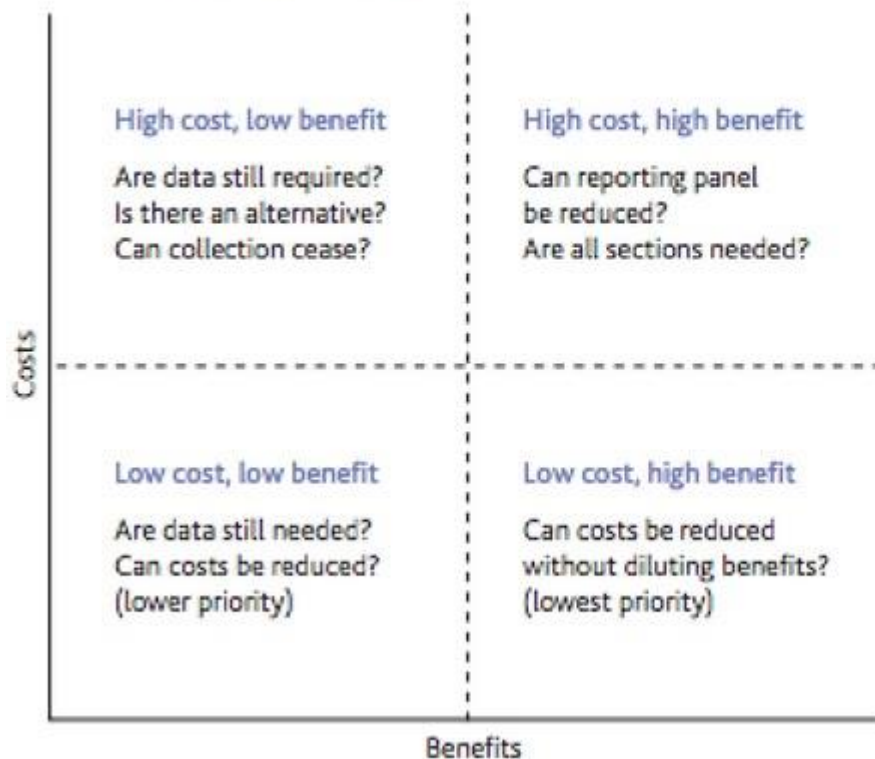
GROWTH RATES			
	Company	Industry	Sector
Sales (MRQ) vs Qtr. 1 Yr. Ago	-0.46	19.33	20.03
Sales (TTM) vs TTM 1 Yr. Ago	4.46	24.89	23.24
Sales - 5 Yr. Growth Rate	-6.78	13.91	13.81
EPS (MRQ) vs Qtr. 1 Yr. Ago	-121.23	12.78	11.92
EPS (TTM) vs TTM 1 Yr. Ago	90.50	--	--
EPS - 5 Yr. Growth Rate	--	22.56	22.546
Capital Spending - 5 Yr. Growth Rate	-2.70	33.60	32.02

Data Source: Reuters.com (2014) “BRIEF-Attica Bank Q3 net loss widens to 24.93 mln euros from 9.56 mln euros last year,” Nov. 28. Accessed March 24, 2015: <http://www.reuters.com/article/2014/11/28/attica-bank-brief-idUSFWN0TH07O20141128?type=companyNews>

Financials: Attica Bank SA (BOAr.AT):
<http://www.reuters.com/finance/stocks/financialHighlights?symbol=BOAr.AT>

Chart 6:

Chart 5.1 Balancing relative costs and benefits



Data source: Bank of England (2006) “Cost Benefit Analysis of Monetary and Financial Statistics,” 21. Accessed March 24, 2015: <http://www.bankofengland.co.uk/statistics/Documents/about/cba.pdf>

“In conventional CBA, a decision would depend on whether the benefits exceed the costs, which requires a monetary valuation for both sides. Because the analysis here is in terms of relative costs and benefits, it does not necessarily follow that a data collection with high cost and low benefit should be discontinued. Rather, this indicates an area where it is more likely that data may be no longer required, or where an estimated alternative would suffice; also where the potential gains from action are largest.”

For institutions with sufficient capital:

High costs, high benefits & low costs, low benefits

For institutions with insufficient capital:

High costs, low benefits & low costs, high benefits

Chart 7:

Chart 2.1 Stylised costs and benefits

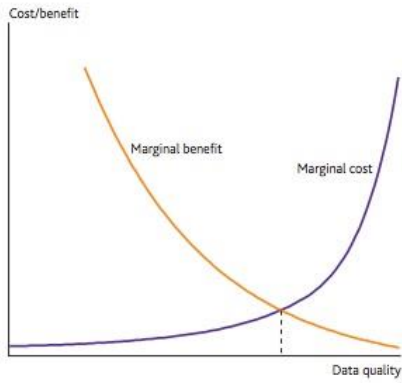


Chart 2.2 Stylised costs and benefits

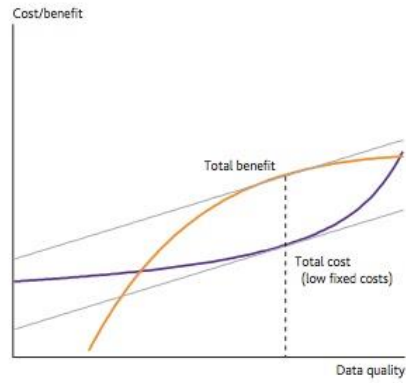


Chart 2.3 Stylised costs and benefits

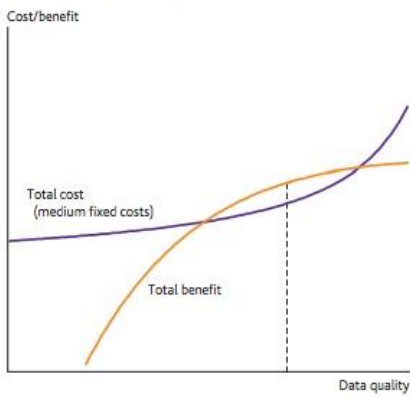
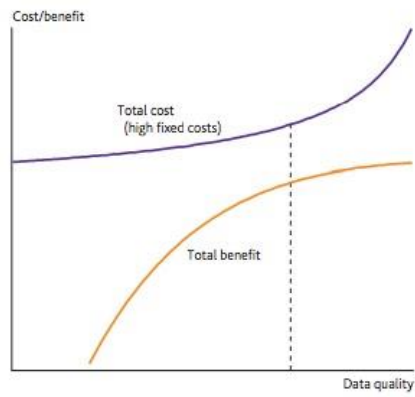


Chart 2.4 Stylised costs and benefits



Data source: Bank of England (2006) “Cost Benefit Analysis of Monetary and Financial Statistics,” 11. Accessed March 24, 2015: <http://www.bankofengland.co.uk/statistics/Documents/about/cba.pdf>

Charts 2.1- 2.4 of Chart 7 depict the inverse relationship between marginal costs and marginal benefits as well as total costs and total benefits as pertaining to increasing complexity of data collection and aggregation.

Appendix B

Task Force Report



**Regulatory Outreach for Student
Education (ROSE) Program**

Fordham University

April 2015

Executive Summary

The Regulatory Outreach for Student Education (ROSE) Program places students in the middle of the regulatory rule-writing process, asking the participants to write a Response Letter to a Consultative Document in the financial regulatory space. Working with the Center for the Study of Financial Market Evolution (CSFME)¹, this year, we tasked five academic research teams with examining the FSB Data Expert Group’s Consultative Document on Standards and Processes for Global Securities Financing Data Collection and Aggregation. Each team, representing a different school within Fordham University, approached the task from a unique philosophical stance and in accordance with its disciplinary skillset. The results of those efforts are consolidated within this Task Force Report.

The Overview section of the Task Force Report was authored by researchers pursuing their Master’s in Business Administration (MBA) degrees at the Gabelli School of Business. These researchers took a step back to question the premise of the data collection and aggregation proposal and to argue that retrospective analysis entails numerous challenges, including the burden of data cleaning and the fact that transacting parties do not fully bear the cost of the risk of their trades (i.e., externalities). This team contextualizes the negative externalities of the financial crisis that gave rise to the Financial Stability Board. Given the possibility that retrospective analysis will still allow for the formation of bubbles and their subsequent bursting, this team proposes a real-time data collection and release policy that will allow markets to price changes in the relative risk embedded within the trades. This group draws parallels with the algorithm based American Customer Satisfaction Index, which has grown to become a leading indicator in the market in less than twenty years. This team also suggests the value of including collateral velocity among the data collection elements.

Part 1 of the Task Force Report was authored by researchers from the Economics Department pursuing both graduate and undergraduate degrees at Fordham College Rose Hill (FCRH). These researchers broadly agreed with the Consultative Documents’ definitions and premises, but highlighted the benefits of using established identifiers, such as Legal Entity Identifiers (LEIs) and International Securities Identification Numbers (ISINs) during the process.² This team also supported the initiation of a pilot program, while providing some important caveats to implementing such a program.

Part 2 of the Task Force Report was authored by researchers pursuing undergraduate business degrees at the Gabelli School of Business. These researchers focused on how the FSB Data Expert

¹ Center for the Study of Financial Market Evolution (2015) “Additional data for financial stability purposes,” filed February 12: <http://www.financialstabilityboard.org/wp-content/uploads/CSFME-on-1411DEG.pdf>

² Legal Entity Identifier (LEI) is a unique ID associated with a single legal entity. See Global Financial Markets Association for more information (<http://www.gfma.org/initiatives/legal-entity-identifier-%28lei%29/legal-entity-identifier-%28lei%29/>). An International Securities Identification Number (ISIN) is assigned to securities to facilitate unambiguous clearing and settlement procedures. See International Securities Identification Number Organisation for more information (<http://www.isin.org/isin/>).

Group can pragmatically deploy the proposals in the Consultative Document, including recommendations for encryption of data both during transfer and storage. This team also highlighted how aggregate data can be used more effectively, for example, by focusing on ratios rather than aggregate amounts.

Part 3 of the Task Force Report was authored by researchers pursuing their Master's in Professional Accounting degrees at the Gabelli School of Business. These researchers approached the Consultative Document from a global perspective, suggesting improvements in the definitions of the scope of the data collection process as well as ways to allow the heterogeneous nature of global financial markets to continue to flourish. This team highlights the vital role that securities lending activity plays in global monetary policy.

As faculty director, I asked each research team to adopt a philosophical stance on financial regulation (e.g., regulation creates frictions vs. regulation is necessary) then to approach the Consultative Document in accordance with that philosophy and the team members' own specialty knowledge. As you will see, the teams hold independent views of each other, yet complement each other in important ways. Moreover, all the teams approached the task with a mindset of improving the data collection and aggregation process.

We thank you for the opportunity to provide the results of this Task Force as Supplemental Commentary and we welcome inquiries and suggestions in order to either explicate our proposals or to refine them in the future.

Respectfully yours,

A handwritten signature in black ink, appearing to read "B - Cole".

Benjamin M. Cole, Ph.D.
Faculty Director
ROSE Program
Fordham University



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Technical Response Working Group

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Technical Response, Overview (Fordham Gabelli School, MBA in Business Candidate Team)

“It must be considered that there is nothing more difficult to carry out, nor more doubtful of success, nor more dangerous to handle, than to initiate a new order of things.”

— Niccolo Machiavelli, *The Prince*



We agree with the FSB that more data needs to be collected and analyzed on a regular basis to give greater insight into what has been called the shadow banking system. However, we believe that the proposal does not give adequate consideration to the amount of time that the data aggregation process will take and that the suggested uses of data are not sufficient to protect the interests of all stakeholders in the investment process. Beyond the banks, traders, regulatory agencies, governments, and individual investors we must also consider the average citizen who, while not directly involved in these transactions, nevertheless suffered through the negative externalities ignored when the transactions take place. We strongly believe that real time data collection would allow for more effective use of this data, allowing regulatory agencies to take a prescriptive approach in addressing future market disruptions.

According to the FSB, this data “would allow a better assessment of the interconnectedness across sectors and jurisdictions of risk concentrations to market segments or group of counterparties and of the dependence on specific collateral asset classes. The monthly data collection would provide for a better comparison of trends across products, counterparty sectors or jurisdictions to identify potential imbalances.”

From the definitions of the proposed data points and the outline for data architecture, we summarize the FSB’s primary objectives relating to data as follows:

- Accuracy by eliminating double counting
- Standardizing risk calculation
- Adaptability for development of additional securities, derivatives, instruments, etc.
- Global compatibility

I. Potential Impracticability of Proposed Data Aggregation

We are concerned that the FSB has not defined how the data will be used after it is collected

After reading the Consultative Document, it is still unclear what the goal of the data aggregation proposal is and how this information will be used to inform policy in different regions. In the section devoted to the uses of data, there are several instances of this uncertainty:

- “data aggregated at the global level could suggest potential financial stability issues”³
- “data on securities financing markets might also be useful for prudential supervisors”⁴
- “the proposed data collection could add to the information available with the implementation of the CPSS-IOSCO *Principles for FMIs*”⁵

The FSB provides no guidance on these matters of *how* the data will be used once it is collected. For example, is the FSB collecting this data with the hopes of being able to inform a financial institution that it has exceeded some level of illiquidity in its collateral for repurchase agreements within a given period of time? If so, that raises additional questions. Would a violation of that threshold for a 24-hour period be actionable? Or would it take a 5-day period? Or more? Additionally, does the FSB plan to shut down banks that exceed illiquidity thresholds? What are those thresholds?

To be a truly effective proposal, the FSB should clearly define the goals and objectives of the system. After all, without defining the objectives of the system, how can the FSB justify the expense of the system?

Despite this lack of guidance, the FSB is proposing to calculate a vital metric for system stability—collateral velocity

One important step in the data aggregation process that the FSB has outlined in the Consultative Document is consideration of which data is “needed to calculate metrics of collateral velocity” and to develop a metric for properly analyzing the risk associated with the re-use of collateral. However, this information is currently only listed in the set of potential next steps that may or may not be added to the list of required data.⁶ We believe that collateral reuse is fundamental to an understanding of both liquidity and leverage. Instead of being a next step, we recommend that the collateral velocity metric be included in the data aggregation system from the beginning.

We fear the FSB is underestimating the burden of collection and reconciliation both for the banks and for the aggregators

Proprietary datasets are among the highest quality and thus most valuable. Irrespective, proprietary datasets are not without typos and misclassifications. We spoke with several university professors who have worked with large-“n” datasets and asked them about the challenges involved with cleaning and reconciling data.⁷ The results were enlightening.

One researcher built his dissertation dataset from 2,030 Initial Public Offerings (IPOs) in the U.S. equity markets between 1997 and 2004. These IPOs involved 602 unique investment banks, many of which were involved in changes in corporate control during the eight-year window. That researcher estimates that the time to clean and reconcile this dataset was 3,200 hours (i.e., 80

³ Financial Stability Board (2014) “Consultative Document: Standards and Processes for Global Securities Financing Data Collection and Aggregation.” November 13, p.38

⁴ Ibid, p.38.

⁵ Ibid, p.38.

⁶ Ibid, p.42.

⁷ Personal correspondence, March 29, 2015.

hours per week for 9 months). Another researcher built his dissertation dataset from 13,836 alliance tie-ups between 344 unique firms between 1986 and 2000. That researcher estimates that the time to clean and reconcile this dataset was 8,160 hours (i.e., 85 hours per week for 24 months).

While not necessarily representative of all data reconciliation work, these two examples should give the FSB pause. If we assume that regional or national aggregators will be doing the reconciliation of data (and then later, the FSB itself), and we further assume that employees working a normal 40-hour work week will be responsible for the aggregation and reconciliation, replicating the first researcher's cleaning and reconciliation process would have required 80 weeks of work for one employee. Attempting to achieve this workload in a four-week time frame would require 20 employees. Likewise, the second researcher's workload would have required 204 weeks for one employee, or 51 employees for a four-week turnaround timeline.

The FSB's data aggregation proposal would yield tens of thousands of transactions each month across thousands of financial institutions every month, year-on-year. This is multi-fold the quantity of data tackled by those in our convenience sample, pushing employee requirements at the regional or national level to the hundreds on an ongoing basis. It is unclear whether there will be sufficient benefits, given the level of burden the consultative document is proposing.

A retrospective proposal is an incorrect approach to financial regulation

Based on the FSB's mandate, we believe that the goal of the FSB's proposal is to create an international liquid, stable market.⁸ What is being proposed is a continuation of the prevailing retrospective approach and will only continue to perpetuate the current failures of risk policies. Thus far, regulatory agencies have acted primarily reactionary, resembling a "cat-and-mouse game of industry change followed by regulatory response,"⁹ that "often, a crisis or industry innovation leads to a new regulatory regime."¹⁰ This retrospective approach has proven flawed and has led to shortcomings within the risk management system. First, it feeds into "disaster myopia," or that people are inclined to underestimate the potential for adverse outcomes.¹¹ Second, it does not incorporate for black-swan bias, or the occurrence of rare events that cannot be predicted but are extremely consequential to the system.¹²

Rather than placing emphasis on retrospective analysis to justify new policies, the FSB should focus on prescriptive analysis looking forward and anticipating new types of securities and market

⁸ Financial Stability Board (2015) "About the FSB." Retrieved March 30, 2015:

<http://www.financialstabilityboard.org/about/>

⁹ Baradaran, Mehrsa (2014) "Regulation by Hypothetical." *Vanderbilt Law Review*. 67.5, p.1249.

¹⁰ Ibid

¹¹ Haldane, Andrew (2009) "Why Banks Fail the Stress Test." *Marcus-Evans Conference on Stress-Testing from Bank of England*, 13 February. Retrieved March 30, 2015:

<http://www.bankofengland.co.uk/archive/documents/historicpubs/speeches/2009/speech374.pdf>

¹² Baradaran, Mehrsa (2014) "Regulation by Hypothetical." *Vanderbilt Law Review*. 67.5, p.1278.

trends. This could remedy current risk policies shortcomings by pressing banks to consider more severe scenarios of economic failure and hopefully, be better prepared for crises.

There should be more efforts to improve stability and less of an emphasis on efficiency

Many of the FSB's suggestions appear to promote market efficiency, but we argue that there are limitations to structuring policies around efficiency. It ignores negative externalities in the system and creates the potential for high booms and devastating busts. Think about the analogy of a car.¹³ One looks to buy a car with fuel efficiency, expecting the car not to waste energy in internal friction or accidental leakage; however, what good is a light-weight engine if it cannot withstand long drives or bumpy roads? According to the Efficient Market Hypothesis, the incorporation of financial derivatives should increase the completeness of the market and therefore the efficiency, but the increases of efficiency should not come at the cost of stability.¹⁴

Rather than efficiency, the focus should be shifted to analyzing cycles of boom and bust, that "financial fragility and recurring cycles of boom and bust (rather than equilibrium) should be the central concepts in theorizing about financial markets and the macro economy. Instead of assuming that markets are efficient and expectations are rational... economists should assume that markets regularly go to extremes and that people forget."¹⁵ In other words, we should be focusing regulations to promote equilibrium instead of allowing the cycles to bounce from extreme highs to extreme lows.

As the system stands currently, negative externalities (by definition) are not priced into system. The extent of these externalities is too material to be ignored. According to the US Treasury Department, the impact of the financial crisis just within the US was \$19,200,000,000,000 of household wealth lost.¹⁶ These conditions forced retirees to return to the workforce,¹⁷ if jobs could be found at all. The drop in the housing market further disrupted the human capital market by preventing existing homeowners from being able to sell their homes to take jobs in other areas of the country, leading to demoralizing long-term unemployment that tore apart American families.¹⁸ The US Treasury Department further estimates that the financial crises led to 8.8

¹³ Buchanan, Mark (2011) "Sand in Machine Makes a Stable Market." *Bloomberg News*. Retrieved March 29, 2015: <http://www.bloomberg.com/news/articles/2011-08-25/sand-in-the-machine-the-key-to-stable-markets-mark-buchanan>

¹⁴ Ibid

¹⁵ Blinder, Alan S. (2015) "Can Economist Learn? The Right Lessons from the Financial Crisis." *Foreign Affairs*. March/April, p.155.

¹⁶ The Financial Crisis Response in Charts. (2012). *U.S. Department of the Treasury*. Retrieved March 29, 2015: http://www.treasury.gov/resource-center/data-chart-center/Documents/20120413_FinancialCrisisResponse.pdf

¹⁷ Stern, Linda (2009) "More Retirees Return to Workforce." *Newsweek*, Oct. 19. Accessed March 30, 2015: <http://www.newsweek.com/more-retirees-returning-workforce-80939>

¹⁸ Peck, Don (2010) "How a new jobless era will transform America." *The Atlantic*, March 1: Accessed March 29, 2015: <http://www.theatlantic.com/magazine/archive/2010/2003/how-a-new-jobless-era-will-transform-america/307919/>

million jobs lost.¹⁹ That is roughly the equivalent of the entire population of the state of New Jersey (the eleventh most populous state in the US) becoming unemployed.²⁰

Using the US Treasury Department's estimate of the 2010 annual household median income of \$49,445²¹, we calculate that the average burden for each of the 115,610,216 US households²² was the equivalent of 3.358 years of lost wages. According to the US Department of Agriculture's Economic Research Service, food insecurity of households in the US increased from 2005 to 2013:

- 2005: 11.0% food insecure; 3.9% very low food security²³
- 2007: 11.1% food insecure; 4.1% very low food security²⁴
- 2009: 14.7% food insecure; 5.7% very low food security²⁵
- 2011: 14.9% food insecure; 5.7% very low food security²⁶
- 2013: 14.3% food insecure; 5.6% very low food security²⁷

The populations most impacted by these conditions are children and the elderly. Unemployment may be falling, but what does that mean if quality of life is not also improving? Clearly, for millions of Americans, the current financial system is not meeting their needs and is instead causing tremendous pain.

¹⁹ The Financial Crisis Response in Charts. (2012) *U.S. Department of the Treasury*. Retrieved March 29, 2015: http://www.treasury.gov/resource-center/data-chart-center/Documents/20120413_FinancialCrisisResponse.pdf

²⁰ State & County Quickfacts from the US Census Bureau. Retrieved March 31, 2015 <http://quickfacts.census.gov/qfd/states/34000.html>

²¹ Ibid

²² USA QuickFacts from the US Census Bureau. *United States Census Bureau*. Retrieved March 30, 2015: <http://quickfacts.census.gov/qfd/states/00000.html>

²³ Nord, Mark; Andrews, Margaret; & Carlson, Steven (2006) "Household Food Security in the United States, 2005." *United States Department of Agriculture: Economic Research Report*. ERR-29 November 2006. Retrieved March 29, 2015: <http://www.ers.usda.gov/publications/err-economic-research-report/err29.aspx>

²⁴ Nord, Mark; Andrews, Margaret; & Carlson, Steven (2007) "Household Food Security in the United States, 2006." *United States Department of Agriculture: Economic Research Report*. ERR-66 November 2007. Retrieved March 29, 2015: <http://www.ers.usda.gov/publications/err-economic-research-report/err66.aspx>

²⁵ Nord, Mark; Coleman-Jensen, Alisha; Andrews, Margaret; & Carlson, Steven (2010) "Household Food Security in the United States, 2009." *United States Department of Agriculture: Economic Research Report*. ERR-108 November 2010. Retrieved March 29, 2015: <http://www.ers.usda.gov/publications/err-economic-research-report/err108.aspx>

²⁶ Coleman-Jensen, Alisha; Andrews, Margaret; & Carlson, Steven (2012) "Household Food Security in the United States, 2011." *United States Department of Agriculture: Economic Research Report*. ERR-141 September 2012. Retrieved March 29, 2015: <http://www.ers.usda.gov/publications/err-economic-research-report/err141.aspx>

²⁷ Coleman-Jensen, Alisha; Gregory, Christian; & Singh, Anita. (2014) "Household Food Security in the United States, 2013." *United States Department of Agriculture: Economic Research Report*. ERR-173 September 2014. Retrieved March 29, 2015: <http://www.ers.usda.gov/publications/err-economic-research-report/err173.aspx>

Clearly stability of the system, which mitigates huge bubbles and subsequent crashes, will serve more citizens in more tangible ways than a system that “efficiently” processes these bubbles and crashes.

II. Proposal for Time Frame of Data Aggregation and the Design and Sources of Data

The system would have the most added value if the data were collected in real time

“Unfortunately, without a comprehensive and timely picture of how securities financing markets were evolving and the risks associated with patterns of behaviour in these markets, authorities found themselves repeatedly dealing with relatively late-stage market developments that sparked systemic risk transmission during [the 2007-09 financial crisis].”²⁸

We believe that the data aggregation system would be of the greatest benefit if data were collected in real time. Technology has increased the speed at which information can be created, gathered and transmitted – the FSB needs to use this to its advantage. Real time data aggregation would allow regulatory agencies and governments to identify areas of risk more quickly and proactively respond during market fluctuations and future runs on the market.

It is easy to see a bank run when retail banking customers withdraw their funds from their savings and checking accounts. They line up in the bank, out the door, and around the corner, not wanting to be the last in line. They know that they should know better, that measures like FDIC insurance should protect them, their savings and their hopes for the kind of life those savings will afford their families. There is the same mentality in runs on the repo market as in retail bank runs, the same palpable sense of fear in traders looking to exit the markets.²⁹ However, it isn’t easy to see when runs on the repo market are happening in real time. This is especially problematic given that, according to the Senior Supervisors Group (SSG), “In particular, the failure of liquidity risk management practices has been at the heart of the evolving crisis in this period.”³⁰

This is the importance of real time data aggregation and analysis—the ability to recognize these trends and behavioral patterns as they are happening. Instant analysis would give national and regional regulatory agencies the chance to stop market runs and fire sales before massive amounts of wealth are destroyed. Think of what could have happened if the US Federal Reserve had access to this information in 2007. Could the Fed have acted like George Bailey in the bank run scene of *It’s a Wonderful Life*, who understood his clients—his neighbors, asked them what they needed to make do, in the process convinced everyone to give up a little bit of something so that the bank could stay open and the town could survive?

²⁸ Strengthening Oversight and Regulation of Shadow Banking. (2013). FSB. Retrieved March 29, 2015: http://www.financialstabilityboard.org/wp-content/uploads/r_130829b.pdf

²⁹ Christakis, Nicholas A. & Fowler, James H. (2009) “The Buck Starts Here.” in *Connected: The Surprising Power of Our Social Networks and How They Shapes Our Lives*. New York: Little, Brown and Company: p.135-171.

³⁰ Senior Supervisors Group (2009) “Risk Management Lessons from the Global Banking Crisis of 2008.” October 21, p.2.

The data aggregation system should be piggybacked onto existing transaction clearinghouse systems

We believe that the best way to obtain real time information of transactions would be to piggyback the FSB's system onto the systems already in place at national and regional transaction clearinghouses. We believe this would solve several potential issues, including double counting and granularity of data. This method could also significantly reduce costs and implementation time.



III. Proposal for Uses of Data

Real-time information should be provided to the market, increasing transparency and access to information

The implications of poor risk management are not strictly limited to the financial industry. Economic downturns impact everyone. They can change the shape of nations and how their citizens live their lives. Money – capital – is the lifeblood of society, the currency of opportunity. As such, it should be the duty of regulatory agencies to inform the public of the levels of risk in the market. Before the financial crisis, the big five investment banks, Bear Stearns, Lehman Brothers, Merrill Lynch, Morgan Stanley and Goldman Sachs, operated with leverage ratios as high as 40-to-1. At leverage ratios this high, “a mere 2.5 percent decline in the value of assets wipes out all shareholder value.” Because most of the borrowing came from off-balance sheet funding through structured investment vehicles, reported levels of leverage were much lower.³¹ If the public were aware of this measure and understood the implications of it, could the crisis have been prevented?

Real time data aggregation in the securities financing markets would allow repos to be evaluated just as exchange traded equities are. To be clear, we are not recommending that the repo rate replace LIBOR or EURIBOR, rather that an algorithm be developed to clearly and concisely communicate the relative risk of the current market. We recommend that this number should be announced on news programs alongside market reports from local exchanges. If investors are informed by the relative performance of stock indexes, then surely they will be informed by the relative risk in the market at any given point in time.

This kind of public attention has many benefits: there is greater transparency between banks and investors; investors would have access to information that would allow them to make more informed financial decisions; the banks and traders will face greater social pressure to make transactions in a responsible manner; this information would enrich economic discussions with respect to pricing and risk.

³¹ Blinder, Alan S. (2013) *After the Music Stopped: The Financial Crisis, The Response, and the Work Ahead*. New York: Penguin: p.50-53.

A recommended model for this algorithm is the American Consumer Satisfaction Index. It was developed roughly 20 years ago but has since become a leading indicator of market trends. Its methodology allows for comparison of companies across various industries. It allows companies to benchmark themselves against competitors and identify best practices.³²

Current stress tests are inadequate as they fail to place financial institutions under real distress; war games would be more effective

Performing stress tests to determine weaknesses and vulnerabilities in a financial institution appear to be good practice in risk management, but we question if current methods are enough. Financial stress tests serves a purpose analogous to medical stress tests in which doctors place the heart under stress, forcing it to work harder, in order to assess for weaknesses and vulnerabilities; however, where financial stress tests fail and medical stress tests succeed is that medical stress tests actually places the system under duress.³³ By placing the patient on a treadmill, the heart is forced to work harder and therefore, forced to expose any vulnerability. Financial stress test by contrary places risk management policies in adverse hypothetical, what-if scenarios, based on historical statistical relationships.³⁴ This retrospective approach fails to predict for the same black-swan bias we discussed previously, exposing risk management strategies to potential oversights.³⁵ Without placing the system in actual financial distress tests for the complex unforeseeable future, stress tests' results are essentially rendered ineffective.

Financial war games can remedy and improve upon these concerns. Military war games have been a long-standing tradition used to best prepare the U.S. Department of Defense, in which military teams are challenged against a simulated, independently-acting opponent. This helps further expose flaws in strategies, offering the ability to revise and strengthen plans. Using these military methodologies, the financial system can be placed under similar simulation, alleviating many of our retrospective approach concerns, better preparing for complex future events, providing a strong foundation for contingency plans.³⁶

We recommend using the real time data to create a virtual copy of the current global market, similar to “sandbox” versions of software used by technology companies for sales and user acceptance testing, in which these war games could be played. Access to this virtual market could be granted to regulatory agencies and academic institutions to develop contingency plans for various market disruptions. In addition to the ineffectiveness of the stress tests, SSG “noted that

³² American Customer Satisfaction Index (2015) “About ACSI.” Retrieved March 29, 2015:

<http://www.theacsi.org/about-acsi/unique-customer-satisfaction-benchmarking-capability>

³³ Baradaran, Mehrsa (2014) “Regulation by Hypothetical.” *Vanderbilt Law Review*. 67.5, p.1283.

³⁴ *Ibid*, p.1279.

³⁵ § 1 *A retrospective proposal is an incorrect approach to financial regulation*

³⁶ Stradtman, Robert (2015) “This is not a test: Simulations and war games help manage risk.” Deloitte Development, LLC. Retrieved March 31, 2015:

<http://www2.deloitte.com/content/dam/Deloitte/us/Documents/human-capital/us-cons-this-is-not-a-test-05102013.pdf>

significant gaps remained in firms' ability to conduct firm-wide tests".³⁷ By using data pulled from the FSB's system rather than relying on banks to conduct their own analyses, war games can begin as soon as the system goes live and will allow for a coordinated effort on a global scale.

IV. Additional Comments

Limiting data collection to just numbers is reductive

To say that the transactions themselves were the cause of the financial crisis is over-simplistic. Though there is no way to capture the following points within the proposed data aggregation system, we believe that ignoring these factors could lead to the creation of future crises. The SSG has stated that in the lead up to the financial crisis, there were a number of institutional flaws at various banks. These include: compensation policies that were out of alignment with risk management protocols; a lack of communication between traders and boards of directors with respect to adherence to risk management procedures; outdated IT infrastructure; and the relatively low status of risk management and control functions.³⁸

To address these issues, we recommend the following:

- In periods of economic growth and upswings that compensation policies of investment banks be closely monitored for their continuous adherence to risk management protocols
- Investment banks should be required to hold internal examinations of risk management protocols for dealers as well as maintaining a record of transactions that violate these policies. The results of examinations and records of transactions should be required to be discussed at board meetings and in employee reviews.
- The FSB needs to consider the burden of banks to improve upon their existing IT infrastructures and evaluate the expected level of compliance. A timeframe for system updates needs to be developed with penalties more not meeting these the required standards.
- Using anthropologists and social and organizational psychologists to address the issues of status banks. Anthropologists are experts in analyzing cultural structures and traditions while psychologists can identify problem areas and perform interventions.

Ethical Considerations for the Long Run

National Public Radio's show *All Things Considered* recently ran a piece about how the scientists who developed CRISPR, the technology to cheaply and easily modify human DNA, are calling for a global moratorium on research relating to the use of their advancements. It is not that their research was faulty or that it would not benefit the study and treatment of diseases. It is not because there was no money to be made in new patents and pharmaceuticals. It is because they do not fully understand how this technology works. For all of the potential benefits that it could

³⁷ Senior Supervisors Group (2009) "Risk Management Lessons from the Global Banking Crisis of 2008." October 21, p.5.

³⁸ Ibid, pp.2-5.

have, it could also lead to the creation of a new disease that would be passed on for generations.³⁹ The implications of genetic research are largely irrelevant to the discussion of financing securities, but what is relevant is the ethical response to this potential Pandora's box, the willingness of the scientific community to admit that they do not know the risks and the call for a global prohibition of the use of these developments until the implications could be fully understood. Would the financial industry be able to do the same? The evidence suggests not.

According to the Bank of International Settlements in Basel, Switzerland, the derivatives market grew five-fold in five years—from roughly \$100 trillion in 2002 to \$516 trillion in 2007.⁴⁰ At the time, the sum of the GDPs of all nations on earth was approximately \$50 trillion and the sum of all real estate on earth was about \$75 trillion, and the total value of the world's stock and bond markets was more than \$100 trillion.⁴¹ Outstanding derivative contracts were double all these sums in 2007.

The anatomy of the global financial market has changed. There has never been a financial system that has this much debt or that has been so intricately connected on a global scale. The question is, do we even know what the risks are if the global markets continue to become more and more leveraged?

In his review of the book *What Have We Learned? Macroeconomic Policy After the Crisis*, Alan S. Blinder discusses the distinction between Keynesian recessions and what he calls Reinhart-Rogoff recessions. These are animals of two different breeds. Keynesian recessions are largely caused and corrected by monetary policies used to control inflations. Reinhart-Rogoff recessions are caused “by huge buildups of debt” and “leave a painful legacy of deleveraging, which makes the recession deep and long and the recovery tepid and slow.” The side effects may include: “limiting the ability to use fiscal stimulus, turning fiscal policy pro-cyclical, or even threaten sovereign default.”⁴²

Taken alone, the Reinhart-Rogoff recession is a formidable enough challenge to overcome. Let us now consider a Reinhart-Rogoff recession through the perspective of Hyman Minsky. “As long as the good times roll, people lose sight of the bitter lessons of the past, claiming that ‘this time is different.’ ... The crashes themselves always seem to come as surprises.”⁴³ This is what caused the most recent financial crisis. The combination of these two phenomena seem to us like a game of Russian roulette. Knowing all that we know about economics and human behavior—the fallibility

³⁹ NPR (2015) “Scientists Urge Temporary Moratorium on Human Genome Edits.” *All Things Considered*. March 20. Retrieved March 29, 2015:

<http://www.npr.org/blogs/health/2015/03/20/394311141/scientists-urge-temporary-moratorium-on-human-genome-edits>

⁴⁰ Farrell, Paul B. (2008) “Derivatives the new ‘ticking bomb.’” *MarketWatch*, March 10. Accessed March 30, 2015: <http://www.marketwatch.com/story/derivatives-are-the-new-ticking-time-bomb>

⁴¹ Ibid

⁴² Blinder, Alan S. (2015). Can Economist Learn? The Right Lessons from the Financial Crisis. *Foreign Affairs*. March/April, p.156.

⁴³ Ibid, p.155.

of logic and society's short-term memory—why not use this to advantage in creating a compliance regime?

What will the impact of the next financial crisis be? Or is it possible that it can be contained – dare we say even be prevented – by limiting the introduction of new types of securities and derivatives until regulatory agencies have had the chance to research the implications of these new instruments? Organizations around the world, such as the Food and Drug Administration, do this for the pharmaceutical industry by preventing new medications from entering the marketplace before thorough testing. Don't financial regulatory agencies bear the same burden to protect citizens?

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Technical Response, Part 1 (Fordham College Rose Hill, MA and BA in Economics Team)

Through the establishment of the proposed two-tiered, five-stage data collection and aggregation process, the FSB aims to ensure: (i) maximum consistency in data collection by national/regional authorities; (ii) minimization of double-counting at the national/regional and global level; (iii) adequate distribution of information collected; and (iv) proper confidentiality. Our comments on the proposed data architecture and suggestions towards best achieving these aforementioned goals are as follows:



I. Proposed Definitions

Q2-1. Does the proposed definition of repos provide a practical basis for the collection of comparable data across jurisdictions as well as the production of comprehensive and meaningful global aggregates?

Repos are the sale of an asset that is fixed with the promise to repurchase at a specific future date, or on demand, at a specific price.⁴⁴ They are also the same as collateralized loans, but treated differently if there is bankruptcy or crisis. The market for repos is significant because the securities lending market plays a key role in going short of both the fixed income and equity markets. Hence it becomes important that the FSB understands the operation of the transaction and decides how to monitor it, which also emphasizes that repos and securities lending are traded on over-the-counter markets. Repos consist of classic repos and sell/buy back transactions, which are legally independent for spot and forward legs.⁴⁵ There are two types of repurchase agreements: first, the bilateral repo, which is an agreement between two institutions where settlement is either delivery or payment; second, the tri-party, which provides collateral management and settlement services, valuing the collateral, and collateral adheres to lenders eligibility requirement.⁴⁶ The repo market is essential to financial markets because it is the main source of short-term funding and is critical for secondary market liquidity.

Q2-7. Does the proposed definition of security lending provide a practical basis for the collection of comparable data across jurisdictions as well as the production of comprehensive and meaningful global aggregates?

Securities lending is a transaction of securities, namely equities and bonds, from lender to a borrower where the lender requires that the borrower transfer cash or securities as a form of

⁴⁴ Coppeland, A., Martin, A., & Walker, M. (2014) "Repo Runs. Evidence from the Tri-Party Repo Market." *Journal of Finance*, Vol. LXIX, No. 6.

⁴⁵ Global Financial Markets Association (2015). Retrieved March 25, 2015: <http://www.gfma.org>

⁴⁶ Coppeland, A., Martin, A., & Walker, M. (2014) "Repo Runs. Evidence from the Tri-Party Repo Market." *Journal of Finance*, Vol. LXIX, No. 6.

collateral.⁴⁷ The transaction has an agreement to terminate the loan at a fixed date or if demanded by either lender or borrower returning the same securities.⁴⁸ The most important impact in the market is that securities lending helps financial institution execute trade settlements in case of a failed transaction. Lenders use securities lending to ensure profit maximization by borrowing. The financing of securitization helps facilitate the security delivery of a short sale. The benefits of securities lending are the improving of market liquidity with a potential for reducing the cost of trading as well as the increasing of market efficiency.⁴⁹ The problem with securities lending is the increased interconnectedness, which poses a contagion threat in economic recessions such as the Global Financial Crisis.

Q2-14. Does the proposed definition of margin lending provide a practical basis for the collection of comparable data across jurisdictions as well as the production of comprehensive and meaningful global aggregates?

Margin lending is defined as collateralized loans by financial institutions—usually a bank or broker—to their clients seeking to leverage their trading position. Because margin lending is conducted over the counter (OTC), there is global legislation to have it cleared like derivatives via Central Counterparties (CCPs).⁵⁰ The Federal Reserve System introduced controls of margin in the year 1934. Over the years, these controls have changed a few times, but since the boom in the stock market in the 1990s, current regulation has set a minimum equity position on the date of financed security transaction.⁵¹ The FSB believes that including transaction data for margin lending in global data is important because it exhibits similar economic trends with repo and lending securities and, as a result, poses a financial stability risk. The market of repos and securities lending, which is part of the collateralized loans, is important to trading in fixed income securities and equities.⁵² Repos, securities, and margin lending are all types of transactions from which the FSB wants more transparency through reporting.

The proposed definitions of repos, securities and margin lending thus help explain and emphasize the need for data reporting or transparency in general in this sector. Adjustments need to be made so that some of the definitions can be in line with global market standards and in line with all the financial institutions.⁵³ However, there is a need to both regulate those specific sectors and

⁴⁷ Dive, M. (2011) *Developments in the global securities lending*. Bank of England. Quarterly Bulletin.

⁴⁸ Global Financial Markets Association (2015) Retrieved March 25, 2015: <http://www.gfma.org>

⁴⁹ Dive, M. (2011) *Developments in the global securities lending*. Bank of England. Quarterly Bulletin.

⁵⁰ Fortune, P. (2000) "Margin Requirements, Margin Loans and Margin Rates: Practice and Principles." *New England Economic Review*, Sept./Oct.

⁵¹ Shiller, R. & Bartlett, B. (2000) "Margin calls: Should the Fed step in?" *The Wall Street Journal*, Monday, April 10, p.A46; Ricke, M. (2003) "What is the link between margin loans and stock market bubbles?" University of Muenster, Dept. of Banking.

⁵² Krishnamurthy, A., Nagel, S. & Orlov, D. (2012) "Sizing up Repo," Northwestern and Stanford University Working Paper.

⁵³ Bundesverband Investment und Asset Management (BVI) (2015). Retrieved March 25, 2015: <http://www.financialstabilityboard.org/wp-content/uploads/BVI-on-1411DEG.pdf>

create an environment that is conducive for business. All the definitions that the FSB adopts to ensure that the rules are consistently applied have to be clear and unambiguous. It is also suggested to have legal agreements that are mutually exclusive for repo, securities lending and margin lending, such that a transaction conducted under a legal agreement listed for repo cannot be considered a stock loan for reporting purpose.⁵⁴

II. Regarding Data Architecture

Q3-2. Do you have any other practical suggestions to reduce any additional reporting burden and improve the consistency of the global data collection?

The FSB details possible sources by which data may be collected beyond the bilateral counterparties in a trade, such as trading venues, securities settlement systems, CCPs and tri-party agents. Compiling data directly from these entities would better ensure the accuracy, consistency, and timeliness of data collection and reduce the likelihood of double counting. Individual market participants would bear reporting responsibility only in the case that the information collected from these alternative sources is inadequate (i.e., in the case of non-centrally cleared bilateral transactions). Additionally, data aggregation and classification would be most consistently performed under a “centralized approach” with the use of unique identifiers, such as LEI and ISIN.⁵⁵ A centralized approach would ensure high data quality and a uniform classification scheme, and impose less burden and costs on reporting entities, which might then be passed onto clients and consumers.

Q3-3. Do the proposed measures for minimizing double-counting at the global level constitute a practical solution to the problem?

We believe that the minimization of double-counting is best handled by a granular approach, in which reporting entities would be required to report data by individual transactions that include the counterparty identifiers to the national/regional aggregator. Subsequently, the national/regional aggregator would identify counterparties that are reporting entities and correct double-counting.

Q3-4. Are there any confidentiality issues that you consider relevant for the global securities financing data collection other than those explained above? If so, please provide any practical suggestions to overcome such issues?

In regard to confidentiality, it is important to carefully manage information so that data in which counterparties could potentially be identified are kept private. In effect, only aggregated data is sent to the FSB. Clear procedural rules on the treatment of confidential data should be defined,

⁵⁴ Global Financial Markets Association (2015). Retrieved March 25, 2015: <http://www.gfma.org>

⁵⁵ Legal Entity Identifier (LEI) is a unique ID associated with a single legal entity. See Global Financial Markets Association for more information (<http://www.gfma.org/initiatives/legal-entity-identifier-%28lei%29/legal-entity-identifier-%28lei%29/>). An International Securities Identification Number (ISIN) is assigned to securities to facilitate unambiguous clearing and settlement procedures. See International Securities Identification Number Organisation for more information (<http://www.isin.org/isin/>).

and the specification by national/regional authorities of the degree of confidentiality as one of “public,” “restricted,” or “confidential” data would be prudent.

III. Regarding the Implementation of a Pilot Program

Q6-3. Do you agree that a pilot exercise should be conducted before launching the new reporting framework? If so, are there any practical suggestions that the FSB and national/regional authorities should consider when preparing the pilot exercise?

Implementing the data collection techniques on a smaller scale would be useful for a number of reasons. Pilot programs, according to sociological research practice, are either “mini versions of a full-scale study (also called ‘feasibility’ studies), [or] the specific pre-testing of a particular research instrument such as a questionnaire or interview schedule.”⁵⁶ In general, flaws uncovered during pilot testing can be fixed without altering an established practice for the firms being monitored by the FSB. One of the most important goals of data collection is to determine what the most effective policy should be to prevent another global financial crisis. The pilot program would alert regulators to dangerous lending practices currently in place, which would give direction in forming policies to counteract dangerous risk.

Finalizing the data necessary for risk mitigation policies

The pilot study may reveal that not all of the transaction data initially gathered for diagnosing the best possible policy will need to be regularly monitored when that policy goes into widespread effect. This is not to suggest that in the future the FSB should not try to collect all categories of transaction data. Keeping clear records for future trend analysis is prudent. However, it may come to light that not every category will require the monthly analysis turnover suggested for monitoring in page 36 of the Consultative Document. If this is the case, the trial run will prevent resources from being eaten up in reporting and aggregating transaction data that will ultimately go unused.

Establishing the Schedule for Data Aggregation

Having a pilot program would help determine realistic time goals for reporting, collecting, and analyzing data. In section 4 of the Consultative Document, a monthly reporting schedule is suggested, but the pilot may reveal that this schedule is insufficient for regulators, or conversely, that it is too demanding for traders to report.⁵⁷ The speed of data analysis and the subsequent turnover in verifying and publishing collected transaction data during the pilot phase would give the FSB a better idea of how fast regional and national regulators could reasonably catch risky business practices.

Potential to Expedite Data Analysis

⁵⁶ van Teijlingen, E. & Hundley, V. (2002) “The Importance of Pilot Studies.” *Nursing Standard*, 16(40): 33-36.

⁵⁷ Financial Stability Board (2014) “Consultative Document: Standards and Processes for Global Securities Financing Data Collection and Aggregation.” November 13.

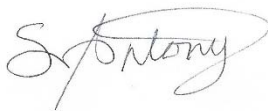
In addition to allowing the FSB to estimate a reasonable reporting schedule, the proposed pilot program may also help by improving that schedule over time. Once the sample program goes into effect, banks and traders will be reporting repo, security, and margin lending transactions on a regular basis, and data aggregators such as CCPs and tri-party agents will be monitoring and publishing this data continuously, most likely on the suggested monthly basis. Having a small sample of the banking population getting used to reporting, as well as giving the aggregation and analysis end of the process time to practice, may actually speed up or streamline the process by the time the full program is implemented. The suggested pilot program here would not only act as a “feasibility study,” but would also serve the secondary purpose of testing out the instruments by which transaction data is aggregated.

Addressing the Concern of Sample Reintegration

“The Importance of Pilot Studies” notes that including the sample trial group in the population studied when the actual program goes live could skew data because the original sample is more familiar with the technology.⁵⁸ However, one of the goals of the pilot program is to get every firm reporting efficiently and to turn over the data for use regularly. If the banks from the pilot were already familiar with reporting, it would be a definite benefit to the full program. The FSB program, unlike a clinical study, will be ongoing. Therefore the issue of including trial data or the sample participants from the trial in the larger “study” or aggregated data does not detract from the validity of the results.

Acknowledged Drawbacks of a Pilot Study

There are a few potential issues inherent to using a representative sample in a pilot program. While the FSB’s proposed pilot can catch many design flaws, it cannot catch problems related solely to handling a high volume of transaction data. The very nature of a pilot study is to use a significant but limited sample. It will also take time to determine precisely which firms would form this representative sample of the full financial trading population. Organizing and selecting which banks and traders to look at would take time and resources. The traders studied could be picked at random, but that would not guarantee that a program that worked for these institutions would work for everybody. In spite of these drawbacks, conducting a pilot program would still be worthwhile. The benefits of improving the reporting and aggregation framework through practice remain, even if the choice of subjects may be flawed.



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⁵⁸ Ibid, p.2

Technical Response, Part 2 (Fordham Gabelli School, BA in Business Candidate Team)

While we support the FSB's general mission to study the global securities lending industry in order to identify threats to global financial stability—as well as its willingness to examine whether such threats should be addressed through already present regulation being applied to parties and counterparties involved with repos, securities lending, and margin lending—after an extensive analysis of the issues covered in the consultative document, our team has concluded that there are several explicit questions that could be problematic if not properly addressed.



We are currently satisfied with how the data provision architecture is proposed to be structured, with both parties reporting trades eventually to the national/regional level authorities, who then pass on the data to a global authority that directs the analyzed information to the appropriate regulatory body. However, in order to maintain a high level of accuracy for global securities financing data, the collection and aggregation processes need to eliminate loopholes, provide a larger amount of transparency when it comes to transactions with foreign counterparties, protect against cyber attacks when it comes to storing and transferring the data, and provide a seamless process for banks accepting the new regulation, so as to eliminate backlash. In recognizing these faults and proposing addenda to the proposed standards and processes, we believe a much more cohesive and accurate representation of FSB's mission can be enacted through regulatory processes for global data collection and aggregation for the global financial lending industry.

I. Summary

For the data that will be collected and aggregated, the data architecture was proposed with the intention of inculcating the maximum consistency in the data collection by national/regional authorities, eliminating double-counting of the data collected and aggregated, and transferring the data to the global authority without double counts or any other problems. Creating a system of data collection that accurately and effectively allows for the frequent flow of data while simultaneously maintaining a high level of said data is a complex task. In general, the proposed data certainly has the potential to aid in the missions and mandates of the FSB and other regulatory and advisory bodies; however, many of the specific processes proposed within the data architecture have potential pitfalls that must be avoided.

In a two tier system, the first tier will consist of any entities involved with the conducting of trades in the domain of repos, securities lending, and/or marginal lending, and their respective counterparties. Data will be collected based upon regional/jurisdictional standards and flow to the national/regional authority, who will then process the raw data to get it to meet the standards

laid out for data elements. In the second tier, the global aggregator obtains the data, eliminates any remaining double-counts (which may still remain due to cross-border transactions), checks the data for any possible faults, standardizes and compiles the data into the final aggregates, and releases the proper aggregates to the public and appropriate regulatory and advisory agencies.

We have identified several potential problems regarding the validity and the disclosure of the data, the collection methods used by the national/regional authorities, and the security of the data aggregation, particularly at the global level. Our main commentary will consist of a resolution to these issues.

II. Recommendation of Ratio-Based Guidelines

Guidelines must be established on what to look for in the data and what actions the FSB will take based on the data to make it useful. This should be done before commissioning the project.

While much of the data collected is purely quantitative, using ratios may be the best way to determine the changes in risk in the financial markets.

The first issue that must be addressed is making sure the data is useful and creating guidelines as to what changes in the data will trigger caution among members of the FSB and how to proceed accordingly as new data comes in. For example, at what point does the FSB decide that the amount of margin loans outstanding is too great when compared to the value of the collateral securing those loans? The data that is to be collected has the potential to be very useful in identifying how the market is doing and how risky the environment is, but only if these guidelines are created and issues addressed.

Using ratios within the data may be the best way to go about determining such guidelines. For example, let's say that overall the amount of margin loans has increased 10% year over year. One might propose that the market is riskier because there is more leverage. However, this assumption may be very flawed because the population of people investing in these deals that involve these margin loans may have increased 20% or the current investors are on average investing 20% more of their money into these deals (higher per capita investment), so the market may actually be less risky. Therefore, determination of the ways the data will be used to aid in more effective regulation of the financial markets is the first step to making this project a success or failure. The data collected is useless if it is not examined and acted upon, and this project will take up constant resources of the FSB and the countries involved.

III. Using Encryption to Ensure Cyber Security

Using a 2048-bit RSA encryption and only transmitting encrypted data over SSL-encrypted connections ensures the data is protected, even if intercepted.

As it stands, there are multiple confidentiality issues of keeping secret the information that is collected and aggregated, as well as preventing domestic and international cyber attacks on the

data. With the recent attacks on banks like J.P. Morgan⁵⁹ and on health care providers like Anthem⁶⁰ fresh in our memories, it is imperative that cyber security be given the highest importance when collecting and aggregating data. The agents conducting repos and other relevant transactions already use the most advanced security measures available to them, and the data transmissions and aggregated data provided through this framework must use the same level of security measures. *Data should always be encrypted with 2048-bit RSA encryption to ensure that even if the data should be intercepted, it cannot be decrypted. Data transmission should only take place over SSL-encrypted connections, and only data that is already encrypted should be transmitted, to ensure that the data is protected from hackers.*

IV. Reporting Population Size

We are in favor of a market representative subset, excluding the very small transactions that are negligible compared to the overall population of data.

We propose that the top 80-90% of samples be taken from each country to ensure that all countries are represented in the data regardless of the differences in average repo size between countries.

All banks and reporting institutions are included in the sampling because even small institutions can carry out considerably large transactions, which would be necessary in calculating the global/national aggregate. Though most of the small institutions do not have the resources to make very large transactions, the quantity of these small transactions can add up. Therefore, several comparatively smaller transactions could amount to the same as one transaction from a larger institution. For example, suppose a big bank, on average, reports a transaction of \$10 million and a small bank/institution, on average, reports a transaction of only \$1 million. Since the quantity of these smaller banks/institutions is greater than the larger banks/institutions, ten transactions of \$1 million of the smaller banks would account for the same amount as one transaction of \$10 million for the larger bank. These values become very important in adequately and efficiently calculating the data aggregate for both national and global level, therefore, small banks/institutions should be included in the calculation.⁶¹

⁵⁹ Goldstein, M., Perloth, N. & Silver-Greenberg, J. (2014) "Cyberattack at JPMorgan Chase Also Hit Website of Bank's Corporate Race." *The New York Times*, October 15. Retrieved March 27, 2015: http://dealbook.nytimes.com/2014/10/15/cyberattack-at-jpmorgan-chase-also-hit-website-of-banks-corporate-race/?_r=0

⁶⁰ Abelson, R. & Goldstein, M. (2015) "Millions of Anthem Customers Targeted in Cyberattack." *The New York Times*, February 5. Accessed March 27, 2015: <http://www.nytimes.com/2015/02/05/business/hackers-breached-data-of-millions-insurer-says.html>

⁶¹ The FSB document gives us two possible approaches in reporting population size. While the full population approach is important for calculating the regional/national aggregate, the market-representative subset approach is necessary for calculating global aggregate due to the sheer number of transactions involved. Though the FSB document proposes a threshold on the size of the transaction we,

This is not to say all transactions should be counted. While small transactions add up, it would be troublesome and inefficient to report transactions of the size under a certain amount. Given the sheer size of the global markets, with over 4 trillion dollars in repurchase turnover each day in the United States alone, amounts in the bottom 10-20% of all the transactions should be considered insignificant.

In order to limit insignificant amounts from creating unnecessarily burdensome data collection and reconciliation, we propose that each regional/national authority should determine a hard cutoff level, approximately equal to the 80-90% figure, and only require transactions larger than that level be reported. For example, if 80% of repos in the United States are larger than \$100,000, only repos \$100,000 or larger are required to be reported, whereas if 80% of repos in Indonesia are larger than \$50,000, only repos of \$50,000 or larger should be required to be reported. The authorities can determine this through a pilot period in which all transactions are reported to find this number if necessary. Additionally, authorities must ensure that this cutoff is kept up-to-date, on an annual basis, in order to preserve the integrity of the aggregate figures.⁶²

V. Data Should be Collected Using a Standardized Computer Program Maintained by the FSB

We believe that the most efficient way to collect comprehensive data of the highest possible quality during the first tier of data aggregation is through the use of a standardized computer program.

We find that the use of a computer program for aggregation would be ideal because it would reduce the costs of compliance.

The use of a computer program solves the issue of double counting, assigning an ID tag to each transaction and letting the computer handle the deletion of duplicate IDs.

However, we do think giving members the option to aggregate using human power would lead to more data being collected and a better overall aggregate.

The data collection process is the lynchpin of a successful aggregation program. If data collection is done in a standardized and rigorous manner, the rest of the program will run much more efficiently and produce more accurate aggregates. *We believe that the most efficient way to collect comprehensive data of the highest possible quality during the first tier of data aggregation*

on the contrary, recommend using only top 80-90% on average of all the transactions, from each country, in calculating the global aggregate. This method will adapt well to inflation, market conditions, interest rates and currency rates.

⁶² It is important to note that we propose the highest percentage within each country to be counted, not overall aggregate, because we do not want to leave out vital data from the individual nations when reporting. The top 80% of transactions in the world may include 95% of the transactions in the United States, but only 50% of the transactions in a country like Indonesia. By collecting a set percentage within each country, it allows the FSB to collect meaningful data on the individual countries as well as a meaningful global aggregate, and identify more acutely where the risks are in the market.

is through the use of a standardized computer program. Every reporting entity should have access to this program to enter records of its transactions, and each transaction should be securely transmitted to an encrypted database. Using a computer program will speed up the data collection process and offer reporting entities a way to connect their existing records to the data collection process, allowing for automation where possible.⁶³

When transactions are recorded in this way, there are two possible pathways for aggregation. The first possibility closely follows the two-stage aggregation process outlined in the Consultative Document. In this scenario, each regional/national authority maintains its own database of transactions under its purview, and each authority is in charge of aggregating its numbers, removing redundant transactions, and submitting aggregate data to the FSB. While this method is more work for the regional/national authorities, it does provide them with the assurance that the data has been processed to their satisfaction and that it has been processed in compliance with all relevant laws and regulations.

The second possibility involves more automation, cutting down the costs of compliance with the FSB's recommendations. *In this scenario, the FSB maintains a single computer database to which all reporting entities submit directly;* the computer program then processes each submission according to a set of rules that corresponds to the regional/national authority with jurisdiction over said reporting entity before adding the submission to the global aggregates. The regional/national authorities are solely responsible for creating and maintaining a set of rules for data that comply with their own laws and regulations, but they are not themselves responsible for processing the data (instead, the computer program does that).

We find that the second pathway for aggregation would be more ideal because it would reduce the costs of compliance. Less human resources would be needed to aggregate and process the data, and less capital resources would be required from each regional/national authority (who would not be responsible for running the servers to host their own databases of transactions). While the ideal solution would have every national/regional authority agree to submit data in this way, we recognize that some authorities would wish to process the data from their jurisdictions themselves and submit data through the first pathway.

Therefore, we propose that the FSB recommend that data be submitted through the second pathway, while still allowing authorities to submit it through the first pathway if they should so choose. This way the FSB can still aggregate the most data possible in the unlikely case that a party prefers to use human power in the reporting of these financial transactions.

The use of a computer program as described above is useful in processing data to eliminate double counting and verify transactions. Essentially, each reporting entity will attach a unique

⁶³ The cost of developing the computer program and maintaining the FSB database are relatively small; funding could come from any unallocated funds in the FSB budget, through additional funding from the Bank for International Settlements, or from a fee assessed on member institutions.

identification tag for each transaction⁶⁴; if both parties in a transaction report the transaction, the computer program will recognize that the transactions have the same ID tag and only count them toward the aggregate totals once. Using a computer program also facilitates verification by allowing automatic connections to sources of verified transaction data, rather than relying on humans verifying transactions by hand.

1. Subpoint: Criticism of Currency Reports in C/A process

Included in the computer aggregation would be a currency converter that would mark the current exchange rates and convert the transactions into any currency desired. This would also allow the reporting countries to report the transaction in their native currency.

Next, there is the issue of what currency to report in the data collection process. All trades, regardless of which party or counterparty is responsible for the initial report of the data in the software to be developed, should be reported in the primary currency in which the transaction took place. For example, if there was a repo that created liquidity in the form of 1,000 Euros, it would be entered in terms of EUR. The subsequent exchange of EUR/USD would then follow based upon an automated process in the software that uses real-time market currency rates. One of the many algorithms available in the software would account for the current exchange rate, and would perpetually update, allowing for the USD conversion to be shown. Thus, data aggregators would have the option of viewing all trades in their initial primary currencies or the secondary currencies to which they have been converted. This provides a comprehensive solution to all potential currency issues.

2. Subpoint: Valuation of Collateral, Problem posed is changing market prices

There is also the issue of how to value the collateral. *We are in favor of a mark-to-market approach, where the computer program values the collateral at the current market value.* Holistically, there are three possible approaches in the valuation of collateral: the sales-comparison approach, the income-capitalization approach, and the cost approach.⁶⁵ Our decision to use the sales-comparison approach (mark-to-market) factors liquidity to be the highest concern. For each transaction that involved the use of collateral, an algorithm in our to-be-developed software will generate a detailed comparable analysis that will correctly appraise the collateral based upon the forces of supply and demand setting a price level for the same collateral types in different transactions.

The data pulled into the software will be from a reliable source, such as the Multiple Listing Service (MLS).⁶⁶ This will allow for market reaction and provide the most transparency of information.

⁶⁴ The money lender is in charge of generating the tag and giving it to the counterparty; in the case that the money lender is not a reporting entity, the counterparty should generate its own tag.

⁶⁵ Farm Credit Administration (2015) "FAQs About Collateral Evaluations." Retrieved March 27, 2015: <https://www.fca.gov/about/collateralFAQs.html#marketvalue>

⁶⁶ Multiple Listing Service (2015) "America's Real Estate Portal." Retrieved March 28, 2015: <http://www.mls.com/>

This is not necessary for highly liquid assets such as stocks and bonds and a different approach may even be used; however, for collateral of lower liquidity, like real estate, a detailed comparable analysis is vital to the correction valuation of the collateral. Naturally, the market value in a comparable analysis is prone to fluctuation based upon shifts in the housing market; however, it still gives a more accurate representation for what the collective property is worth. The value of the collateral, then, will be sent to the appropriate national/regional authority, or to the global regulator also via the software platform, depending on which path was adopted.

VI. Data Confidentiality

We agree with the Consultative Document that data should be sorted into three levels of confidentiality. At each tier and with each data point, the determination must be made whether the data is public, restricted, or confidential. Considering that many of the transactions concerning repos, securities lending, and margin lending will contain identifiers,⁶⁷ transaction values, specific equity or debt instrument information, along with the counterparties responsible for any given transaction, data confidentiality is of the utmost importance. To that end, we offer the following recommendations on the process of classifying data.

1. Subpoint: Software Determines a Flagging System to Maintain High-Level of Confidence

The computer program described in Section VII provides an efficient way to ensure that data receives the appropriate confidentiality level. Depending on whether the FSB chooses to implement the program according to the first (less-automated) scenario, the second (and recommended) scenario, or a mix of the two, the confidentiality process can proceed in one of two ways. In the first scenario, regional/national authorities assign confidentiality flags to the aggregates that they compute. When the flagged data is submitted to the FSB, the FSB computer program recognizes the confidentiality flags and treats the data appropriately. In the second scenario, just as a regional/national authority creates rules on how its aggregates are computed, it also creates rules on which aggregates are given each confidentiality level. These rules can be as simple as “aggregate data on principal amount should be public,” or they can incorporate more nuances, such as conditions that must be met for a given aggregate to get a certain confidentiality level. The program then uses these rules to assign the correct confidentiality flags to the regional/national aggregates.

In either scenario, the program recognizes the confidentiality flags when computing the global aggregates and ensures that the global aggregates respect the confidentiality of the underlying data. *We recommend that the FSB urge regional/national authorities to submit data via the second method because it reduces the potential for human error and provides the maximum possible safeguards for confidentiality.*

⁶⁷ Identifiers may include Social Security Numbers (SSNs) for individuals, Employer Identification Numbers (EINs) for corporate forms, and Committee on Uniform Securities Identification Procedures (CUSIP) numbers for financial institutions.

With the mechanism for classifying data in place, we now turn to our recommendations on how to decide what data should be assigned each confidentiality level. Any information that can be used, reused and redistributed by anyone and to anyone without any restrictions is *public data*. In the collection and aggregation process, for the information to specifically qualify for public disclosure, several conditions must be met. First, the original data collection should be conducted anonymously. Next, the original data should be purged of any direct or indirect identifiers that may risk the disclosure of the subjects' identities. Then, the original data must be purged of any identifiers of human subjects or person and finally, the original data must be purged of any variables that could reveal the identity of the subject(s).⁶⁸

Certain information should be shared with non-involved parties, and not disclosed to the public. We will classify this data as restricted and will refer to any information that is relevant and shared with other parties with legitimate policy and authorizations but not revealed to the public. Restricted data has several preconditions before being put in the limited circulation, as described above. First, it should not reveal the identity of the counterparties in any fashion. Then, the information contained in the data must be of relevance to a third party, and finally, the third party must be of the correct and relevant authorization required to access the data.

For the utmost security, a final classification of the data produced in the collection and aggregation process will be titled confidential. This will refer to any information that can reveal the identity of the counterparties should not be shared at all and should only stay in FSB's realm. Like public and restricted data, confidential contains a set of conditions that must, at all costs, be met. These conditions are that the identity of the counterparties should not be at risk to be revealed and that no single entity, unless by federal/government mandate, has access to the information.

VII. Foreign Entity Complications when Reporting

A severe problem arises when foreign entities are involved in transactions concerning repos, securities lending, or margin lending for the data collection and aggregation process. The currently proposed regulation states that "national/regional authorities should define an appropriate consolidation scope that would not hamper the global comparability and aggregation of data," whereas reports involving foreign counterparties would be flagged and obliged to follow FSB standards for individual transactions.⁶⁹ We currently advise the same as the FSB's suggestions to have any "EU financial or non-financial entity" automatically required to report when it engages in a transaction with a U.S. counterparty.⁷⁰ This allows for the standardization of data across all fronts and does not skew results just because one or more parties is internationally located. It is

⁶⁸ It is in the best interest of the FSB not to release information to the general public that contains sensitive information as it would mitigate all of the profitability of financial institutions that trade in these settings, as well as pose financial and personal security risks for the individuals involved with these transactions. Please see 3.2.2 "Data Confidentiality" of the Consultative Document for further details.

⁶⁹ Financial Stability Board (2014) "Consultative Document: Standards and Processes for Global Securities Financing Data Collection and Aggregation." November 13, p.36.

⁷⁰ Ibid, p.45.

typical for when a domestic party and a foreign counterparty are engaged in a transaction that the quality and speed of communication between the two is diminished. To mitigate this deficiency, the counterparties must abide exactly by the regulations set in place, as no extra time or leniency should be given to foreign counterparties, otherwise consistency and accuracy of transaction data is at risk of being faulty.

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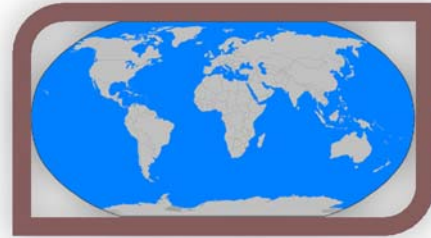
Technical Response, Part 3

(Fordham Gabelli School, MS in Professional Accounting Candidate Team)

I. Data Definitions

FSB should clarify the definition of repos to include “object of purchase” rather than collateral, and “cash and cash equivalents” rather than “cash.”

We do not agree with the proposed definition of repos. We are of the view that the proposed definition does not reflect the prevailing market conditions as currently provided in the international/national master securities repurchase transaction agreements. The current European Union (EU) legislation does not contain in the definition of any repos element, which refers to the term collateral. Because we think the purchase price of the repo is not always equal to collateral, we suggest that FSB should use “object of purchase” instead of “collateral”. Furthermore, in the FSB’s definition, we find that it uses “cash” to define the exchange. However, we think the word “cash” should be replaced by “cash and cash equivalents.” Sometimes companies need repo agreements to finance in exchange for things other than cash, such as notes payable, stock or PP&E. Therefore, we think it would be fruitful for FSB to alter its definition as follows:



A repurchase agreement is defined as “an arrangement involving the provision of securities or other financial assets (~~“collateral”~~ “object of purchase”) in exchange for ~~cash~~ cash and cash equivalents. (Spot leg) with a commitment to repurchase the same or similar ~~collateral~~ object of purchase at a fixed price (forward leg) either on a specified future date or on demand (“open” or extendable repos).”

II. Data Elements

Additional repo data elements – such as transactions executed with a central bank – should be included in the FSB global securities financing data collection and aggregation

The consultative document proposes that the aggregated national/regional data submitted to the FSB should exclude central bank repo transactions. Still, we know that central banks around the world also conduct many repurchase agreements. In China, for example, the central bank usually uses repos and reverse repos to control the release of currency. Likewise, in the U.S., the tools used by the Federal Reserve System to achieve its monetary policy objectives includes the temporary addition or subtraction of reserve balances via repurchase and reverse repurchase agreements in the open market.⁷¹ When using a repo agreement, a central bank is more likely to

⁷¹ Federal Reserve Bank of New York (2007) “Repurchase and Reverse Repurchase Transactions.” Retrieved March 29, 2015: <http://www.newyorkfed.org/aboutthefed/fedpoint/fed04.html>

call in currency and when using the reverse repo agreement, a central bank is more likely to release currency into the market. Central banks often adjust their official repo and reverse repo rates as a means of influencing the cost/benefits of borrowing/lending by financial market participants and institution.⁷² Therefore, we think it is important that reporting entities not only report private repo market activity but also central bank repos in a consistent manner.

At the same time, including central bank transactions within consideration also causes two problems. First, reporting central banks may be asked to present their confidential data to FSB and usually other central banks. Central banks and other authorities typically have a statutory obligation not to disclose information about individual institutions except for specific purposes. The potential confidentiality issues, in turn, hinder data sharing among reporting central banks and limit the details that can be publicly disseminated. Indeed, the enhancements are likely to introduce a sharper differentiation between data released to the general public and data released only to reporting central banks, where policies and procedures are in place to safeguard the confidentiality of unpublished data.

Second, the volume and complexity of the enhanced data make it more difficult to maintain data quality. For example, inconsistencies in data retrieved from different forms and systems, or across different breakdowns, are more noticeable in granular data than in more aggregated data.

Third, granular data tend to be less complete. While including repo data of central bank increases the details available to the FSB to analyze, these details are more likely to have gaps than more aggregated data. Gaps arise from differences in the details reported by each central bank as well as confidentiality restrictions.

Such gaps complicate the analytical process and require FSB to consider carefully how any gaps might bias the analysis. That said, the enhancements support a richer analysis of risks to financial stability. So the FSB should plan steps to help central banks build universal principals when presenting data. In particular, the FSB should consider how to use banking statistics in financial stability analysis.

FSB should expand certain data elements, including relevant major currencies, repo rates, and indicators of collateral quality

In general, we agree with the proposed definitions of the data fields. However, we would like to make the following comments.

First, we recommend that the individual currency reporting profile (see Table 2) be expanded to include the currency of all reporting jurisdictions, or at a minimum include AUD - Australian dollars and KRW - Korean Won.

⁷² Central Bank News (2015) "Central Bank Information." Retrieved March 29, 2015: <http://www.centralbanknews.info/p/central-bank-information.html#B7>

In Table 3, the buckets for the repo rate seem to need a repo rate range instead of an accurate number. A 0.5% repo rate may not be considered appropriate for various repo markets. For example, Australian repo market where the greater majority of transactions are secured by High Quality Liquid Assets⁷³ as prescribed for this jurisdiction. In China, it usually uses seven-day repo rates – 3.88% as integral repurchase rate in Jan 2015.⁷⁴ In India, the Policy Repo Rate was 7.5%⁷⁵ in March 2015. However, Sweden has a negative repo rate, which is -.025%⁷⁶ in Mar 2015. So we think FSB should make some change to this number.

In Table 4, collateral quality is also an element that influences repos and reverse repos. Different collateral quality may have impact on final agreement. So we think FSB should give more details on collateral quality. For example, it should list out different investment grade on collateral, such as AAA, BBB, etc.

III. Data Confidentiality

FSB should clarify its thoughts on data confidentiality

We agree with the conceptual framework laid out by the Consultative Document—that national and regional regulators keep confidential any data where counterparties could potentially be identified, and send only aggregated data to the FSB.

However, the FSB has not made transparent its thoughts on which kind of information it believes can be reported to the public and which data cannot be. We suggest that FSB provide its recommendations as soon as possible so that various parties' rights can be guaranteed.

While the FSB addresses a number of confidentiality concerns in the Consultative Document, we stress that much of the data being reported to the national level will be highly confidential and may be afforded confidential treatment at the national level. Therefore, it is essential that this data not be transmitted beyond the national level, including any follow up data requests, to ensure, for example, that any national confidentiality protections are not compromised. Furthermore, we hope that FSB can establish regulations that mainly focus on confidential issues.

Data collection also needs rules and regulations, similar to auditing principals and Code of professional conduct, to control data collection procedure and to ensure data confidentiality. Meanwhile, we recommend that FSB build up a third party at the global level to supervise confidential issues during the collection and aggregation process. For instance, the Securities and Exchange Commission (SEC) is an organization that holds primary responsibility for enforcing U.S.

⁷³ Klein, M. (2015) "Getting Around the Safe Asset Shortage – Australian Style." *The Financial Times*, January 13. Retrieved March 29, 2015: <http://ftalphaville.ft.com/2015/01/13/2085482/getting-around-the-safe-asset-shortage-australian-style/>

⁷⁴ Sun, H. (2015) "China Money rate Drops as PBOC Injects Funds via Reverse Repos," *BloombergBusiness*, January 26. Retrieved March 29, 2015: <http://www.bloomberg.com/news/articles/2015-01-27/china-money-rate-drops-as-pboc-injects-funds-via-reverse-repos>

⁷⁵ Central Bank Rates (2015) "Worldwide Central Bank Rates." Retrieved March 29, 2015: <http://www.cbrates.com/>

⁷⁶ Ibid

federal securities laws, proposing securities rules, and regulating the securities industry, the nation's stock and options exchanges, and other activities and organizations, including the electronic securities markets in the United States. So data aggregation in security also needs an organization like that to supervise confidentiality.

IV. Data Collection

FSB should maintain flexibility at the national/regional Level

We appreciate, and fully support, the FSB's express recognition that "data collection processes at the national/regional level could be organized in different ways."⁷⁷ As the FSB correctly explains, this flexibility is necessary to allow the data collection process to reflect the diversity of national and regional practices, procedures, and systems for clearing and settling securities financing transactions. In China, a lot of medium-sized entities focus on data collection and then they send the data to national level. We think it means that authorities should gather the information they need in the most efficient way reasonably available.

At the same time, the Consultative Document also cites that "however, a wide divergence in the national/regional data collection processes may pose practical challenges in the aggregation of data at the global level and compromise the quality of the global aggregates. To overcome such problems, there should be consistent data elements definitions as well as minimum granularity and collection frequency, in order to produce meaningful global aggregates."⁷⁸ We also think that for the national/regional level, the national aggregators can present two reports. The first one is designed by themselves according to different constructions. The other one is presented using a universal format and rules to present to the global level. In this way, the diversity of national and regional practices can be reflected as well as the difference among different national authorities can be minimized.

V. Double Counting

FSB should further improve the reconciliation of the problem of double counting

Assuming that at least FSB member jurisdictions will provide the data, a two-side reporting scheme, where both counterparties report the trade, would maximize the data collection coverage.... However, collecting data from both parties of securities financing contracts introduces double counting as data from the same transaction could be reported twice.

From those public or non-public entities, this problem is easier to solve because they have knowledge and staff to do. And according to different security types, we need organizations or the national level aggregators to use different methods to collect data. For example, our Consultative Document cites: the two-sided approach is suggested for stock data on repos and securities lending. Reverse repos' flow data are based on a one-sided reporting scheme since they

⁷⁷ Financial Stability Board (2014) "Consultative Document: Standards and Processes for Global Securities Financing Data Collection and Aggregation." November 13, p.24

⁷⁸ Ibid, p.24

are meant to look at the turnover of credit exposures so that only the cash leg is required. Also, data for margin lending would be based on one-sided reporting because of the characteristics of these transactions and the nature of the intermediary-client relationship. Many organizations now present new monthly estimates of U.S. cross-border securities investment, combining information from detailed annual Treasury International Capital (TIC) surveys with new information from the TIC Form SLT⁷⁹ and use Form SLT to collect data when meeting cross-border situations. Because the Form SLT collects data from both custodian and issuers, double counting issues most likely exist in the Form SLT data.⁸⁰

So we suggest that through the first and second tier, organizations can collect data at the security level instead of at the transaction level. This allows for easier correction of misreporting or pricing errors, and also for necessary adjustments to the data to account for potential double-counting of securities held. These adjustments, though small in the aggregate, tend to be concentrated in particular securities types such as asset-backed securities.



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⁷⁹ U.S. Dept of Treasury (2015) "TIC Form SLT and Instructions." Retrieved March 29, 2015:

<http://www.treasury.gov/resource-center/data-chart-center/tic/Pages/forms-slt.aspx>

⁸⁰ Bertaut, Carol & Judson, Ruther (2014) "Estimating U.S. Cross-Border Securities Positions: New Data and New Methods." *Board of Governors of the Federal Reserve System, International Financial Discussion Papers, No. 1113*, August. Retrieved March 29, 2015:

<http://www.federalreserve.gov/pubs/ifdp/2014/1113/ifdp1113.pdf>

Appendix 1

2012 National Customer Satisfaction Index (NCSI-UK) Scores: Industry Benchmarks

