Basel III and Its Impact on Broker-Dealers

A Presentation at Compliance 2015 Panel: Keeping Your Financial House in Order: Cash Management, Prime Broker Relationships and Custody Issues

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Agenda

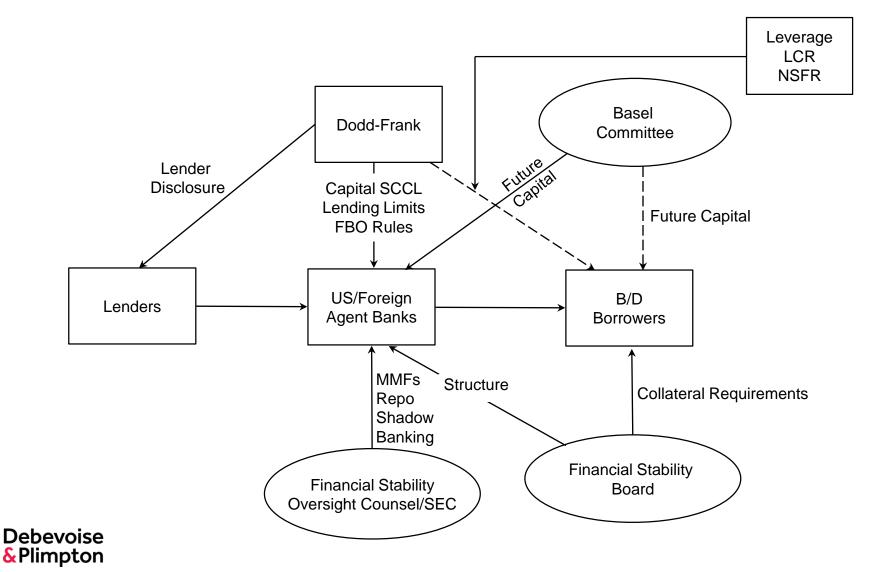
In this presentation we focus on securities financing transactions ("SFTs") as a paradigm for the analyses because of their prevalence

- Overview of Regulatory Landscape
- Challenges for Broker-Dealers
- Certain Strategies for Broker-Dealers
- Select Examples
- Appendix

Overview of Regulatory Landscape

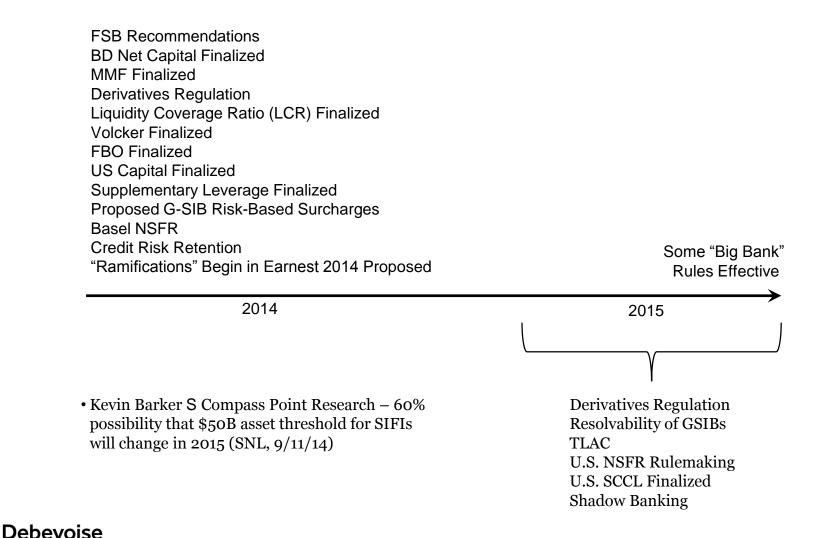


Counterparty-Based Activities What Frameworks Are Relevant?

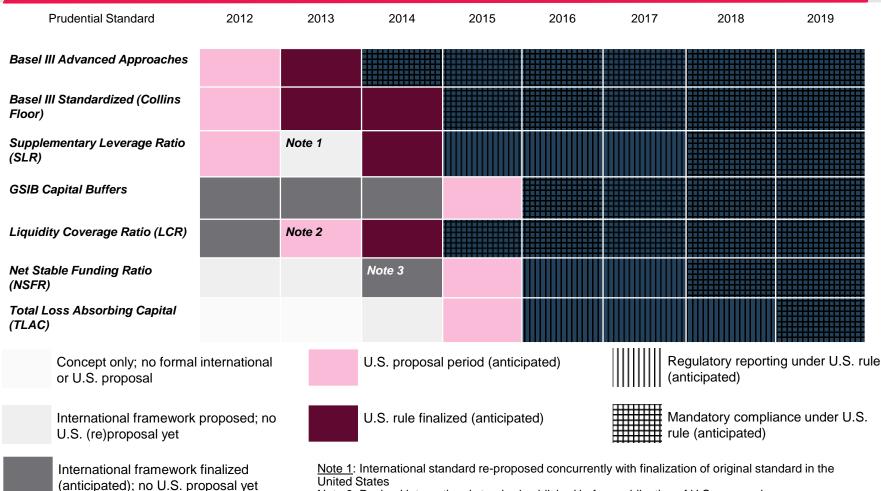


Where We Are – Where We're Going (Maybe)

Elimpton



The Timelines to Get There



<u>Note 2</u>: Revised international standard published before publication of U.S. proposal <u>Note 3</u>: International standard re-proposed and finalized in the same year

Challenges for Broker-Dealers



Overarching Challenges

The New Normal

- New rules are driven by international regulation (Basel III) more than Dodd Frank
 - Less likely to change even if a Republican wins the Presidency
 - Federal Reserve sees international rules as a "floor" and generally toughens the standards
 - Despite lengthy transition periods, markets are forcing prompt compliance
 - Must adapt quickly to new environment
- New rules increase burdens for counterparty-based activities
 - Fed Governor Tarullo (in charge of rulemaking) focused on securities financing transactions and derivatives
 - Not just about bank safety; focus on macroeconomic issues making the rules tougher to argue against

Overarching Challenges

US Broker-Dealers Adapting to the New Bank Framework

- US Broker-Dealers not "built" for bank capital rules
 - Financial crisis converted large BDs to Bank Holding Company structures
 - BDs subject to bank rules because of BHC parents
 - BDs never required to have bank-style capital or liquidity (e.g., deposits)
- Rules impose greater counterparty burdens on different entities
 - Supplemental leverage ratio burdensome for all
 - Capital RWA/SCCL primary burdens bank's dealing with BDs
 - NSFR/LCR can be more burdensome for BDs
- Competition from Shadow Banking Sector
 - Growing disparity between banking sector and "shadow banking"
 - FSB/US exploring additional burdens on shadow banking industry
 - » But material disparities likely to remain
- Bank-Affiliated BDs can succeed through strategic thinking

Specific Broker-Dealer Challenges

New Bank Framework

- Supplemental Leverage Ratio
 - Penalizes use of cash collateral, a major issue for US market
 - Penalizes large holdings of low-risk, low-yield assets (e.g., cash and Treasuries)
- Liquidity Coverage Ratio (LCR)
 - Focus on day-to-day outflows and inflows from transactions, whether or not "on balance sheet"
 - May necessitate greater retention of unencumbered HQLA
- Net Stable Funding Ratio (NSFR)
 - Imposes longer-term funding requirement based on asset quality and maturity profile
 - Penalizes maturity transformation

Specific Broker-Dealer Challenges Shadow Banking and Tax Challenges

- FSB and Fed "Shadow Banking" Recommendations
 - Require higher margin/structural changes, including capital surcharge on top of G-SIB buffer
 - Correlates with FRB wholesale funding/volatility concerns and associated capital changes
- Financial Transaction Tax (FTT)
 - Could bring EU repo markets to standstill

Potential Practical Ramifications

- Increased costs for dealers could make some trades uneconomic

Specific Broker-Dealer Challenges SEC Focused on Leverage and Liquidity

- SEC staff is working on a leverage rule for broker-dealers that would supplement net capital requirements
 - Big issue is the treatment of repos and whether they should be subject to a capital charge similar to equity positions
- SEC staff is examining broker-dealer liquidity
 - Issues include the appropriate measure of liquidity and the types of acceptable collateral
 - SEC anticipates balancing act with the LCR to avoid or mitigate the impact of potentially two sets of liquidity calculations
 - In parallel, the SEC is also conducting liquidity risk exams, which may result in additional qualitative requirements



US Broker-Dealer Financial Responsibility Rules

- Broker-dealers have existing financial responsibility rules from the SEC, including net capital (Rule 15c3-1) and customer protection (Rule 15c3-3) requirements.
- Net capital essentially requires the broker-dealer to maintain more than one dollar of highly liquid assets for each dollar of unsubordinated liabilities. The broker-dealer first calculates its net assets, which includes all "allowable" assets less applicable haircuts. Next, the broker-dealer compares the net liquid assets against its chosen financial ratios, which can be either: (a) the 15-to-1 aggregate indebtedness to net capital ratio; or (b) the 2% of aggregate debit items ratio. The Rule also sets a floor amount.

US Broker-Dealer Financial Responsibility Rules continued

- The customer protection rule sets forth the methods by which a brokerdealer must obtain and retain possession and control of customer funds and securities, which includes securities associated with sec lending and repo agreements. The rule also requires broker-dealers to "lock up" customer cash ("free credit balances") and other credit items, less monies customers owe to the broker-dealer, by making a deposit into a "Reserve Bank Account." These steps help ensure that the broker-dealer does not impermissibly use customer assets for its own business purposes.
- For bank-affiliated brokers, the SEC requirements apply first, but the capital, leverage and liquidity requirements from banking regulation apply as the broker is rolled up into the larger organization.

Certain Strategies for Broker-Dealers



- Banking entities are changing counterparty transactions to adapt
- Changes in pricing on certain trades, depending on the economics for the broker-dealer or for the bank
- Banks more likely to consider acting as principal rather than agent, especially for conduit lending and asset exchanges
- US broker-dealers seeking to use a broader range of collateral, but limited by Rule 15c3-3 requirements
 - Various initiatives with SEC underway
- Differences between US and non-US requirements can allow non-US banks to place exposures outside the US
- Look for a broader set of "tools in toolbox"

Exploring Asset Exchanges and Derivatives

- Asset exchanges go by many names, including collateral swaps and collateral upgrades
- The idea is to give the counterparty a financial instrument you do not need in exchange for one you need
- This technique can be used to obtain HQLA or appropriate collateral for posting at a central counterparty
- If documented properly to keep the received asset off balance sheet, it can provide helpful securities while avoiding NSFR, capital and leverage implications
- Derivatives also can lessen impacts because the rules focus not on notional amount but margin posted or the net assets and liabilities (except when booked at the broker-dealer)

Central Counterparties; New Counterparties

- Central counterparties can allow for aggregate netting, resulting in a more holistic approach that lessens overall obligations, rather than having to apply the rules on a transaction-by-transaction basis
- One potential downside of central counterparties is the need to post margin, and the implications of margin under the rule sets
- Looking to new counterparties, especially non-financial corporate clients and public sector entities, can provide some relief, especially with regard to longer-term funding needs
- It is unclear how actively those clients want to participate in the financial markets

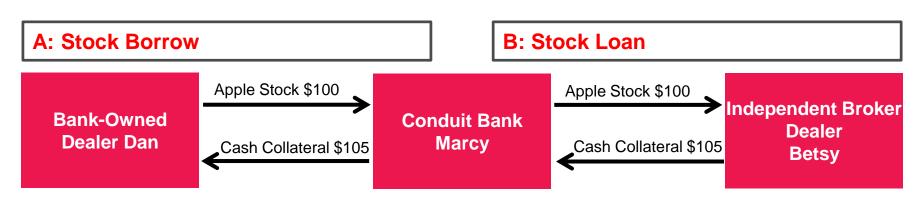
Netting; Lengthening the Term (Tenor)

- Master netting and cross netting arrangements provide possibilities for reducing usage of HQLA, ASF, and RWA
- Lengthening the term of funding agreements and debt issuances is driven in part by LCR needs, in part by NSFR requirements and in part to raise additional capital
- The use of evergreen provisions also can assist in creating longer tenor without sacrificing as much flexibility



Select Examples





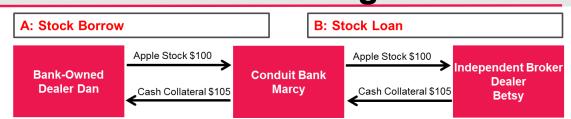
Facts

- Marcy borrows \$100 of Apple stock from Dan, under a standard MSLA that permits recall of the stock at any time. Marcy then loans the Apple stock to Betsy for \$105 cash collateral, also under a standard MSLA with immediate recall. Marcy uses the collateral from Betsy to post to Dan. Marcy is running a matched book.
- Assuming the securities loan is not afforded sale treatment under GAAP, Marcy records a cash receivable from Dan on the asset side of his balance sheet and a cash payable to Betsy on the liability side of his balance sheet.
- The Apple stock Marcy borrows from Dan and lends to Betsy are not recorded by Marcy on his balance sheet but remain on Dan's balance sheet pursuant to GAAP. Dan records a cash payable to Marcy on the liability side of his balance sheet.

Regulatory Analysis



• Dan (Dealer)



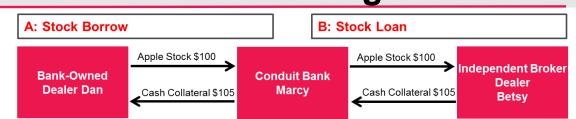
- Dan has an outflow in the amount of \$52.50 (50% of \$105) for cash he will repay to Marcy upon the transaction's unwinding. 12 C.F.R. 249.32(j)(1)(iv) (with the Apple stock presumably qualifying as Level 2B HQLA). Because of this outflow, Dan will require HQLA in order to remain LCR-neutral after the transaction. While the stock remains on Dan's balance sheet, it is encumbered because it is pledged to Marcy and thus would not constitute eligible HQLA for Dan. 12 C.F.R. 249.22(b)(1). The cash received by Dan will qualify for HQLA only if it is conveyed to Dan's parent bank for use as Reserve Bank balances in a manner that also satisfies the operational requirements for eligible HQLA. 12 C.F.R. 249.20(a); 249.22(a). In the next hypothetical, we show one method by which Dan can obtain the needed HQLA.
 - » If the stock transferred had not been HQLA (irrespective of whether it qualifies as eligible HQLA for Dan), Dan would have an outflow of \$105, resulting in a larger HQLA requirement. 12 C.F.R. 249.32(j)(1)(vi).
 - » If the security loaned had been Treasuries, Dan would not have an outflow, resulting in no HQLA requirement for this particular transaction (although the 75% cap on inflows across all transactions still applies). 12 C.F.R. 249.32(j)(1)(i).



Regulatory Analysis

LCR (Continued):

• Marcy (Conduit Bank)

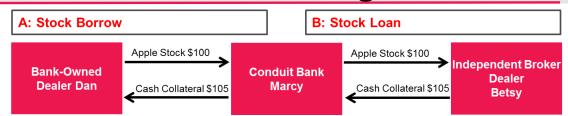


- Marcy has both an inflow in the amount of \$52.50 (50% of \$105) for the cash to be received from Dan and an outflow in the amount of \$52.50 (50% of \$105) for cash to be paid to Betsy. 12 C.F.R. 249.32(j)(1)(iv); 249.33(f)(1)(v) (with the Apple stock presumably qualifying as Level 2B HQLA). Because Marcy has a matched book, they negate each other for net outflow purposes, subject to the bank-wide cap of inflows at 75% of outflows. 12 C.F.R. 249.30(a)(2) Thus, Marcy may require 25% of \$52.50 (\$13.13) of HQLA to remain LCR-neutral regardless of the matched outflow and inflow. Because the securities loan is for less than 30 days, the Apple stock does not qualify as HQLA for Marcy. 12 C.F.R. 249.22(b)(5).
 - » If the stock transferred had not been HQLA (irrespective of whether it qualifies as eligible HQLA for Marcy), Marcy would have an inflow of \$105 and an outflow of \$105, resulting in a larger HQLA requirement (potentially 25% of \$105). 12 C.F.R. 249.32(j)(1)(vi); 249.33(f)(1)(vi).
 - » If the security borrowed/loaned had been Treasuries, Marcy would not have an inflow or an outflow, resulting in no HQLA requirement. 12 C.F.R. 249.32(j)(1)(i); 249.33(f)(1)(iii).
- Betsy (Independent Broker Dealer)
 - Betsy is not subject to the LCR because she is not affiliated with a bank.

Regulatory Analysis

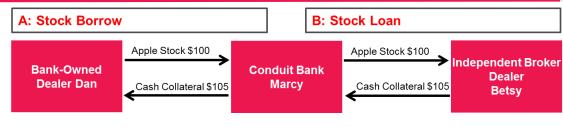
NSFR:

• Dan (Dealer)



- Dan has an NSFR mismatch. For NSFR purposes, the Apple stock continues to belong to Dan. NSFR ¶ 32.
 The Apple stock on his balance sheet incurs a 50% RSF factor (a charge of \$50), but the cash he receives from Marcy has a 0% ASF factor. NSFR ¶¶ 40(a), 25(a). Dan will need to find ASF elsewhere.
- Marcy (Conduit Bank)
 - Marcy also has an NSFR mismatch. The cash loan to Dan will incur a 15% RSF (a charge of \$15.75), but the cash received from Betsy has a 0% ASF factor. NSFR ¶¶ 39(b), 25(a). Marcy will need to find ASF elsewhere.
- Betsy (Independent Broker Dealer)
 - Betsy is not subject to the NSFR because she is not affiliated with a bank.

Regulatory Analysis



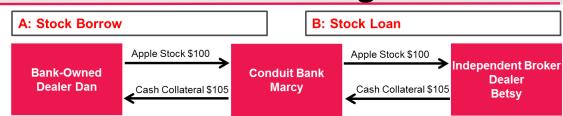
Regulatory Capital: (Collateral Haircut Approach)

- Dan (Dealer)
 - Dan may net the \$105 cash collateral received from Marcy against the \$100 exposure on the stock lent to Marcy, resulting in a -\$5 exposure to Marcy. 12 C.F.R. 217.37(c)(2), 217.132(b)(2)(i). Dan will, however, have to take a 10.6% (15% ÷ sqrt(2)) market volatility haircut on the stock, which may result in total risk weighted assets of approximately \$5.6. 12 C.F.R. 217.37(c)(3), 217.132(b)(2)(i).
- Marcy (Conduit Bank)
 - Marcy has exposure to both Dan and Betsy. Marcy's exposure to Betsy is essentially the same as Dan's exposure to Marcy, resulting in a capital charge of approximately \$5.6. Marcy's exposure to Dan is the \$5 over-collateralization increased by a 10.6% market volatility haircut on the stock. Marcy's total risk weighted assets would be approximately \$21.2. 12 C.F.R. 217.37(c)(2), (3), 217.132(b)(2)(i), (ii).
- Betsy (Independent Broker Dealer)
 - Betsy is not subject to regulatory capital requirements because she is not affiliated with a bank.

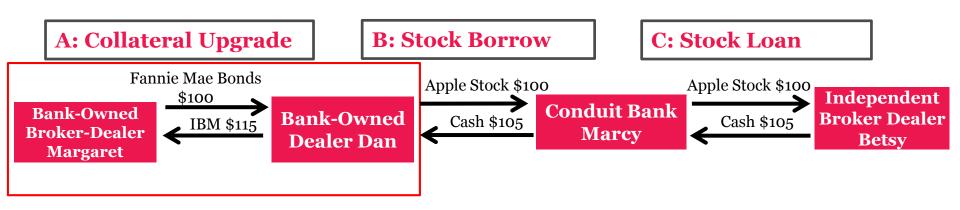


Regulatory Analysis

Leverage Ratios:



- Dan (Dealer)
 - Dan must increase the denominator of both of his leverage ratios by \$105 as a result of an increase in assets to offset the \$105 payable (cash collateral). 12 C.F.R. 217.10(c)(4)(ii)(A), (F). Please note that Dan's exposure to Marcy is over-collateralized in favor of Dan. If the value of the stock ever exceeded the value of the cash collateral, then Dan may have to increase the denominator of his supplementary leverage ratio to account for the counterparty credit risk to Marcy. 12 C.F.R.217.10(c)(4)(ii)(F).
- Marcy (Conduit Bank)
 - Marcy must increase the denominator of both of his leverage ratios by \$105 for the cash collateral received from Betsy (in the form of an on-balance sheet receivable), and in the case of the supplementary leverage ratio, must add a counterparty credit risk measure of \$5 resulting from his over-collateralization exposure to Dan. 12 C.F.R. 217.10(c)(4)(ii)(A), (F). Please note that Marcy's exposure to Betsy is over-collateralized in favor of Marcy. If the value of the stock ever exceeded the value of the cash collateral, then Marcy may have to increase the denominator of his supplementary leverage ratio to account for the counterparty credit risk to Betsy. 12 C.F.R.217.10(c)(4)(ii)(F).
- Betsy (Independent Broker Dealer)
 - Betsy is not subject to leverage ratio requirements because she is not affiliated with a bank.



Facts

- In order to raise the additional HQLA that will be required for him to engage in the conduit lending transaction discussed in hypothetical 3 (and other transactions), Dan engages in a collateral upgrade transaction with Margaret.
- Dan pledges \$115 of IBM (which, for purposes of this hypothetical, we assume qualifies as Level 2B HQLA) to Margaret and borrows \$100 of Fannie Mae bonds (which, for purposes of this hypothetical, we assume qualify as Level 2A HQLA) from Margaret, subject to an agreement to return the Fannie Mae bonds to Margaret in 35 days (needs to be beyond 30 days term or evergreen). Margaret has provided a collateral upgrade to Dan.
- Margaret holds the Fannie Mae bonds on her balance sheet, while Dan holds the IBM shares on his balance sheet.
- Collateral upgrades can be bilateral or tri-party transactions. For simplicity, the hypothetical is a bilateral collateral upgrade. The regulatory analysis for a tri-party transaction would not be significantly different.



- Margaret (Broker Dealer)
 - Margaret does not have an inflow or an outflow (on the day the transaction is entered into) because the upgrade won't be unwound for more than 30 days. 12 C.F.R. 249.32(j), 249.33(f). Thus, Margaret does not have to hold additional HQLA because of this transaction.
 - Margaret can count the IBM stock she receives from Dan as HQLA, so long as the stock (1) does not cause her level 2 HQLA amount to exceed 40% of her total HQLA, (2) does not cause her Level 2B HQLA amount to exceed 15% of her total HQLA and (3) meets the operational and generally applicable requirements for HQLA. 12 C.F.R. 249.21(d), (e); 249.22(a), (b).
- Dan (Dealer)
 - Dan can count the Fannie Mae bonds that he received from Margaret as HQLA, so long as the bonds (1) do not cause his Level 2 HQLA to exceed 40% of his total HQLA and (2) meet the operational and generally applicable requirements for eligible HQLA. 12 C.F.R. 249.21(d); 249.22(a), (b).
 - Dan does not have an inflow or an outflow (on the day the transaction is entered into) because the upgrade won't be unwound for more than 30 days. 12 C.F.R. 249.32(j), 249.33(f). Thus, Dan does not have to hold additional HQLA because of this transaction.





- In the case of a collateral upgrade, banking organizations should exclude from their assets securities that they have borrowed (where they do not have beneficial ownership) and should include securities that they have lent. NSFR ¶ 32.
- Margaret (Broker Dealer)
 - Margaret includes her Fannie Mae bonds in her NSFR calculation. Because Margaret was already including her assets in her NSFR calculations, this transaction is NSFR neutral for her.
 - » Margaret receives a 15% RSF charge of \$15 for her Fannie Mae bonds. NSFR ¶ 39(a).
- Dan (Dealer)
 - Dan includes his IBM stock in his NSFR calculation. Because Dan was already including his assets in his NSFR calculations, this transaction is NSFR neutral for him.
 - » Dan receives a 50% RSF charge of 57.5 for his IBM stock. NSFR \P 31; 40(a).





- Margaret (Broker Dealer)
 - Margaret can net out the Fannie Mae debt securities posted and the IBM stock received, leaving her with a -\$15 exposure to Dan on the Fannie Mae debt securities. 12 C.F.R. 217.31(c)(2), 217.132(b)(2)(i). Margaret will also have to take a 10.6% (15% ÷ sqrt(2)) haircut on the IBM stock and a 0.7% to 4.2% (1% or 6% ÷ sqrt(2)) on the Fannie Mae bonds, resulting in total risk weighted assets ranging from approximately \$0 to \$1.44. 12 C.F.R. 217.37(c)(3), 217.132(b)(2)(ii).
- Dan (Dealer)
 - Dan can net out the Fannie Mae bonds received and the IBM stock posted, leaving him with a \$15 exposure to Margaret on the IBM stock. 12 C.F.R. 217.37(c)(2), 217.132(b)(2)(i). Dan will also have to take a 10.6% (15% ÷ sqrt(2)) haircut on the IBM stock and a 0.7% to 4.2% (1% or 6% ÷ sqrt(12)) haircut on the Fannie Mae bonds, resulting in total risk weighted assets ranging from approximately \$27.90 to \$31.44. 12 C.F.R. 217.37(c)(3), 217.132(b)(2)(ii).





- Margaret (Broker Dealer)
 - The transaction results in an additional on-balance sheet exposure to Margaret for the IBM stock received, though Margaret's leverage ratio remains unchanged due to the special rules for security-for-security repostyle transactions until Margaret re-pledges or sells the IBM stock. 12 C.F.R. 217.10(c)(4)(ii)(A). Please note that Margaret's exposure to Dan is over-collateralized in favor of Margaret. If the value of the Fannie Mae debt ever exceeded the value of the stock collateral, then Margaret may have to increase the denominator of her supplementary leverage ratio to account for the counterparty credit risk to Dan. 12 C.F.R.217.10(c)(4)(ii)(F).
- Dan (Dealer)
 - The transaction results in no additional on-balance sheet exposure to Dan under GAAP. Dan's leverage ratio remains unchanged, while Dan's supplementary leverage ratio denominator increases by the \$15 counterparty credit risk related to the IBM stock lent. 12 C.F.R. 217.10(c)(4)(ii)(A), (F).

- This presentation highlights general principles. As such, it should be used for informational purposes only and should not be construed as legal advice
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Appendices



Final U.S. Capital Rules



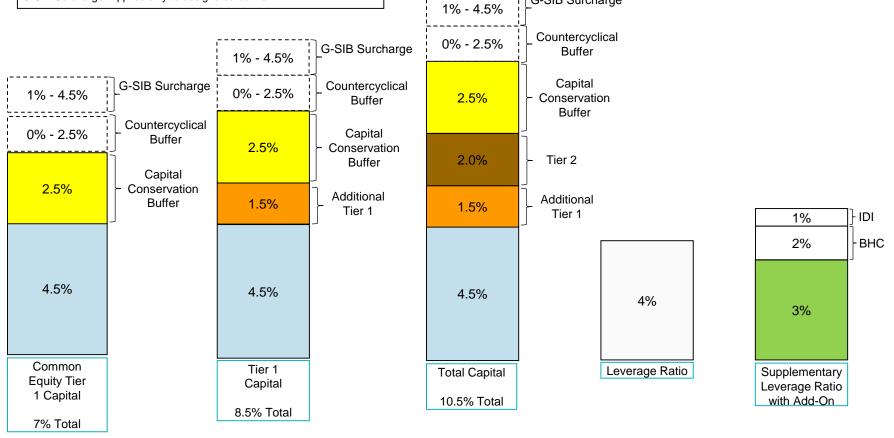
Capital Ratios *End-State Ratios with Supplementary Leverage Ratio Proposal*

Capital Conservation Buffer:

Additional buffer to avoid limitations on capital distributions & discretionary bonuses. Progressive limitations for banks with capital levels below buffer. Countercyclical Buffer: Starts at 0 but could be as high as 2.5% upon agency discretion (*e.g.*, during period of excessive credit growth). Applies only to Advanced Approaches Banks *before* Capital Conservation Buffer. G-SIB Surcharge: Applies only to designated banks

Supplementary Leverage Ratio: Tier 1 capital to total leverage exposure must be \geq 3%. Applies only to Advanced Approaches institutions. Incorporates certain off-balance sheet assets in denominator (*e.g.*, guarantees, financial standby letters of credit, forward agreements).

G-SIB Surcharge



Standardized Rule - Comparison Snapshot Commercial Loans

| Loan Type | Historical Risk Weight | New Risk Weight (Effective 2015) |
|---|---------------------------|-------------------------------------|
| Corporate exposures | 100% | 100% |
| Qualifying Broker-Dealer | 20% | 100% |
| Banks | 20% | 20% |
| QCCPs | N/A | 2% |
| Assets not assigned to a risk weight category | 100% | 100% |

Basel Committee Limits on Large Exposures

Finalized – April 2014

Intended full Implementation – January 1, 2019



Single-Counterparty Exposure Limits: Basel Framework – Counterparties/Limits

- Places limits on consolidated exposure to counterparties daily limit / monthly compliance reports
- General limit of 25% of banking group's Tier 1 Capital of exposure to any single counterparty (and affiliates)
 - E.g., December 31, 2012 Bank Tier 1 capital = \$150 B
 - Bank standard exposure limit \$37.5 B
- More stringent limit of 15% of credit exposure of G-SIBs to other G-SIBs
 - Bank \$150 B current exposure limit = \$15 B
- Note US proposal from January, 2012 would impose a 10% limit, but U.S. agencies may reconsider based on Basel

"Counterparties" Limit

- Exposures to a counterparty aggregated across the covered company and all its subsidiaries
 - "Exposure" = on/off-balance sheet in banking/trading book
 - "Subsidiary" broadly defined as directly or indirectly "controlled" (including BHC Act standards)
 (50% of any class of voting securities) by covered company (systems issue)
 - » 25% voting or equity in US proposal
- "Counterparty" includes:
 - Company and all its subsidiaries collectively
 - Unlike U.S. proposal, sovereigns excluded

- Approach
 - Bank <u>must</u> recognize eligible CRM if recognized for risk capital
- Amount
 - Unfunded credit protection amount
 - Simple approach market value of collateral
 - Comprehensive Approach Value after supervisory haircut
- Recognition
 - When must recognize reduction to counterparty, also must recognize to CRM provider
 - Netting permitted for loans vs. deposits



Final Liquidity Coverage Ratio



Overview

- Adopted by the Federal Reserve Board, OCC and FDIC
- Imposes a minimum quantitative liquidity standard
 - Full LCR for the very largest banks
 - Modified LCR for "smaller" large banks
- Requires banks to hold enough eligible High Quality Liquid Assets ("HQLA") to cover "Total Net Cash Outflows"
- "Super-equivalent" to the 2013 Basel III LCR for the Full LCR banks
 - Phases in by January 1, 2017 rather than January 1, 2019
 - More stringent standards for HQLA
 - More stringent treatment of outflows to address maturity mismatch ("peak-day" vs average)

Scope and Transition

Transition Timeline

January 1, 2015

- <u>Monthly</u> calculations begin for the Full LCR banks
- 80% phased-in

July 1, 2015

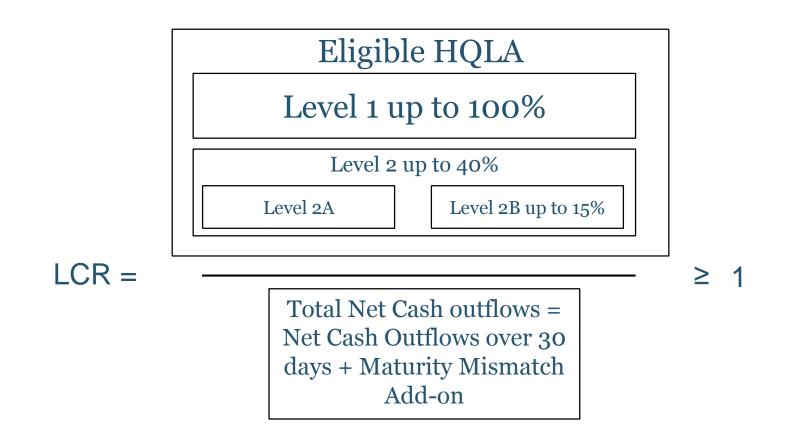
• <u>Daily</u> calculations begin for the Full LCR banks that have holding companies with >\$700B or more in total consolidated assets or >\$10T in assets under custody

January 1, 2016

- <u>Daily</u> calculations begin the Full LCR banks
- <u>Monthly</u> calculations begin for the <u>Modified LCR</u> banks
- 90% phased-in

January 1, 2017 • 100% phased-in for both the Full LCR banks and the Modified LCR banks

January 1, 2019 • 100% phased-in under the Basel III LCR





Total Net Cash Outflow Overview

- "Total Net Cash Outflow" on the calculation date may have two components
 - Part 1: Netting all cash outflows and inflows that mature within 30 days
 - » -PLUS- (for the Full LCR banks)
 - Part 2: Computing an "add-on" that captures the peak-day maturity mismatch for <u>certain categories</u> of outflows/inflows (Maturity Mismatch "Add-On")

» Not applicable to Modified LCR banks

- New approach no longer "front-loads" all open maturity outflows onto day 1
- 30-day instead of 21-day time horizon as proposed for Modified LCR banks

Net Stable Funding Ratio



BIS NSFR Ratio and Approach

Available amount of stable funding ("ASF") \geq 100%Required amount of stable funding ("RSF") \geq 100%

- ASF: calculated by multiplying a banking organization's liabilities and capital by the assigned factors and then summing the weighted figures.
- RSF: calculated by multiplying a banking organization's assets by the assigned factors and then adding the weighted figures.



- Designed to reflect stability of liabilities across 2 dimensions:
 - 1) Funding tenor Generally, long term deemed more stable
 - 2) Funding type/Counterparty Retail generally more stable than wholesale
- Timing:
 - Basel Committee: NSFR will become a minimum standard by January 1, 2018.
 - Federal Reserve anticipates finalizing a rule in 2015.



BIS NSFR ASF Determination

| Summary of Liability Categories and associated ASF factors | | |
|--|---|--|
| ASF factor | Components of ASF category | |
| 100% | Total regulatory capital (excluding Tier 2 instruments with residential maturity of less than one year) Other capital instruments and liabilities with effective residual maturity of one year or more | |
| 95% | • Stable non-maturity (demand) deposits and term deposits with residual maturity of less than one year provided by retail and small business customers | |
| 90% | • Less stable non-maturity deposits and term deposits with residual maturity of less than one year provided by retail and small business customers | |
| 50% | Funding with residual maturity of less than one year provided by non-financial corporate customers Operational deposits Funding with residual maturity of less than one year from sovereigns, public sector entities (PSEs), and multilateral and national development banks Other funding with residual maturity between six months and less than one year not included in the above categories, including funding provided by central banks and financial institutions | |
| 0% | All other liabilities and equity not included in above categories, including liabilities without a stated maturity (with a specific treatment for deferred tax liabilities and minority interests) NSFR derivative liabilities net of NSFR derivative assets if NSFR derivative liabilities are greater than NSFR derivative assets "Trade date" payables arising from purchases of financial instruments, foreign currencies and commodities | |

| RSF factor | Components of RSF category | |
|-------------------|---|--|
| 0% | Coins and banknotes All central bank reserves All claims on central banks with residual maturities of less than six months "Trade date" receivables arising from sales of financial instruments, foreign currencies and commodities | |
| 5% | Unencumbered Level 1 assets, excluding coins, banknotes and central bank reserves | |
| 10% | • Unencumbered loans to financial institutions with residual maturities of less than six months, where the loan is secured against Level 1 assets as defined in LCR paragraph 50, and where the bank has the ability to freely rehypothecate the received collateral for the life of the loan | |
| 15% | All other unencumbered loans to financial institutions with residual maturities of less than six months not included in the above categories Unencumbered Level 2A assets | |
| 50% | Unencumbered Level 2B assets HQLA encumbered for a period of six months or more and less than one year Loans to financial institutions and central banks with residual maturities between six months and less than one year Deposits held at other financial institutions for operational purposes All other assets not included in the above categories with residual maturity of less than one year, including loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns and PSEs | |



| Summary of asset categories and associated RSF factors | | |
|--|---|--|
| RSF factor | Components of RSF category | |
| 65% | Unencumbered residential mortgages with a residual maturity of one year or more and with a risk weight of less than or equal to 35% under the standardized approach Other unencumbered loans not included in the above categories, excluding loans to financial institutions, with a residual maturity of one year or more and with a risk weight of less than or equal to 35% under the standardized approach | |
| 85% | Cash, securities or other assets posted as initial margin for derivatives contracts and cash or other assets provided to contribute to the default fund of a CCP Other unencumbered performing loans with risk weights greater than 35% under the standardized approach and residual maturities of one year or more, excluding loans to financial institutions Unencumbered securities that are not in default and do not qualify as HQLA with a remaining maturity of one year or more and exchange-traded equities Physical traded commodities, including gold | |
| 100% | All assets that are encumbered for a period of one year or more NSFR derivative assets net of NSFR derivative liabilities if NSFR derivative assets are greater than NSFR derivative liabilities 20% of derivative liabilities as calculated according to paragraph 19 All other assets not included in the above categories, including non-performing loans, loans to financial institutions with a residual maturity of one year or more, non-exchange-traded equities, fixed assets, items deducted from regulatory capital, retained interest, insurance assets, subsidiary interests and defaulted securities | |

(Supplementary) Leverage Ratio

U.S. Final Leverage Ratio Generally

- Applies to all banks, thrifts, BHCs, and SLHs subject to Advanced Approaches Rule
- Published September 3, 2014
- Public disclosure begins January 1, 2015
- Pillar 1 treatment by January 1, 2018
- Meant as a "complementary measure" to the risk-based framework



U.S. Final Leverage Ratio Capital Measure & Ratio

Tier 1 Capital

Exposure Measure

 \geq Required Ratio^{*}

*For BHCs with > \$700B total assets or \$10T AUC

- BHC Level 5% (including buffer)
- Bank Level 6%
- Based on Q2 2014 Need to raise \$14.5B

*For all other advanced institutions – 3%

FSB and Other Initiatives



Shadow Banking

• The FSB announced final recommendations for addressing shadow banking risks in securities lending and repos on August 29, 2013, largely in line with its initial recommendations including the establishment of a trade repository. A Data Experts Group established by the FSB developed proposed granular recommendations on standards and processes for global securities financing data collection and aggregation on November 13, 2014. The FSB's recommendations include proposals on data elements to be collected and describe recommended standards and processes for data collection. The comment period ended on February 12, 2015. The standards and processes will be finalized in 2015.

Shadow Banking (cont'd)

• The European Commission on January 29, 2014 issued a proposed regulation on reporting and transparency of SFTs. The proposed regulation addresses transparency in the SFT market, disclosure to investors and rehypothecation and essentially transposes all of the FSB's recommendations with respect to enhanced transparency into law. This proposal puts the EU ahead of other jurisdictions in implementing the FSB's recommendations, however, we expect other jurisdictions to follow in the near term in a similar vein. The next step is for the Parliament and the Council of the EU to finalize the text of the regulation, which is widely anticipated to occur in early 2015.



Shadow Banking (cont'd)

• On October 14, 2014, the FSB published final recommendations on haircuts for non-centrally cleared securities financing transactions (SFTs), which includes qualitative standards for methodologies used by market participants to calculate haircuts, and haircut floors which will apply to certain SFTs. Excluded from the scope of the haircut floors are centrally cleared SFTs, financings against government securities collateral, and cash collateralized SFTs where certain requirements on the reinvestment of cash are met. The FSB expects to complete its work on the application of numerical haircut floors to non-bank-tonon-bank transactions by Q2 2015. The related consultation closed on December 15, 2014, and implementation of the framework is expected by end of 2017.

- Central Securities Depository Regulation
 - Issued 28 August 2014, the Regulation on settlement and Central Securities Depositories (CSDR) was published, designed to harmonize the timing and conduct of securities settlement in Europe and the rules governing Central Securities Depositories (CSDs) which operate the infrastructures. The regulation introduces an obligation on market operators to represent all transferable securities in book entry form and to record them in CSDs before trading them on regulated venues. Specific obligations placed on market participants include:
 - » to represent all transferable securities in book entry form, i.e. recording electronically, and to record them in CSDs before trading them on regulated venues;

- » to settle their obligations no later than on the second business day after trading takes place (T+2);
- » procedures and penalties relating to settlement fails; and
- » a mandatory 'buy-in' of trades that fail to settle.
- ESMA published two consultation papers on 18 December 2014
 - » Draft Technical Standards: cover settlement discipline measures; authorization / supervision of CSDs; prudential requirements for CSDs; access requirements; as well as internalized settlement reporting
 - » Draft Technical Advice: includes proposed penalties for settlement fails



- » Comment period deadline 19 February 2015
- » Target final technical standards by 18 June 2015
- Timing for implementation TBD
- Bottom Line: There are two lines of thinking around the topic of the CSDR. Firstly, more strict settlement requirements could have a promotional effect on securities lending as borrowing increases to meet the higher settlement standard. Alternatively, the penalty settlement regime may have a chilling effect on securities lending.

- UCITS V
 - The final UCITS V Directive was published in the Official Journal of the European Union on August 28, 2014. While UCITS V came into force on 17 September 2014 member states have until 18 March 2016 to transpose the requirements into national law. Amongst other requirements UCITS V will largely align the depositary obligations with those under the AIFMD. In contrast to the AIFMD, Article 22 of the Directive is amended under UCITS V to limit the manner of transfer of collateral in connection with re-use of UCITS assets (including securities lending) strictly to title transfer.
 - ESMA issued a consultative paper on 26 September 2014 seeking stakeholder views in two areas

- » Insolvency protection when delegating safekeeping: In order to ensure against the event of insolvency of a third party, UCITS V requires this third party to take all necessary steps to ensure that, in the event of its insolvency, the assets that it holds in custody are unavailable for insolvency distribution
- » Independence requirements: UCITS V provides that both the UCITS' management company (or the investment company, i.e. a self-managed UCITS) and its depositary need to act independently and solely in the interest of the fund and its investors
- CSSF (Commission de Surveillance du Sectuer Financier) circular 14/587 was issued 11 July 2014 essentially recommending compliance with the safekeeping of custody assets (e.g., collateral) by 31 December 2015