THE VOLCKER ALLIANCE
*Working for Effective Government*

October 17, 2018

The Honorable Jerome H. Powell
Chairman
Board of Governors of the Federal Reserve System
20th Street and Constitution Avenue NW
Washington, DC 20551

The Honorable Jelena McWilliams
Chair
Federal Deposit Insurance Corporation
550 17th Street NW
Washington, DC 20429

The Honorable Joseph M. Otting
Comptroller
Office of the Comptroller of the Currency
400 7th Street SW
Washington, DC 20219

The Honorable Jay Clayton
Chairman
U.S. Securities and Exchange Commission
100 F Street NE
Washington, DC 20549

The Honorable J. Christopher Giancarlo
Chairman
U.S. Commodity Futures Trading Commission
1155 21st Street NW
Washington, DC 20581

**Re: Proposed Revisions to Prohibitions and Restrictions on Proprietary Trading and Certain Interests in, and Relationships with, Hedge Funds and Private Equity Funds (Docket ID OCC-2018-0010; Board Docket No. R-1608; RIN 7100-AF 06; FDIC RIN 3064-AE67; SEC File Number S7-14-18; CFTC RIN 3038-AE72)**

Dear Chairman Powell, Chair McWilliams, Comptroller Otting, Chairman Clayton, and Chairman Giancarlo:

Thank you for the opportunity to comment on the notice of proposed rulemaking ("NPR") amending the 2013 regulation (the "2013 Final Rule") that implements Section 619 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act"), commonly known as the "Volcker Rule."[1] A centerpiece of the post-financial crisis reform program, the Volcker Rule precludes government subsidized banks from making risky bets with

[1] Section 619 of the Dodd-Frank Act added a new section 13 to the Bank Holding Company Act of 1956, codified at 12 U.S.C. § 1851. Section 13 requires the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, the Securities and Exchange Commission and the Commodity Futures Trading Commission (collectively, "the Agencies") to issue this NPR jointly.

depositor funds or working against their customers' interests.[2] The rule seeks to achieve these objectives by prohibiting a "banking entity"[3] from trading for its own account—or "proprietary trading"—and from sponsoring or investing in hedge funds and private equity funds ("Covered Funds").[4]

Since 2009, when the conceptual framework behind the Volcker Rule was initially introduced,[5] standalone proprietary trading units of banks have been closed, private equity and hedge fund investments have been substantially sold or spun out, and traders have become subject to more appropriate constraints.[6] Had the rule been in effect prior to the crisis, it could have helped rein in the market for synthetic collateralized debt obligations, which the largest banks relied upon to gain leverage and which, in 2008, helped bring the entire housing market and the global economy to the brink of collapse.[7]

Now, based on the Agencies' "experience" in implementing the rule and in response to "feedback" the Agencies have received—including from the banking industry regarding the rule's purported costs, burdens and detrimental effect on economic growth and market liquidity—regulators offer a nearly 400-page "simplification" to the rule.[8] In fact, the proposal goes beyond simplification to weaken the rule's core elements. It dilutes definitions, expands

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[2] *Prohibiting Certain High-Risk Investment Activities by Banks and Bank Holding Companies: Hearing Before the S. Comm. on Banking, Housing, & Urban Affairs*, 111th Cong. 44 (2010) (Testimony of Paul A. Volcker, Former Chairman of the Board of Governors of the Federal Reserve System). Available at: https://www.gpo.gov/fdsys/pkg/CHRG-111shrg57709/pdf/CHRG-111shrg57709.pdf

[3] "Banking entity" refers to any depository institution, any company that controls a depository institution, any company treated as a bank holding company under the International Banking Act of 1978 and any affiliate or subsidiary of any of the foregoing. *See* U.S.C. § 1851(h)(1); 12 CFR 248.2(c).

[4] 12 U.S.C. § 1851

[5] Group of Thirty, Financial Reform: *A Framework For Regulatory Stability* (2009), available at: http://group30.org/images/uploads/publications/G30_FinancialReformFrameworkFinStability.pdf

[6] *See* FSOC, *Study & Recommendations on Prohibitions on Proprietary Trading & Certain Relationships with Hedge Funds and Private Equity Funds* (Jan. 2011). Available at https://www.treasury.gov/initiatives/fsoc/studies-reports/Documents/Volcker%20sec%20%20619%20study%20final%201%2018%2011%20rg.pdf; *See also* Paul A. Volcker, *Remarks by Paul A. Volcker at the 2017 Annual Meeting of the Bretton Woods Committee*, Washington, D.C. (April 17, 2017). Available at: https://www.volckeralliance.org/sites/default/files/attachments/Paul%20Volcker_Bretton%20Woods%20Speech_19Apr2017.pdf

[7] *See* Martin Gruenberg, Chairman, Federal Deposit Insurance Corporation, *Financial Regulation: A Post-Crisis Perspective;* Brookings Institution, Washington D.C. (November 14, 2017) ("The Volcker Rule addresses certain types of speculative trading and investment activities and reduces the likelihood that federal deposit insurance will subsidize them. As an example, *some collateralized debt obligations (CDOs) that were an accelerant to the crisis, such as CDOs backed by derivatives or by other securitizations, would have met the Volcker Rule's current definition of 'covered fund.' Had it been in place then, the Volcker Rule would have constrained the proliferation of such instruments.*") (emphasis added). Available at: https://www.fdic.gov/news/news/speeches/spnov1417.html

[8] Proposed Rule, Preamble at 14 and 15

exclusions, and eliminates documentary and analytical requirements designed to prevent the rule's abuse and evasion.[9]

Specifically, the NPR narrows the scope of oversight of the proprietary trading prohibition, eliminates specific analysis requirements that are intended to prevent proprietary trading from occurring under the guise of legitimate underwriting, market-making or hedging activity, and reduces or otherwise limits important compliance and reporting obligations. In effect, the NPR gives banks greater discretion to determine the scope of their own permitted trading activity, opening the door for traders to more freely cloak prohibited transactions as legitimate and hindering examiners' ability to enforce the rule. In a prolonged period of lax supervision, the reduced standards could also give rise to poor risk management conventions that generate more frequent and severe trading losses.

There is no apparent justification for this proposal. The U.S. is in its second longest economic expansion in recorded history, far outpacing the post-crisis recoveries of other advanced economies.[10] Bank profits are soaring,[11] as banks pay out billions of dollars in dividends to their shareholders.[12] Trading volume is near an all-time high,[13] bank loan growth is outpacing nominal GDP growth,[14] market liquidity remains ample,[15] and the unemployment rate is the lowest it has

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[9] The Economic Growth, Regulatory Relief, and Consumer Protection Act, which was signed by President Donald J. Trump on May 24, 2018, amends the Volcker Rule by narrowing the definition of banking entity and revising the statutory provisions related to the naming of covered funds. *See* Pub. L. No 115-174, 132 Stat. 1296-1368 (2018). The Agencies plan to address these statutory amendments through a separate rulemaking process.

[10] Gruenberg *supra* note 7

[11] *See* FDIC Quarterly, *Quarterly Banking Profile: Second Quarter 2018, Volume 12, Number 3.* Available at: https://www.fdic.gov/bank/analytical/qbp/2018jun/qbp.pdf; *See also*, Ryan Tracy and Telis Demos, *U.S. Banks Reported Record First-Quarter Profit*, The Wall Street Journal (May 22, 2018). Available at: https://www.wsj.com/articles/u-s-banks-report-record-first-quarter-profit-1526999856; Yalman Onaran, *U.S. Mega Banks Are This Close to Breaking Their Profit Record*, Bloomberg markets (July 21, 2017). Available at: https://www.bloomberg.com/news/articles/2017-07-21/bank-profits-near-pre-crisis-peak-in-u-s-despite-all-the-rules; Ryan Tracy, *U.S. Banking Industry Annual Profit Hits Record in 2016*, The Wall Street Journal (February 8, 2017). Available at: https://www.wsj.com/articles/u-s-banking-industry-annual-profit-hit-record-in-2016-1488295836

[12] Alistair Gray and Ben McLannahan, *US banks poised for $170 bn in shareholder payouts*, The Financial Times (June 17, 2018). Available at: https://www.ft.com/content/bcf77ea2-6ff3-11e8-92d3-6c13e5c92914

[13] Tobias Adrian, Michael Flemming, Or Shachar and Erik Vogt, *Market Liquidity After the Financial Crisis*, Federal Reserve Bank of New York, Staff Report # 796, (revised June 2017). Available at: https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr796.pdf?la=en

[14] Gruenberg *supra* note 7

[15] The Securities and Exchange Commission, Report to Congress, *Access to Capital and Market Liquidity*, As Directed by the Explanatory Statement to the Consolidated Appropriations Act, 2016 (P.L.114-113), August, 2017 at 7. Available at: https://www.sec.gov/files/access-to-capital-and-market-liquidity-study-dera-2017.pdf ("In corporate bond markets, trading activity and average transaction costs have generally improved or remained flat. More corporate bond issues traded after regulatory changes than in any prior sample period."). *See also Id.* at 9 ("Evidence from the crisis suggests that during times of *severe* market stress, dealers may not lean into the wind, but instead make larger cuts in inventory of bonds that are aggressively sold by their customers. Such evidence supports a finding that dealers decrease liquidity provision in times of severe market stress.") (emphasis original)

been in nearly 50 years, hovering at 3.7 percent.[16] (***See* Appendix Figures 1-15**) Indeed, as former Federal Reserve Chairman Paul Volcker himself observed in a 2017 speech, "claims that Dodd-Frank and other regulatory approaches have somehow gravely damaged the effective functioning of American financial markets, the commercial banking system, and prospects for economic growth simply do not comport with the mass of the evidence before us."[17]

With inflated asset prices, record levels of debt, highly volatile markets, and uncertainties of a normalizing monetary policy, prudence would dictate that policymakers resist the urge to ease regulation and work to strengthen the financial system. A focus on resilience will help ensure that banks are able to lend through the economic cycle and mitigate the effects of a future crisis.[18] But policymakers appear to be relenting yet again to the temptation to ease regulation at precisely the wrong time, first by reducing leverage capital and stress testing requirements for large banks,[19] and now by considering these unwarranted changes to the Volcker Rule, a reform that has not even been in existence for five years.

Most striking, the Agencies offer no data or analysis in support of the NPR.[20] Instead, they pose more than one thousand questions to public commenters on key aspects of the rule. The most crucial of these questions can only be answered by the banking industry—the source of all the relevant data and already *the* dominant voice in the equation.

Forthcoming changes to the 2013 Final Rule's Covered Funds provisions also are uncertain. The NPR asks approximately 250 questions about the provisions' key aspects but, for the most part, makes no specific proposals. This leaves commenters in the dark about what policies may be finalized in the coming months. Similarly, the NPR signals—though does not specifically propose—a shift in the definition of "trading desk," a foundational term to which virtually every

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[16] Nathaniel Mayersohn, *Unemployment Rate Matches Lowest Point in Half a Century*, CNN Business (June 1, 2018). Available at: https://money.cnn.com/2018/06/01/news/economy/may-jobs-report/index.html

[17] Paul A. Volcker, *Remarks by Paul A. Volcker at the 2017 Annual Meeting of the Bretton Woods Committee*, Washington, D.C. (April 17, 2017). Available at: https://www.volckeralliance.org/sites/default/files/attachments/Paul%20Volcker_Bretton%20Woods%20Speech_19Apr2017.pdf

[18] Lael Brainard, Member, Federal Reserve System, *Safeguarding Financial Resilience Through the Cycle*, Global Finance Forum, Washington D.C. (April 19, 2018). Available at: https://www.federalreserve.gov/newsevents/speech/brainard20180419a.htm; *see also*, Nellie Liang, *Financial Regulations and Macroeconomic Stability*, Brookings Institution, Washington, D.C. (July 15, 2017). Available at: https://www.brookings.edu/wp-content/uploads/2017/07/liang_financialregulationsandmacroeconomicstability.pdf ("Given the economic costs of credit busts, it is important to continue to build countercyclical policy options, such as the countercyclical capital buffer and stress tests.")

[19] Sheila C. Bair, *The US must hold firm on bank capital rules*, The Financial Times (October 1, 2018). Available at: https://www.ft.com/content/d871e122-c33b-11e8-84cd-9e601db069b8

[20] Sheila C. Bair and Gaurav Vasisht, *The Volcker Rule Needs Transparency More Than 'Simplification,'* The Wall Street Journal, (September 10, 2018). Available at: https://www.wsj.com/articles/the-volcker-rule-needs-transparency-more-than-simplification-1536524547

major element of the rule is anchored.[21] While it may be beneficial to redefine "trading desk," a dramatic shift in its definition in the future could severely undermine a meaningful assessment of this proposal. This seemingly unprecedented level of opacity stifles public debate and input in the rulemaking process, giving self-interested industry advocates who do have access to information a distinct advantage.

Instead of weakening the Volcker Rule's implementation, regulators should enhance its supervision and enforcement. Recent news reports highlight instances of banks making enormous profits and suffering outsized losses from trading activities, apparently without much scrutiny from regulators.[22] Indeed, to date only one public enforcement action has been brought by the Agencies for the rule's violations.[23] Ironically, the NPR now waters down many of the very provisions that were the impetus for the enforcement action.[24]

Before any specific policy changes are considered, regulators should consolidate and standardize the data on bank trading metrics currently being collected in various formats by five different agencies. The Agencies should study and publicly release these data in an appropriately anonymized format to allow the public to understand the impact of the rule on trading activity, gauge its effectiveness in curbing risky speculation, understand how effectively the rule is being enforced, and monitor emerging trends and potential risks in the trading operations of the largest banks.

Only after the release and review of this important information—and only if supported by empirical evidence—should regulators consider any amendments to the rule. This step would not only ensure a level playing field among public commenters but bolster public trust in the rulemaking process. It would also promote the type of rigor that should be necessary before amending what is one of the most significant financial reforms to have emerged from the financial crisis.

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[21] The term "trading desk" is used in the Volcker Rule's exemptions for market-making and risk mitigating hedging, its reporting requirements under Appendix A, and its compliance requirements under Appendix B. The proposed new accounting prong also applies to "trading desks."

[22] Shahein Nasiripour, Sonali Basak, and Steven Arons, *Wild Trading Day at Deutsche Bank Raises Questions on Risk*, Bloomberg Markets (June 21, 2018). Available at: https://www.ft.com/content/d871e122-c33b-11e8-84cd-9e601db069b8; *see also* Justin Baer, *How One Goldman Sachs Trader Made More Than $100*, The Wall Street Journal (October 19, 2016). Available at: https://www.wsj.com/articles/how-one-goldman-sachs-trader-made-more-than-100-million-1476869402; *and* Dakin Campbell, *Citigroup Trading Desk Made $300 Million on Rate Swaps*, Bloomberg (October 27, 2016). Available at: https://www.bloomberg.com/news/articles/2016-10-27/citigroup-trading-desk-said-to-reap-300-million-on-rate-swaps

[23] *In the Matter of Deutsche Bank, AG*, Consent Order and Assessment of Civil Money Penalty Pursuant to Federal Deposit Insurance Act, as amended, Board of Governors of the Federal Reserve System. Docket Ns: 17-009-B-FB, 17-009-CMP-FB, April 20, 2017. Available at: https://www.federalreserve.gov/newsevents/pressreleases/files/enf20170420a2.pdf

[24] *Id.*

## The Current Framework

The Volcker Rule generally prohibits a banking entity from engaging as principal for the purchase or sale of financial instruments for the banking entity's own trading account ("proprietary trading").[25] The statute defines "trading account" as any account used for acquiring or taking positions in financial instruments "principally for the purpose of selling in the near term (or otherwise with the intent to resell in order to profit from short-term price movements)."[26]

Not all short-term transactions are prohibited. Some are specifically excluded from the scope of the rule, such as transactions intended for liquidity management.[27] Other transactions may fit within the scope of a "trading account," but could be exempt under the rule as a "permitted activity."[28] These include market-making,[29] underwriting,[30] and risk mitigating hedging transactions.[31]

To prevent misuse and evasion, the 2013 Final Rule imposes certain limitations, as well as documentary and specific analysis requirements for banks seeking to avail themselves of these carveouts. For instance, (1) the liquidity management exclusion only covers the purchase or sale of securities, not derivatives;[32] (2) the market-making exemption requires a "demonstrable analysis" showing that a trading desk's market-making activities do not exceed the reasonably expected near-term demand of customers ("RENTD");[33] (3) the underwriting exemption requires that the trading desk's underwriting position be designed not to exceed RENTD, and that the trading desk makes reasonable efforts to sell or otherwise reduce the underwriting position within a reasonable period;[34] and (4) the risk mitigating hedging exemption requires (a) hedging activity to demonstrably reduce or otherwise significantly mitigate specific, identifiable risk at the inception and on an ongoing basis and (b) a "correlation analysis" showing that the hedging activity "demonstrably reduces or otherwise significantly mitigates" the risks being hedged.[35]

Based on banking industry concerns that the Volcker Rule's proprietary trading prohibition is too broad and subjective and its exclusions and exemptions are too limited and burdensome to claim, the NPR: (1) permits banking entities to establish risk and inventory limits for market-making

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[25] 12 U.S.C. § 18(a)(1)(A)

[26] 12 U.S.C. § 1851(h)(6)

[27] 12 C.F.R. § 248.3(d)(3)

[28] Other exclusions and exemptions include repurchase agreements, securities lending transactions and trading in government obligations.

[29] 12 C.F.R. § 248.4 (a)

[30] 12 C.F.R. § 248.4(b)

[31] 12 C.F.R. § 248.5 (a)

[32] *Supra* note 27

[33] *Supra* note 29

[34] 12 C.F.R. § 248.4(a)(2)(ii)

[35] *Supra* note 31

and underwriting based on internal models, eliminating the requirement for a demonstrable or any other specific analysis to claim the exemptions; (2) removes the risk mitigating hedging exemption's obligation to have a correlation analysis and to demonstrate that the hedge is risk reducing on an ongoing basis; (3) expands the liquidity management exclusion to include certain derivatives; and (4) narrows the scope of the proprietary trading prohibition by altering the definition of "trading account." The NPR also suggests—though does not specifically propose—a change to the definition of "trading desk" to give banks more flexibility in how they define the term.

## The Market-Making and Underwriting Exemptions

As mentioned above, the Volcker Rule exempts market-making and underwriting activities from the proprietary trading prohibition to the extent those activities are designed not to exceed the RENTD of the bank's clients, customers and counterparties.[36] A crucial element to ensure the Volcker Rule's integrity, the RENTD provisions are intended to prevent a trading desk from taking a speculative proprietary position as part of its market-making or underwriting activities.[37]

To prevent circumvention of the RENTD obligation, the 2013 Final Rule requires banks to base their assessment of RENTD compliance for market-making purposes on two overarching factors: (1) the liquidity, maturity and depth of the market for the relevant financial instruments; and (2) "a demonstrable analysis of historical customer demand, current inventory of financial instruments, and market and other factors regarding the amount, types and risks of or associated with positions in financial instruments in which a trading desk makes a market." [38] The demonstrable analysis must be both "reviewable" and "testable" and a banking entity must consider it when establishing trading desk inventory and risk limits.[39] The 2013 Final Rule also requires a banking entity "to make reasonable efforts to sell or otherwise reduce its underwriting position within a reasonable period, taking into account the liquidity, maturity and depth of the market for the relevant type of security."[40]

Banks argue that the market-making and underwriting exemptions can be difficult to claim, requiring them to produce complex and intensive analyses that are too rigid and impractical to carry out. Therefore, they claim that these exemptions can constrain legitimate market-making and underwriting activities.[41] In part based on these concerns, the NPR eliminates the requirement for a specific analysis, allowing banks to formulate their market-making and

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[36] 12 U.S.C. § 1851(d)(1)(B)

[37] 79 Fed. Reg. 5598 (January 31, 2014)

[38] 12 CFR § 248.4; 79 Fed. Reg. 5606 (January 31, 2014)

[39] *Id.*

[40] 79 Fed. Reg. 5570 (January 31, 2014)

[41] Letter from The Clearing House Association L.L.C. to the OCC, Sep. 21, 2017, *available at* https://www.theclearinghouse.org/-/media/tch/documents/tch-weekly/2017/20170921_tch_-_comment_letter_to_occ_volcker_request_for_comment.pdf

underwriting risk limits based on internal models.[42] If a trading desk stays within those internally set limits, the NPR requires regulators to presume that the trading desk is compliant with RENTD obligations.[43] Although the limits would be subject to regulatory review, the NPR would not require prior regulatory approval of the limits, which may be increased temporarily or permanently with prompt reporting to regulators.

At the time the 2013 Final Rule was adopted, the Agencies observed that the demonstrable analysis "is important to … allow determinations of reasonably expected near term demand and associated inventory levels to be monitored and tested to ensure compliance with the statute and the rule."[44] By eliminating the demonstrable analysis, the NPR gives bank management greater discretion to set their own boundaries for permitted trading activity, allowing trading desks a freer hand to establish higher risk and inventory limits and take on exposures for which there may not be a reasonable customer demand. In assessing the costs and benefits of the proposal, the Securities and Exchange Commission ("SEC") observed:

> To the extent that internal risk limits may be designed to exceed the actual RENTD, introducing the proposed presumption may also increase risk-taking by banking entity dealers. As a result, under the proposed amendments, some entities may be able to maintain positions that are larger than RENTD and, thus, increase their risk-taking. This type of activity could increase moral hazard and reduce the economic effects of [the Volcker Rule] and the implementing rules.[45]

This approach harkens back to the pre-crisis days when regulators heavily deferred to bank managers in determining minimum bank capital levels, a decision that had disastrous consequences.

Although regulators may rebut the presumption of compliance for any trading desk, the proposed rule strips regulators of an important tool they might need to do so effectively. Regulators would no longer have a reviewable and testable analysis at their disposal to assess the reasonableness of a banking entity's internally set limits and gauge whether prohibited trading activity might be occurring. This would make the rule's supervision and enforcement particularly challenging.

Importantly, banks frequently exceed their internally set risk metrics. **Appendix Figure 16** shows the ratio of the largest daily trading losses to that trading day's Value-at-Risk ("VaR") for banks with the most active trading operations. In just a few recent quarters, some banks reported loss ratios that exceed 200%, including one recent instance in which a large bank's one day trading loss turned out to be 1200% larger than its daily VaR.

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[42] Preamble at 96

[43] Proposed Rule § _.4(b)(6). *See also* Preamble at 108

[44] 79 Fed. Reg. 5610

[45] *See* Proposed Revisions to Prohibitions and Restrictions on Proprietary Trading and Certain Interests in, and Relationships With, Hedge Funds and Private Equity Funds, 83 Fed. Reg. 33432 (proposed July 17, 2018) (extended at 83 Fed. Reg. 45860).

This is surprising since VaR is calculated using a 99 percent confidence level—that is, trading activity is expected to result in a profit or a loss smaller than the VaR 99 percent of the time.[46] Shifting to self-serving, model-based risk limits as a proxy for determining compliance with RENTD could lead to a deterioration of risk management practices, potentially increasing the frequency and severity of such trading losses.

Other than some passing references to "feedback" received from the banking industry, regulators provide little justification or support for their proposal. The NPR appears to be based in large part on industry arguments that were considered and addressed before the adoption of the 2013 Final Rule, including assertions that the exemptions are too burdensome to claim. Based on these arguments, the 2013 Final Rule provided relief to banks for market-making by explicitly recognizing that the liquidity, maturity and depth of the market, as well as the relationship between market-maker inventory and customer order flow, can vary across asset classes;[47] that "it may be more difficult to predict near-term customer demand in less mature markets due to, among other things, a lack of historical experience,"[48] that predicting the RENTD of customers is "inherently subject to changes based on market and other factors that are difficult to predict with certainty;" and that "there may be differences between predicted demand and actual demand" from customers.[49]

To help address some of these challenges, the 2013 Final Rule builds in substantial flexibility for banks to determine their risk and inventory limits. It specifically states that the analysis should not be static or fixed solely on current market or other factors, be both backward and forward looking, and consider events that are reasonably expected to occur in the near-term.[50] The rule also allows banking entities to incorporate a host of other potential factors in their analysis, including (1) recent trading volumes and customer trends; (2) trading patterns of specific customers or other observable demand patterns; (3) analysis of the banking entity's business plan and ability to win new customer business; (4) evaluation of expected demand under current market conditions compared to prior similar periods; (5) schedule of maturities in customers' existing portfolios; and (6) expected market events.[51]

The rule does not mandate an instrument-by-instrument analysis. Instead, it applies the RENTD requirements generally to financial instruments in which the trading desk makes a market and the amount and type of such instruments that the desk's customers are reasonably expected to be interested in trading.[52] The rule even allows limits to be exceeded so long as there are reasonable

[46] 77 Fed. Reg. 53069 (August 30, 2012)

[47] 79 Fed. Reg. 5606

[48] *Id.* at 5609

[49] *Id.* at 5612

[50] *Id.* at 5610

[51] *Id.* at 5610-11

[52] *Id.*

escalation procedures, and applies a specific hedging exemption to market-making activities that is more streamlined than and distinct from the risk mitigating hedging exemption.[53]

In terms of underwriting, the 2013 Final Rule specifically states that the exemption requirements are "not intended to prevent a trading desk from distributing an offering over a reasonable period of time consistent with the market conditions or from retaining an unsold allotment of the securities acquired from an issuer…where holding such securities is necessary due to circumstances such as less than expected purchaser demand at a given price."[54] The rule also notes that the "expectation of demand does not require a belief that the securities will be placed immediately. The time it takes to carry out a distribution may differ based on the liquidity, maturity and depth of the market for the type of security."[55] Taken together, these aspects of the 2013 Final Rule more than adequately address the concerns raised by industry regarding undertaking legitimate market-making and underwriting activities.

## The Risk Mitigating Hedging Exemption

The Volcker Rule exempts risk mitigating hedging activity from the prohibition on proprietary trading to the extent that such activity is designed, on an ongoing basis, to demonstrably reduce or otherwise significantly mitigate specific, identifiable risks to a banking entity in connection with individual or aggregated positions, contracts or other holdings.[56] To guard against misuse of the exemption, the 2013 Final Rule requires banking entities to undertake an analysis, including a correlation analysis of whether a hedge: (1) may reasonably be expected to demonstrably reduce or otherwise significantly mitigate the specific risk being hedged, and (2) the correlation analysis demonstrates that the hedging activity demonstrably reduces or otherwise significantly mitigates the risks being hedged.[57] The rule requires hedges to be subject to continuing review, monitoring and management by the banking entity.[58]

Based on the banking industry's contention that the exemption is often too rigid and impractical to claim, the NPR removes key requirements intended to prevent the exemption's misuse. Specifically, although the proposed rule still requires that risk mitigating hedges be designed to reduce the risk being hedged, it eliminates the requirement that the hedging activity "demonstrably" do so for one or more specific, identifiable risks, including on a continual basis. The NPR also eliminates the requirement for a banking entity to undertake a correlation analysis showing that a hedge "demonstrably reduces or otherwise significantly mitigates" such risks.[59]

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[53] *Id*. at 5617

[54] 79 Fed. Reg. 5570-5572 (January 31, 2014)

[55] *Id*.

[56] 12 U.S.C. 1851(3)(1)(C)

[57] 12 C.F.R. § 248.5 (a)

[58] 12 C.F.R § 248.5 (b)(2)(iv)

[59] Proposed Rule § _.5(b)(1)(i)(c). *See also* Preamble at 129

Much like the proposed amendments to the market-making and underwriting exemptions, these changes essentially cede the authority to determine the scope of permitted trading activity to the banks themselves. In doing so, the proposal makes it easier for trading desks to mask prohibited proprietary trades as legitimate risk mitigating hedging.

In assessing the costs and benefits of this proposal, the SEC observed that while the proposal may alleviate compliance burdens,

> it could also enable dealers to accumulate large proprietary positions through adjustments (or lack thereof) to otherwise permissible hedging portfolios. Therefore, we recognize that the proposed amendment could increase moral hazard risks related to proprietary trading by allowing dealers to take positions that are economically equivalent to positions they could have taken in the absence of the 2013 final rule.[60]

While supervisors may review a banking entity's hedges as part of the supervisory process, the lack of a correlation analysis would make it more challenging for supervisors to do so effectively and enforce the rule. Over time, the lack of a correlation analysis could lead to poor risk management practices with hedges losing correlation and possibly generating substantial losses, such as JPMorgan's massive 2012 London Whale loss. In that case, JPMorgan was trading credit derivatives supposedly to hedge risk but did not document or track that hedging activity and could not show regulators and policymakers any documentation delineating what specific, identifiable risks it was hedging.[61] At the very least, banks should be required to undertake a correlation analysis for internal risk management purposes to ensure that hedges remain correlated to the specific risk they are intended to reduce. This is basic to effective risk management and prudential oversight.

**Appendix Figure 17** illustrates the importance of a correlation analysis. It shows the rolling 260 trading day (approximately one year) correlation between JPMorgan Chase stock and well known, high volume exchange traded funds that track the performance of U.S. large cap stocks ("SPY"), U.S. investment grade bonds ("AGG"), and gold ("GLD") over the past 5 years. Note that correlations change even between JPM stock and the index of large cap stocks. Failure to monitor changing correlations would have led to positions that were over-hedged or under-hedged.

The contention that the risk mitigating hedging exemption is too rigid and does not contemplate scenarios where there may not be enough time or information to conduct an analysis is inaccurate. The 2013 Final Rule specifically states that "the nature and extent of the correlation analysis undertaken would be dependent on the facts and circumstances of the hedge and the

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[60] *Supra* note 45

[61] United States Senate, Permanent Subcommittee on Investigations, Committee on Homeland Security and Government Affairs, *JPMorgan Chase Whale Trades: A Case History of Derivatives Risks and Abuses*, Majority and Minority Staff Report, March 15, 2013. Available at: https://www.hsgac.senate.gov/imo/media/doc/REPORT%20-%20JPMorgan%20Chase%20Whale%20Trades%20(4-12-13).pdf

underlying risks targeted."[62] It also notes that "where correlation cannot be demonstrated, the analysis would explain why not and also how the proposed hedging position, technique, or strategy is designed to reduce or significantly mitigate risk and how that reduction or mitigation can be demonstrated without correlation."[63]

The 2013 Final Rule does not require banks to mathematically prove correlation, and it even recognizes that some hedging activity may not exhibit a strong linear correlation to the risks being hedged.[64] Consequently, the rule does not require that every hedge maintain correlation; it merely requires that banking entities "undertake a correlation analysis that will, in many but not all instances, provide a strong indication of whether a potential hedging position, strategy, or technique will or will not demonstrably reduce the risk its designed to reduce."[65] Put simply, the current rule incorporates enough flexibility to allow banking entities to conduct risk mitigating hedging without undue constraints. To the extent that the effectiveness of correlation analyses can be sharpened, Agencies should work to do so instead of eliminating the analysis all together.

## Liquidity Management

The NPR expands the liquidity management exclusion to include foreign exchange forwards,[66] foreign exchange swaps,[67] and physically settled cross-currency swaps. [68] Regulators opted to limit the exclusion in the 2013 Final Rule to securities out of concerns that an expansive exclusion could lead to its misuse for proprietary trading purposes.[69] The proposed change creates exactly that concern for the currency markets, making it easier for trading desks to trade these instruments for speculative purposes under the guise of legitimate liquidity management.

Importantly, the 2013 Final Rule does not prohibit these instruments per se. A banking entity may trade them to the extent that the instruments qualify for one of the many exclusions and exemptions under the rule, including for market-making or hedging purposes. Regulators have provided no specific explanation for why expanding the scope of this exclusion to include these

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[62] 79 Fed. Reg. 5631

[63] *Id.*

[64] *Id.*

[65] *Id.*

[66] *See* 7 U.S.C. § 1a(24)

[67] *See* 7 U.S.C. § 1a(25)

[68] Cross-currency swap means a swap in which one party exchanges with another party principal and interest rate payments in one currency for principal and interest payments in another currency, and the exchange of principal occurs on the date the swap is entered into, with a reversal of the exchange of principal at a later date that is agreed upon when the swap is entered into. Proposed Rule § _.3(f)(5). *See also* Preamble at 76

[69] 79 Fed. Reg. 5555 (January 31, 2014) ("To ensure that this exclusion is not misused for the purpose of proprietary trading, the final rule imposes a number of requirements. First, the liquidity management plan of the banking entity must be limited to securities (in keeping with the liquidity management requirements proposed by the Federal banking agencies) and specifically contemplate and authorize the particular securities to be used for liquidity management purposes.")

specific instruments is necessary for banks to undertake effective liquidity management. They should do so before any further changes are considered in this area.

## The Definition of "Trading Account"

The 2013 Final Rule uses a three-part test to determine if a trade is for a banking entity's trading account.[70] The market risk capital rule test ("MRCRT") is satisfied when a bank active in trading engages in a transaction that involves an instrument covered by the market risk capital rule.[71] The status test ("ST") is satisfied when the banking entity is a securities dealer, a swap dealer or a securities-based swap dealer and the transaction is conducted in connection with the banking entity's activities as a dealer.[72]

The short-term intent test applies to any account that is used by a banking entity to purchase or sell one or more financial instruments principally for the purpose of: (a) short-term resale; (b) benefitting from short-term price movements; (c) realizing short-term arbitrage profits; and (d) hedging another trading account position.[73] To help implement this test, the 2013 Final Rule establishes a 60-day rebuttable presumption under which the purchase or sale of a financial instrument is considered to be for the trading account if the banking entity holds the financial instrument for fewer than 60 days or otherwise transfers its risk within that time.[74]

Industry representatives argue that the short-term intent test is highly subjective, requiring banks to determine the intent of each trader who purchases or sells a financial instrument. They further argue that the 60-day rebuttable presumption is overbroad, covering a range of transactions and activities that a banking entity is unlikely to have intended for short-term resale or that the statute never intended to cover.[75] Specifically, industry claims that the rebuttable presumption interferes with banks' ability to engage in asset-liability management ("ALM"), which helps banks manage a wide range of risks, including liquidity, credit, and interest rate risks. They further argue that ALM requires them to purchase or sell a mix of securities and derivatives often classified as available-for-sale ("AFS").[76]

The NPR eliminates the short-term intent test and the associated 60-day rebuttable presumption. It replaces them with an "accounting prong" under which a trading desk that is not subject to the

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[70] 12 C.F.R. § 248.3(b)

[71] 12 C.F.R. § 248.3(b)(1)(ii). Banks with trading assets and liabilities that are 10% or more of total assets, or more than $1 billion are subject to the MRCR. A "trading position" is a position held by the bank for the purpose of short-term resale or with the intent of benefitting from actual or expected short-term price movements, or to lock in arbitrage profits. "Covered positions" include all trading positions, but not hedges of trading positions or certain hedges of covered positions.

[72] 12 C.F.R. § 248.3(b)(1)(iii)

[73] 12 C.F.R. § 248.3(b)(1)(i)

[74] 12 C.F.R. § 248.3(b)(2)

[75] *Supra* note 41

[76] *Id.*

MRCRT or the ST and that buys or sells a financial instrument that is recorded at "fair value"[77] on a recurring basis would be deemed to do so for its trading account.[78] Agencies note that this would include, among other financial instruments, derivatives, trading securities and AFS securities.[79] Along with the accounting prong, the proposal also establishes a presumption of compliance for such trading desks whose absolute profits and losses over a 90-calendar day period do not exceed $25 million, relieving such desks of any compliance obligations under the Volcker Rule.[80]

Although the accounting prong appears to be relatively broad in scope, without access to trading desk-level data its prudence cannot be fully evaluated. For instance, it is difficult to assess whether the new prong is broad enough to capture an appropriate universe of transactions to prevent evasion. It is also unclear, as the NPR itself suggests, whether and to what extent a banking entity may circumvent the accounting prong by using its discretion to record certain financial instruments at amortized cost instead of fair value, or how regulators might prevent such forms of evasion. (**Appendix Figures 18-26 illustrate the scope of bank securities and how they are classified under accounting rules**).

Equally difficult to evaluate is the trading desk presumption of compliance. It is unclear why trading desks with profits and losses below $25 million over 90-calendar days should be given a pass from demonstrating compliance or how regulators might address evasion through splitting trades over multiple trading desks to stay below the threshold and trade under the radar of regulators. A loose definition of "trading desk" could certainly facilitate such evasion opportunities.

It is also unclear how large a trading desk with profits and losses of $25 million over 90-calendar days might become, particularly in times of low volatility. **Appendix Figure 27** attempts to bridge the gap. It shows the largest positions of the SPY and AGG exchange traded funds that an investor could have held on the last trading day of a calendar quarter, such that the absolute value of the investor's daily profit & loss for the following calendar quarter would have remained less than the proposed $25 million limit based on the actual daily price changes and dividends for the period in question.

SPY and AGG are two of the best known and most heavily traded exchange traded funds, tracking the performance of the S&P 500 large cap stock index and the Bloomberg Barclays U.S. Aggregate investment grade bond index, respectively. The quarter-to-quarter intervals used in the figure approximate the 90-calendar day intervals proposed by the rulemaking. Note that the

[77] Fair Value refers to a measurement basis of accounting and is defined under generally accepted accounting principles as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. *See* Accounting Standards Codification (ASC) 820-10-20 and International Financial Reporting Standards (IFRS) 13.9.

[78] Proposed Rule § _.3(b)(3). *See also* Preamble at 61

[79] *Id.*

[80] Proposed Rule § _.3(c). *See also* Preamble at 68

size of the maximum exposure has varied greatly based on the volatility of the underlying asset (lower realized volatility = higher maximum exposure, and vice versa).

Although the proposal eliminates the short-term intent prong and the 60-day rebuttable presumption, recent news reports indicate that bank lobbyists remain dissatisfied with the proposal, arguing that the accounting prong is too broad and captures AFS portfolios and interferes with legitimate ALM functions.[81] But as previously noted, not every purchase or sale of a financial instrument that fits within the scope of the accounting prong necessarily would be prohibited. Indeed, myriad exemptions and exclusions could apply, including many that the proposal imprudently and substantially dilutes. Moreover, the trading desk presumption of compliance would also provide additional flexibility to banks to undertake legitimate ALM and risk management activities free of any compliance obligations. Eliminating the short-term intent prong and the 60-day rebuttable presumption without adequately replacing them would create a gaping hole for the rule's exploitation.

## Covered Funds

The Volcker Rule generally prohibits a banking entity from acquiring or retaining any ownership interest in, or sponsoring Covered Funds.[82] A banking entity may make and retain an investment in a covered fund that it organizes and offers to (1) establish the fund and provide the fund with sufficient initial equity to permit the fund to attract unaffiliated investors; or (2) make a de minimis investment.[83] Investments by a banking entity in a covered fund must within one year of establishment of the fund be reduced to not more than three percent of the total ownership interest of the fund and be immaterial to the banking entity but in no case may it exceed three percent of the Tier 1 capital of the banking entity.[84]

In roughly 80 pages, the NPR poses approximately 250 questions to commenters, including (1) whether the definition of covered funds in the 2013 Final Rule effectively implements the statute; (2) whether additional exclusions should be considered; (3) whether exemptions under the Federal Reserve Act and Regulation W should be available under the Volcker Rule; and (4) whether certain definitional changes should be considered for excluded funds that might be considered "banking entities."[85]

For the most part, the NPR is silent on recommending changes to these provisions. The questions, however, hint that significant changes may be forthcoming. This raises concerns that the Agencies may finalize amendments to these provisions without first proposing them while leaving the public without a meaningful opportunity to comment. To ensure robust debate,

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[81] Lalita Clozel, *Banks Say No Thanks to the Volcker Rule Changes*, The Wall Street Journal (August 15, 2018). Available at: https://www.wsj.com/articles/banks-say-no-thanks-to-volcker-rule-changes-1534353932

[82] 12 U.S.C. § 1851(a)(1)(B)

[83] 12 U.S.C. § 1851(d)(4)(A)

[84] 12 U.S.C. § 1851(d)(4)(B)(ii)

[85] Preamble at 150-213

regulators should refrain from finalizing any changes to the rule without first proposing them. Anything less would undermine public trust in the rulemaking process and arguably violate provisions of the Administrative Procedures Act.

The proposal does include a few proposed changes. One provision would allow a banking entity to exclude from the aggregate fund limit and capital deduction the value of any ownership interests they have in Covered Funds through the underwriting or market-making exemption.[86] Another provision would allow a banking entity to acquire or retain an ownership interest in a covered fund as a risk mitigating hedge when acting as an intermediary on behalf of a customer that is not a banking entity in order to facilitate the exposure by the customer to the profits and losses of the Covered Fund.[87]

These proposed revisions would allow banking entities to take on additional risk, expand their ownership of Covered Funds through the market-making and underwriting exemptions, circumvent the 3% capital limitation, and take on what regulators in 2013 believed were high risk trading strategies.[88] Regulators should not embrace these changes, particularly if they plan to move forward with the contemplated weakening of the market-making and risk mitigating hedging exemptions.

## The Compliance Framework

The 2013 Final Rule requires each banking entity to maintain a compliance program that is "reasonably designed" to ensure and monitor compliance with the rule and meets certain minimum content requirements.[89] The nature and extent of the compliance requirements depends on the bank's total consolidated assets or its total trading assets and liabilities.[90]

A banking entity that does not engage in proprietary trading or covered-funds related activities is not required to have a compliance program.[91] A banking entity with total consolidated assets of $10 billion or less that engages in proprietary trading or Covered Funds-related activities may establish a compliance program by including references to the Volcker Rule in its existing compliance program.[92] A banking entity that has between $10 billion and $50 billion in total consolidated assets must maintain a standard compliance program that includes written policies and procedures, internal controls, a management framework that delineates responsibilities and

[86] Preamble at 192-197

[87] Preamble at 197-201

[88] 79 Fed. Reg. 5737

[89] 12 CFR 248.20(a)

[90] *Id.*

[91] 12 C.F.R. 248.20(f)(1)

[92] 12 C.F.R.248.20 (f)(2)

accountability for compliance, independent testing and auditing, training, and record retention. These are often referred to as the "six pillars" of compliance.[93]

Finally, a banking entity has at least $50 billion in total consolidated assets must have an ***additional*** compliance program as provided in Appendix B of the rule.[94] Appendix B provides highly specific trading desk level compliance requirements and includes an annual attestation requiring the CEO to certify "that the banking entity has in place processes to establish, maintain, enforce, review, test and modify the compliance program in a manner reasonably designed to achieve compliance with the rule."[95] Banks with trading assets and liabilities greater than $10 billion must also report trading desk level quantitative metrics to regulators on a periodic basis under Appendix A.[96]

Critics argue that Appendix B requirements are highly prescriptive and rest on top of banks existing risk management policies and procedures. In addition, certain banks with more than $50 billion in consolidated assets that do not have vast amounts of trading assets and liabilities argue that these requirements are not worth the burdens imposed on them.[97] To better align compliance requirements with bank trading activity, the proposed rule eliminates Appendix B and imposes compliance requirements that increase in stringency based on the size of a bank's trading assets and liabilities without regard to total consolidated assets.

Specifically, under the proposal, banks are divided into the following three categories.

- **Banks with significant trading assets and liabilities.** This group is composed of banks with more than $10 billion in trading assets and liabilities. These banks would need to incorporate the six pillars of compliance requirements into their existing overarching risk management policies and procedures, relieving them of the requirement to do so in a separate Volcker compliance framework. They would also remain subject to the metrics reporting requirement and the CEO attestation requirement.[98]
- **Banks with moderate trading assets and liabilities**. This group is composed of banks with between $1 billion and $10 billion in trading assets and liabilities. These banks would be subject to a "moderate" compliance framework. Specifically, they would satisfy the compliance requirements by including in their existing compliance policies and procedures appropriate references to the requirements of the Volcker Rule. They would also have to comply with the CEO attestation requirement.[99]
- **Banks with limited trading assets and liabilities.** This group is composed of banks with less than $1 billion in trading assets and liabilities. These banks would be presumed to be

[93] *Id.*

[94] 17 C.F.R. Appendix B to Part 255—Enhanced Minimum Standards for Compliance Programs

[95] *Id.*

[96] 12 C.F.R. 248.20(d)(2)

[97] E.g., Letter by The Clearing House, LLC

[98] Proposed Rule § _.20(b). *See also,* Preamble at 33

[99] Proposed Rule § _.20(f)(2). *See also,* Preamble at 34

> compliant with the proposal and would have no obligation to demonstrate compliance. However, if examiners find a violation of the rule during an examination the bank would have to remediate and could be required to establish the compliance program required for banks with moderate trading assets or liabilities.[100]

Under the proposal, the largest approximately 15 banks will remain subject to the six pillars of compliance but would be relieved from the trading desk level specific requirements of Appendix B. (***See* Appendix Figure 23**) Some banks with total consolidated assets greater than $50 billion but trading assets and liabilities less than $10 billion that are currently subject to Appendix B requirements would fall two notches to the "moderate" compliance requirements. Banks with less than $1 billion in trading assets and liabilities would be freed from compliance requirements, including the CEO attestation. Regulators should consider maintaining the CEO attestation obligation for banks with limited trading assets and retaining the total consolidated asset threshold to ensure that compliance for large banking entities is not dramatically reduced.

## The Volcker Rule Metrics

Since the Volcker Rule was implemented, banking entities with significant trading activity have been required to furnish to regulators various categories of information regarding their trading desks.[101] This information includes: (1) risk and position limits and usage; (2) risk factor sensitivities; (3) value-at-risk and stress value-at-risk; (4) comprehensive profit and loss attribution; (5) inventory turnover; (6) inventory aging; and (7) customer-facing trade ratio.[102] While the proposed rule indicates that regulators have benefited from an examination of these data, it also notes that the data are not standardized, often are incomplete and inaccurate, seek information that may not be helpful to regulators, and are not fully utilizable for supervision and regulation purposes.[103]

Based on the Agencies' assessment of the gathered trading desk-level data, the proposal recommends several key changes. These include revisions designed to help banking entities and regulators: (1) better understand and track trading desk activity, strategy and booking practices; (2) document changes in calculation methods, restructurings of trading desks and strategies; and (3) standardize reporting requirements to ensure consistency.[104] Specifically, among other things, the proposal requires banks to provide additional qualitative trading desk information, including the desk's name and identifier, the type of activity it is engaged in, a description of its strategy, legal entities the trading desk uses as a booking entity, and the specific currency and conversion rates it uses.[105] The proposal also requires banks to submit information in accordance with

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[100] Proposed Rule § _.20 *See also,* Preamble at 35

[101] 17 C.F.R. Appendix A to Part 248—Reporting and Recordkeeping Requirements for Covered Trading Activities

[102] *Id.*

[103] Preamble at 265

[104] Proposed Rule Appendix to Part _--Reporting and Recordkeeping Requirements for Covered Trading Activities

[105] *Id.*

certain software requirements.[106] These proposed revisions could be valuable to assist regulators better understand bank trading metrics.

Unfortunately, the proposal narrows the scope of the reporting requirements to trading desks that are engaged in "covered trading activities," a term that excludes trading desks that benefit from the $25 million presumption of compliance proposed in the NPR. In some instances, the reporting requirements are narrowed further to include only market-making and underwriting activities. These changes could prevent regulators from obtaining a complete picture of a banking entity's trading activity, including for trading desks involved in ALM and other risk management functions, all of which are areas where the NPR potentially creates opportunities for regulatory arbitrage. Moreover, the proposal neglects the overarching problem of data collection. It continues the reporting of data to five different agencies based on the functional approach to regulation in the United States. A central data repository, such as the Office of Financial Research, should be considered for this purpose. This would help all regulators better understand the nature and extent of the bank trading activity.

## Conclusion

Without offering any data or analysis in support, this proposal weakens what is the most important structural reform to have emerged from the financial crisis. In doing so, the proposal introduces greater risk into the financial system precisely when regulators should be pursuing policies to enhance the system's resilience. Instead of diluting the rule's implementation, the Agencies should enhance the rule's supervision and enforcement. They should also work to aggregate and standardize the trading desk-level data they have been collecting and study them to understand what effect the rule has had on the trading activity of large banks and how the rule may be more effectively supervised and enforced. If after review, regulators believe proposed changes are warranted, such changes should be accompanied with appropriately anonymized public data on large banks' trading activity to allow non-industry commenters to provide informed input on the impact of the current rule and the consequences of proposed changes.

Sincerely,

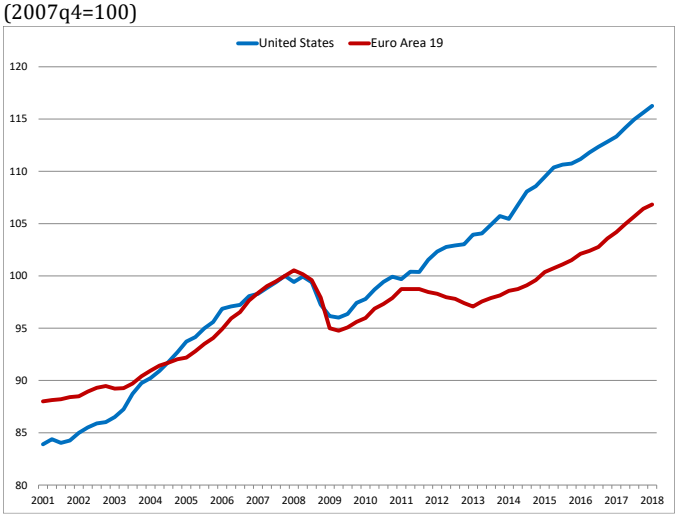
Sheila C. Bair
Former Chairman
Federal Deposit Insurance Corporation

Gaurav Vasisht
SVP and Director, Financial Regulation
The Volcker Alliance

[106] *Id.*

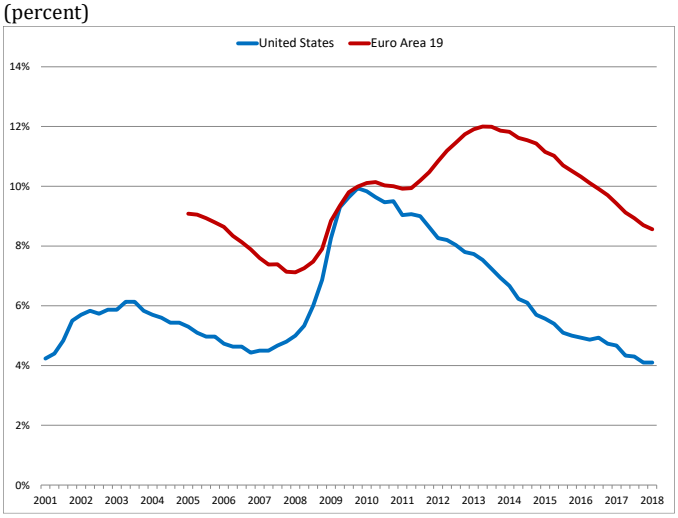
# *Appendix*

**Figure 1**
**U.S. economy recovered faster than the Eurozone**
Real gross domestic product
(2007q4=100)



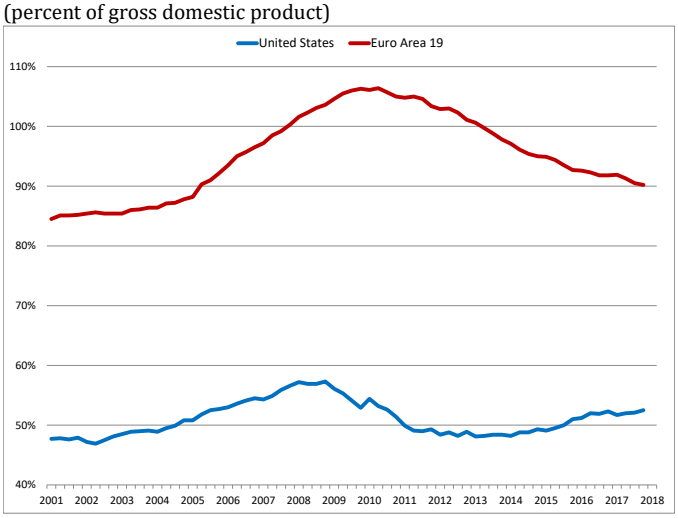

*Source: FRB St. Louis*

**Figure 2**
**U.S. unemployment rate is back to 4 percent**
Average quarterly unemployment rate
(percent)



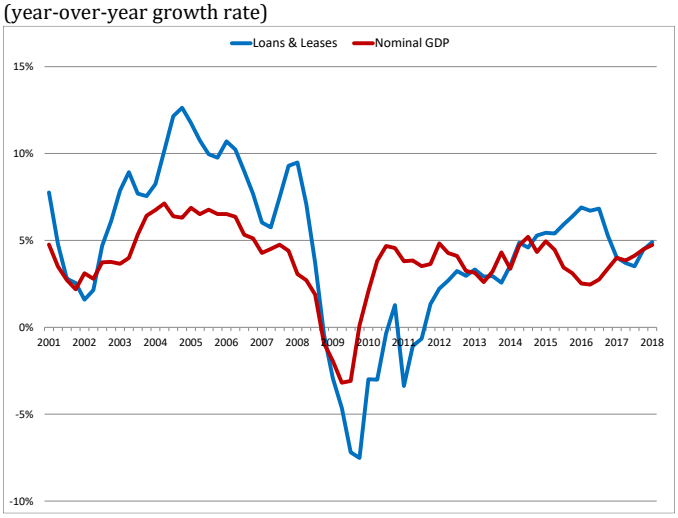

*Source: OECD*

**Figure 3**
**Bank credit is growing in U.S., but not in Eurozone**
Bank credit to the private non-financial sector
(percent of gross domestic product)



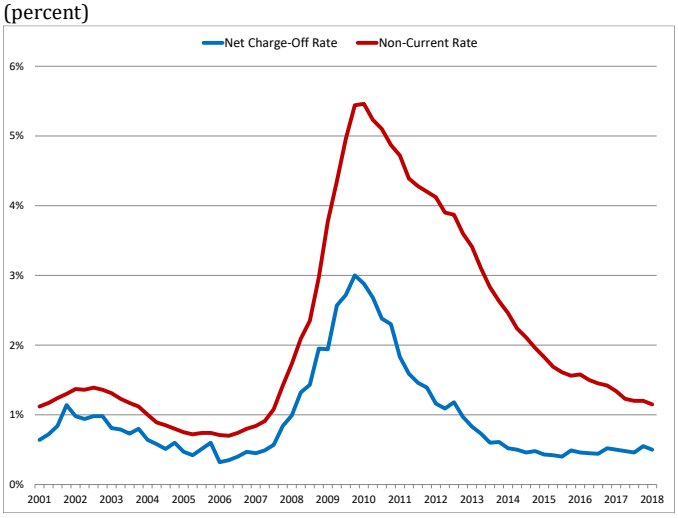

*Source: BIS*

**Figure 4**
**U.S. loans & leases growing faster than GDP since 2014**
Growth in loans & leases of FDIC-insured institutions versus GDP
(year-over-year growth rate)



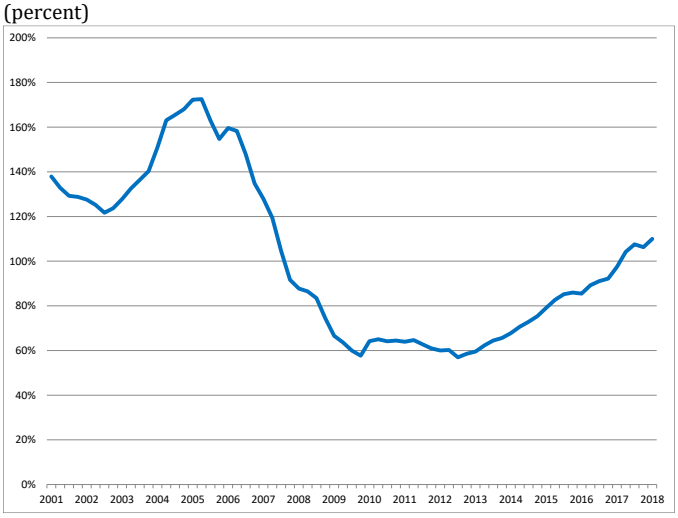

*Source: FDIC, FRB St. Louis*

**Figure 5**
**Loan losses have improved**
Net charge-off rate and non-current loan & lease rate
(percent)



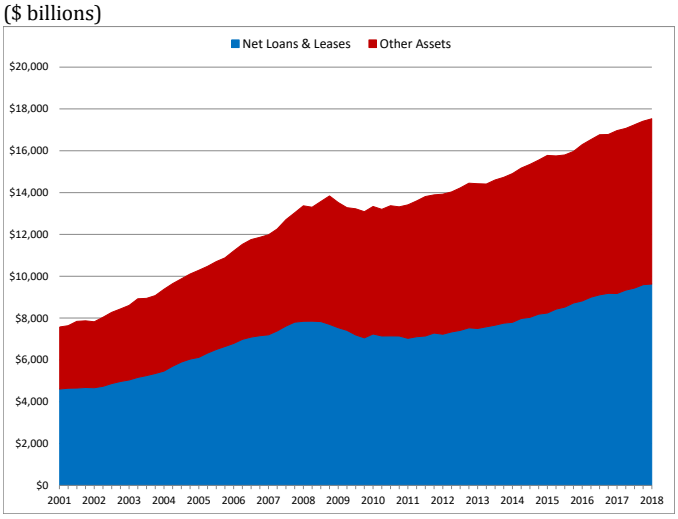

*Source: FDIC*

**Figure 6**
**Reserve coverage ratio exceeds 100%**
Loan & lease loss reserves / non-current loans & leases
(percent)



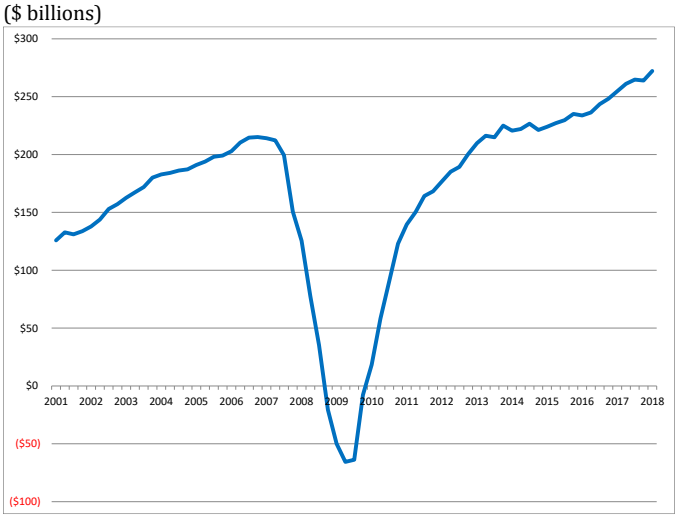

*Source: FDIC*

**Figure 7**
**Bank asset balances are growing steadily**
Total balances of FDIC-insured institutions
($ billions)



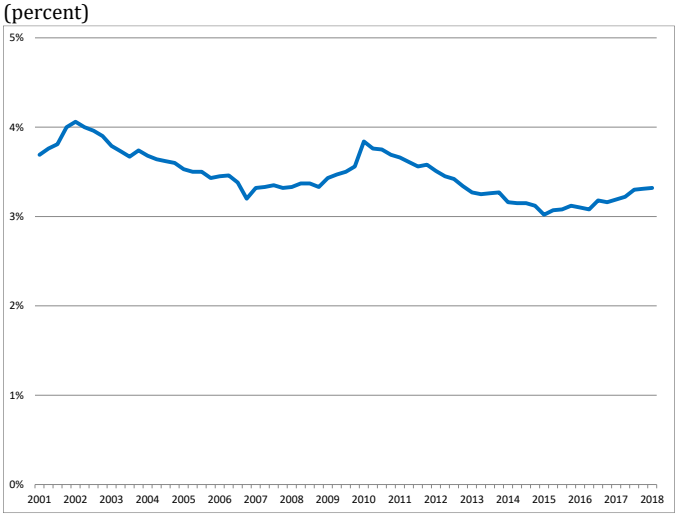

*Source: FDIC*

**Figure 8**
**Bank profits are at all-time highs**
Total pre-tax income before extraordinary items of FDIC-insured institutions ($ billions)



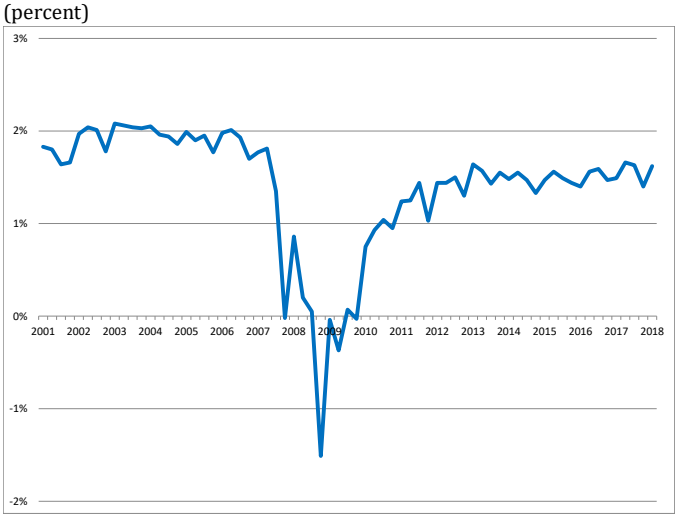

*Source: FDIC*

**Figure 9**
**Net interest margin trending upward since 2015**
Aggregate net interest margin of FDIC-insured institutions (percent)



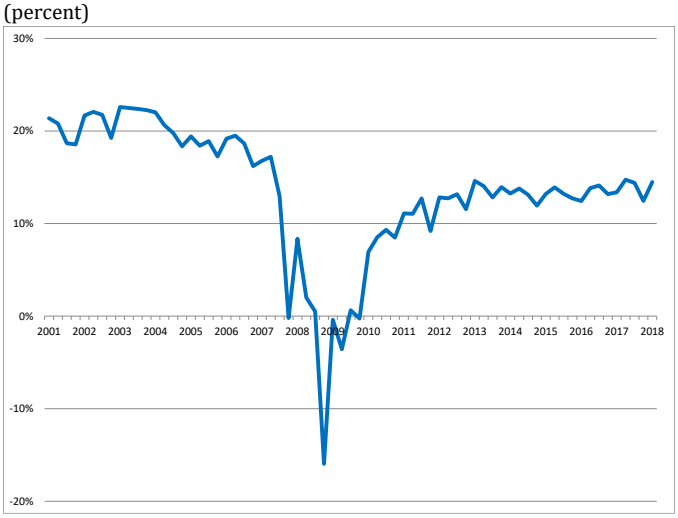

*Source: FDIC*

**Figure 10**
**Return on <u>assets</u> stable or up since Volcker Rule**
Aggregate pre-tax return on assets for FDIC-insured institutions (percent)



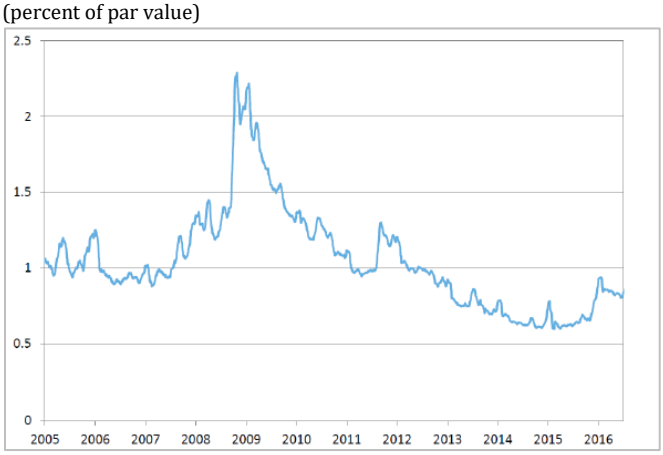

*Source: FDIC*

**Figure 11**
**Return on <u>equity</u> stable or up since Volcker Rule**
Aggregate pre-tax return on equity for FDIC-insured institutions (percent)



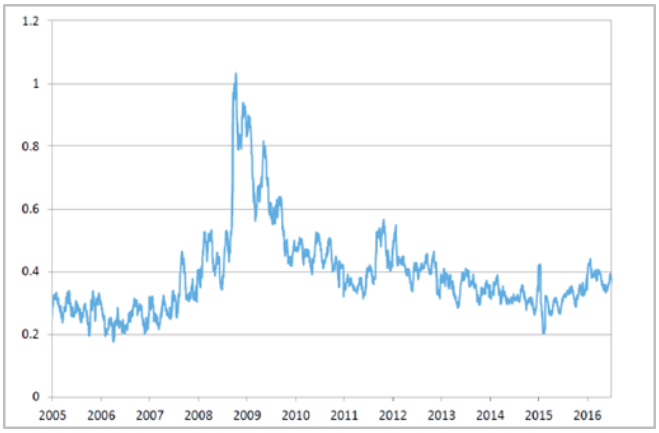

*Source: FDIC*

**Figure 12**
**Corporate bond bid-ask spreads**
21-day moving average of realized bid-ask spreads from FINRA TRACE
(percent of par value)



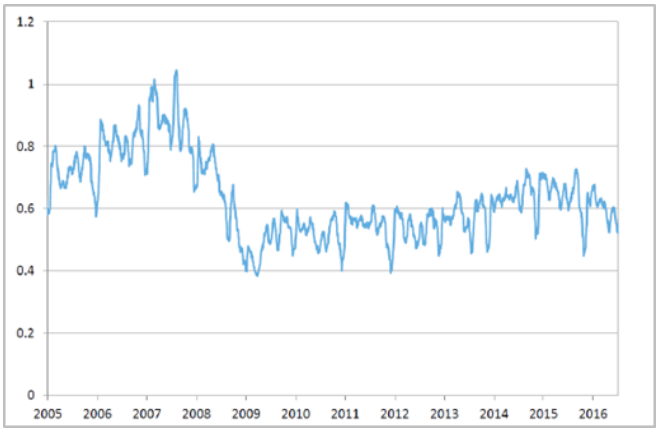

*Source: Adrian, Fleming, Shachar, and Vogt, June 2017, page 24, figure 14*

**Figure 13**
**Corporate bond price impact**
21-day moving average for trades of $100,000+ from FINRA TRACE
(percent of par value)



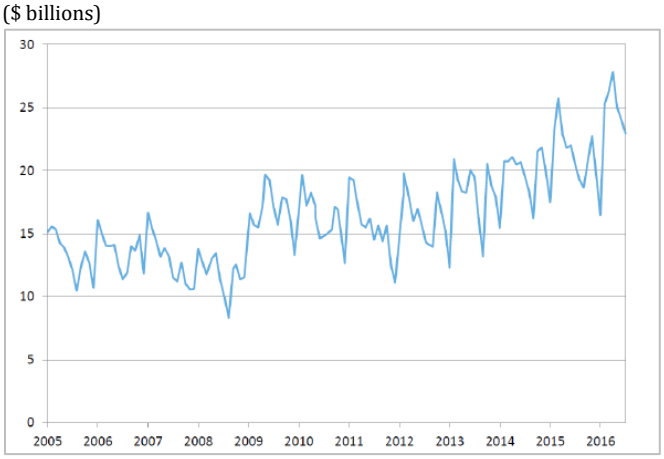

*Source: Adrian, Fleming, Shachar, and Vogt, June 2017, page 26, figure 17*

**Figure 14**
**Corporate bond trade size**
21-day moving average of average trade size from FINRA TRACE
($ millions)



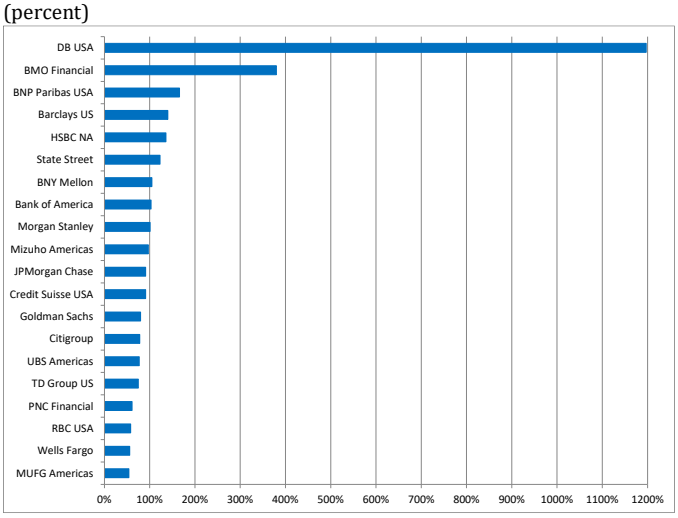

*Source: Adrian, Fleming, Shachar, and Vogt, June 2017, page 25, figure 16*

**Figure 15**
**Corporate bond trading volume**
Average daily trading volume by month from FINRA TRACE
($ billions)



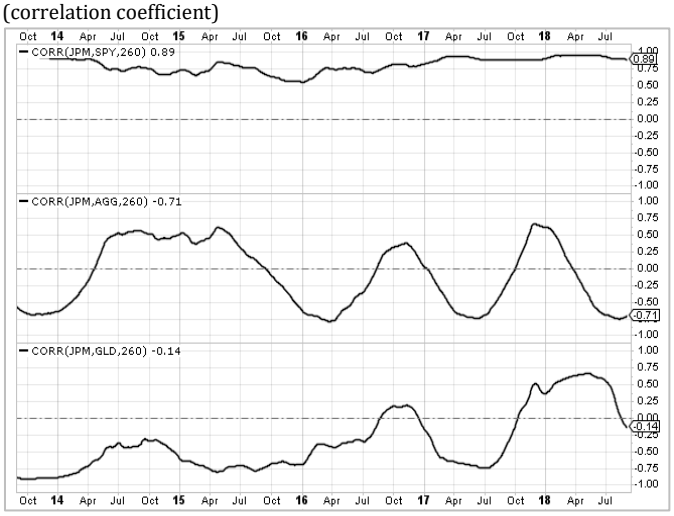

*Source: Adrian, Fleming, Shachar, and Vogt, June 2017, page 26, figure 18*

**Figure 16**
**Trading losses can and do exceed Value at Risk**
Largest ratio of daily trading loss to that day's VaR for 2017Q2-2018Q1
(percent)



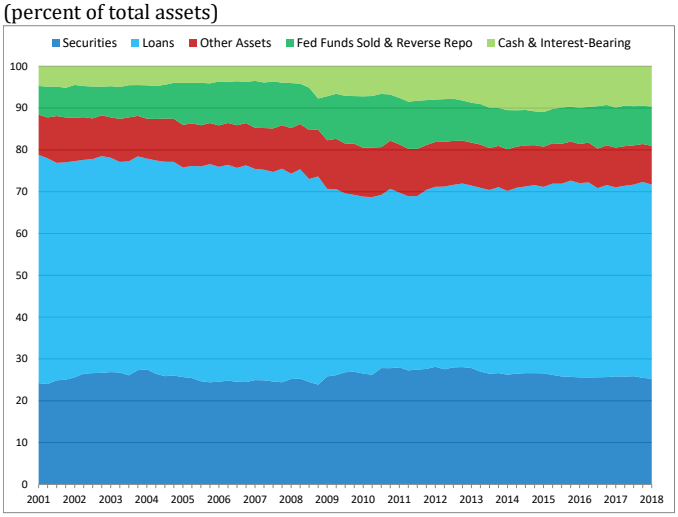

*Source: FFIEC 102 filings*

**Figure 17**
**Correlations between securities can and do change**
Rolling 260 trading day correlation between JPM and stocks, bonds, gold
(correlation coefficient)



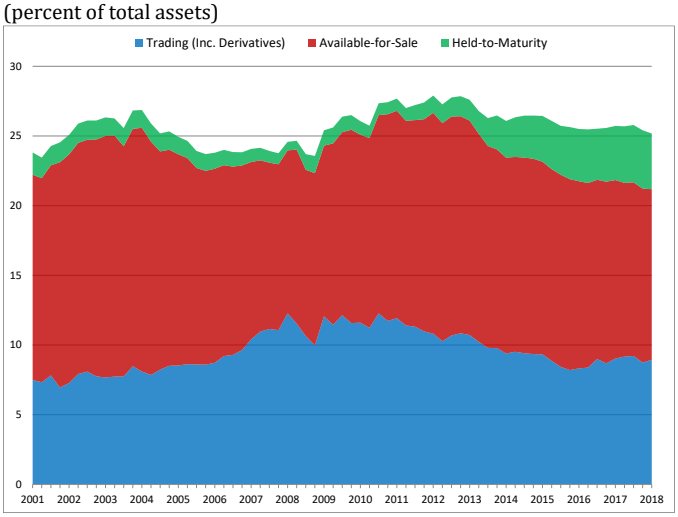

*Source: [www.StockCharts.com](http://www.StockCharts.com)*

**Figure 18**
**Securities comprise about 25% of bank assets**
Major categories of bank assets
(percent of total assets)



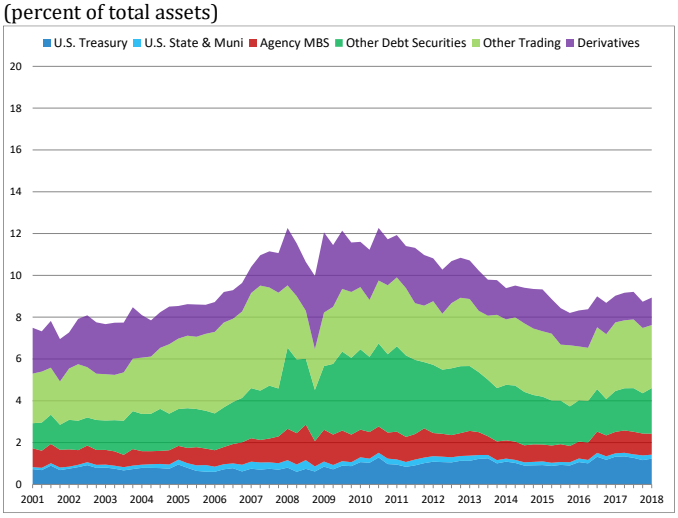

*Source: FRB NY Quarterly Trends for U.S. Banking Organizations*

**Figure 19**
**Bank security holdings by ASC 320/321 accounting**
Trading, available-for-sale, and held-to-maturity securities
(percent of total assets)



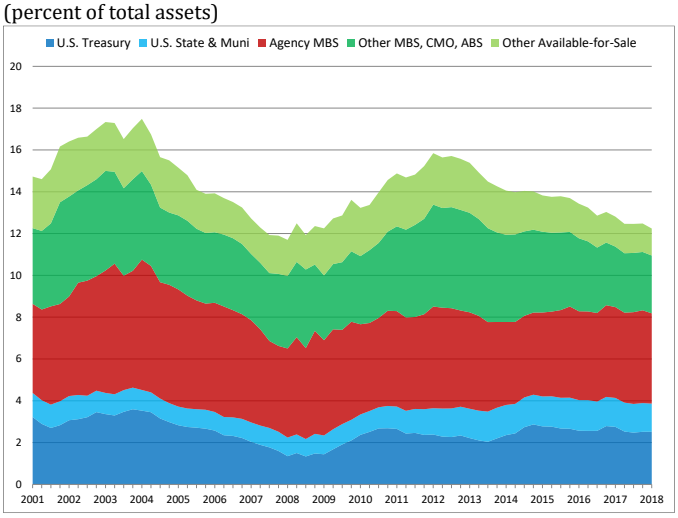

*Source: FRB NY Quarterly Trends for U.S. Banking Organizations*

**Figure 20**
**Trading assets**
Types of trading assets, including derivatives, owned by banks
(percent of total assets)



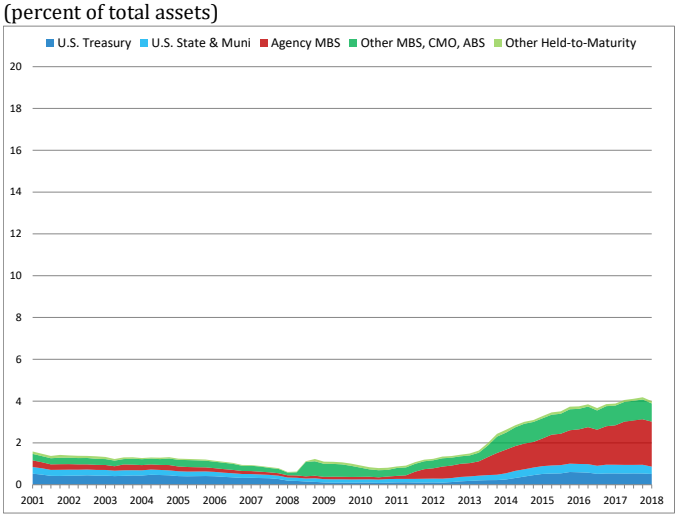

*Source: FRB NY Quarterly Trends for U.S. Banking Organizations*

**Figure 21**
**Available-for-sale securities**
Types of available-for-sale securities owned by banks
(percent of total assets)



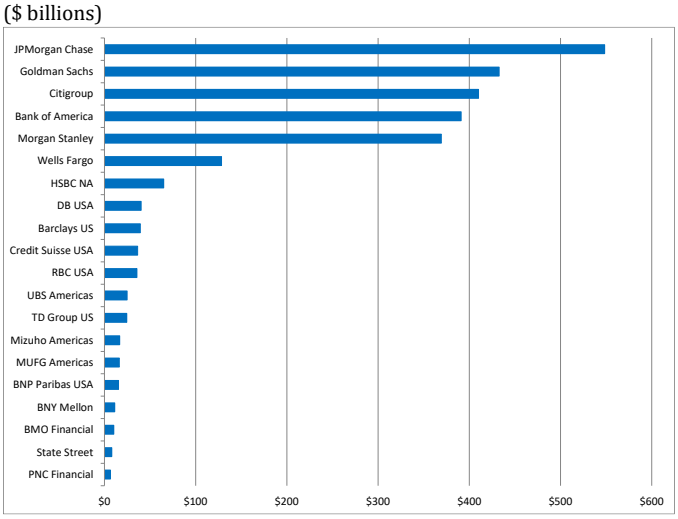

*Source: FRB NY Quarterly Trends for U.S. Banking Organizations*

**Figure 22**
**Held-to-maturity securities**
Types of held-to-maturity securities owned by banks
(percent of total assets)




*Source: FRB NY Quarterly Trends for U.S. Banking Organizations*

**Figure 23**
**Twenty bank holding companies with largest trading**
Total trading assets and trading liabilities at March 31, 2018
($ billions)

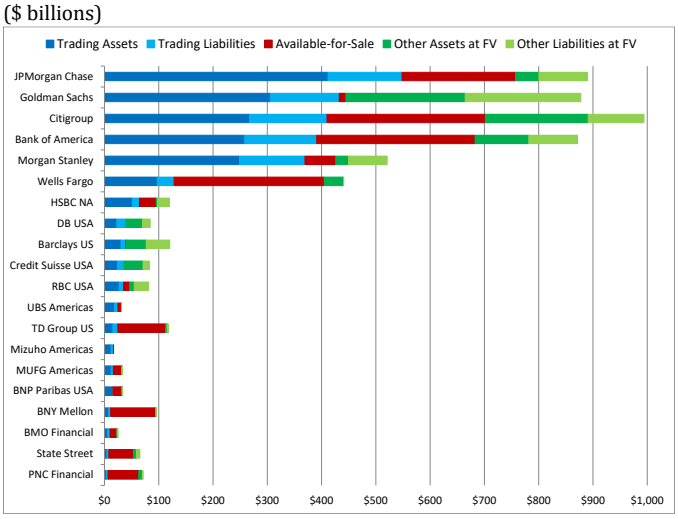



*Source: FR Y-9C filings*

**Figure 24**

**Assets & liabilities measured at fair value**

20 bank holding companies with largest trading at March 31, 2018
($ billions)

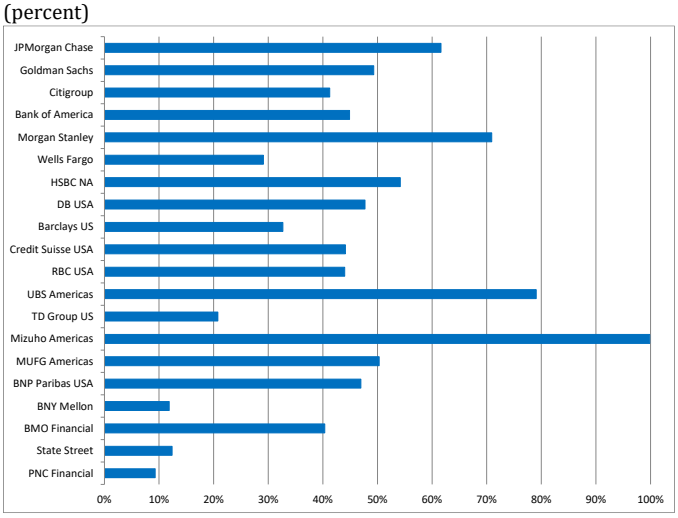



*Source: FR Y-9C filings*

**Figure 25**

**Trading A&L as a % of all A&L measured at fair value**

20 bank holding companies with largest trading at March 31, 2018
(percent)

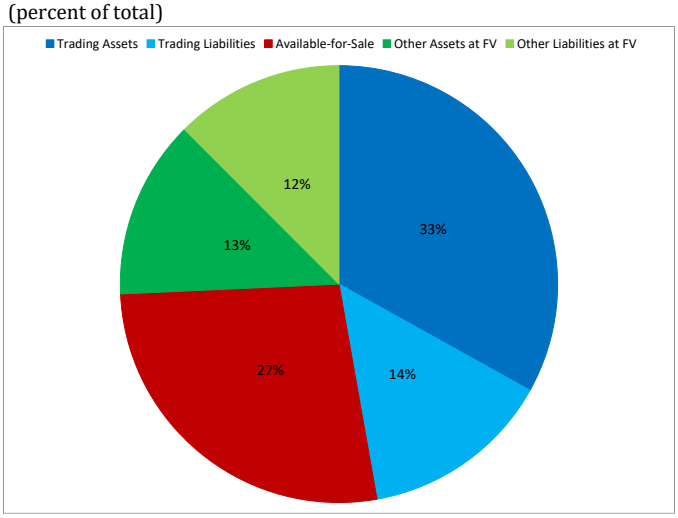



*Source: FR Y-9C filings*

**Figure 26**

**Assets & liabilities measured at fair value**

20 bank holding companies with largest trading at March 31, 2018
(percent of total)

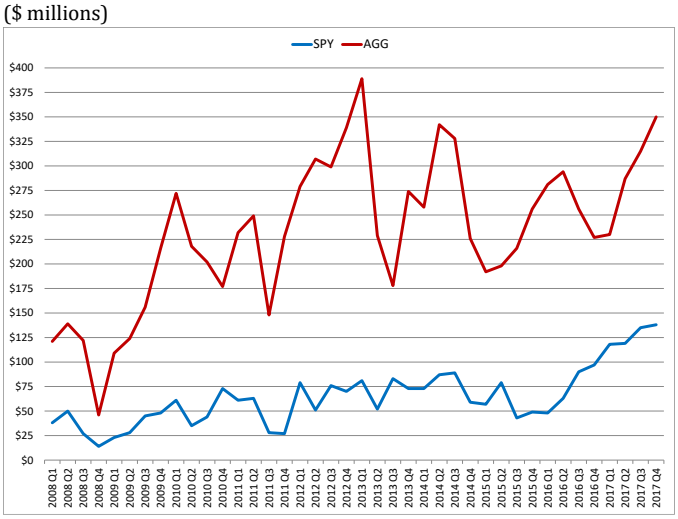



*Source: FR Y-9C filings*

**Figure 27**

**Max exposure to stay below $25 million absolute P&L**

U.S. large cap stocks (SPY) and U.S. investment grade bonds (AGG)
($ millions)




*Source: Calculations based on closing prices obtained from Yahoo Finance*