## Impact of Prudential Regulation on Capital Market Liquidity

SIFMA/BPI PRUDENTIAL REGULATION CONFERENCE



## Today's Question

# Does prudential regulation affect market liquidity? If so, how?

## Unclear Effects of Regulation on Market Liquidity

"Quantifying the effects of the regulatory reforms is challenging for several reasons. Most notably, overlapping implementations make it difficult to isolate the effect of any single rule or requirement...It is also possible that many of the observed changes in market participant behaviors would have occurred absent the reforms...Finally, post reform macroeconomic conditions...are different from those leading up to and right after the financial crisis."

*"Evidence for the impact of regulatory reforms on market liquidity is mixed, with different measures of market liquidity showing different trends."* 

Source: Report to Congress, Access to Capital and Market Liquidity, Division of Economic and Risk Analysis of the SEC, August 2017

## **Empirical Evidence**

STUDIES ANALYZING VOLCKER RULE AND LCR REACH SIMILAR CONCLUSIONS

- 1. Regulations cause affected institutions to provide less liquidity, *particularly in times of stress*
- 2. Non-affected institutions step in to provide liquidity, but not enough to offset *there is a net loss of market liquidity*





LCR Banks Reduced Liquidity Creation Compared with Midsized Banks

— LCR banks — Midsized banks



Source: Authors' calculations based on FR Y-9C report data.

Notes: Liquidity creation is measured by the Liquidity Mismatch Index, defined as the liquidity-weighted liabilities minus liquidity-weighted assets, as a share of bank assets. It is calculated per bank and then averaged over all banks in two size groups. LCR banks are banks with at least \$50 billion in assets that are subject to LCR. Midsized banks are banks with assets between \$3 billion and \$50 billion and are not subject to LCR.

Source: Roberts, Sarkar, Shachar, *Bank Liquidity Provision and Basel Liquidity Regulations*, Federal Reserve Bank of New York, June 2018

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# The Volcker Rule



# **Proprietary Trading**



## Market Making Exemption



## Market Making Exemption: Key Requirements

- The trading desk routinely stands ready to purchase and sell the financial instrument and is willing and available to quote, purchase and sell those types of financial instruments in commercially reasonable amounts and throughout market cycles as is appropriate based on the liquidity, maturity and depth of the market for the relevant financial instruments.
- The trading desk's market maker inventory must be designed not to exceed, on an ongoing basis, the reasonably expected near-term demands of clients, customers or counterparties ("RENT-D")
  - The exemption requires 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 financial instruments in which the trading desk makes a market, including through block trades.

## Impact on Market Liquidity: Theory



Source: PwC analysis

## Impact on Market Liquidity: Theory

Market	Market structure		Liquidity effects	Economic impact
Corporate bonds	•	OTC market intermediated by bank dealers		
Private label ABS	•	OTC market intermediated by bank dealers		
OTC derivatives (Rates, FX, credit, equity derivatives)	:	OTC market (with limited transition to electronic trading facilities) Balance sheet critical for intermediation		
Foreign government bonds (Includes agency and municipal debt)	•	OTC market intermediated by primary dealers		
Commodities	•	Parallel exchange and OTC markets		
FX spot and forwards	•	OTC markets (via electronic trading platforms)		
	•	Limited principal intermediation		
Cash equities	•	Parallel exchange and OTC markets		
	·	Principal intermediation critical for large trades		
Repo and securities lending	•	OTC market intermediated by bank dealers	No restrictions	
	•	Balance sheet critical for intermediation		
US government bonds (Includes agency and municipal debt)	•	OTC market intermediated by primary dealers	No restrictions <sup>27</sup>	

Larger liquidity effects or economic impact in the relevant market

Smaller liquidity effects or economic impact in the relevant market

Source: Oliver Wyman, The Volcker Rule Restrictions on Proprietary Trading: Implications for Market Liquidity (2012)

## Impact on Market Liquidity: Empirical Evidence

Jack Bao, Maureen O'Hara and Xing (Alex) Zhou, *The Volcker Rule and Corporate Bond Market Making in Times of Stress*, 130 J. Fin. Econ. 95 (2018)

"We show that liquidity provision by Volcker-affected dealers dropped during post-Volcker stress times and [liquidity provision] by non-Volckeraffected dealers has not increased enough to compensate for this decline."



## Effect of Proposed Rules

#### Proposed Accounting Prong:

"Trading account means any account that is used by a banking entity to ... purchase or sell one or more financial instruments, with respect to a financial instrument that is recorded at fair value on a recurring basis under applicable accounting standards."

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#### Federal Register / Vol. 83, No. 137 / Tuesday, July 17, 2018 / Proposed Rules DEPARTMENT OF TREASURY banking entities with clarity about what Comments received, including activities are prohibited and to improve Office of the Comptroller of the supervision and implementation of Currency section 13. DATES: Comments must be received on 12 CFR Part 44 or before September 17, 2018. ADDRESSES: Interested parties are [Docket No. OCC-2018-0010] ncouraged to submit written comments BIN 1557-AE27 jointly to all of the Agencies. Commenters are encouraged to use the FEDERAL RESERVE SYSTEM

12 CFR Part 248

[Docket No. R-1608] RIN 7100-AF 06

FEDERAL DEPOSIT INSURANCE CORPORATION

12 CFR Part 351

RIN 3064-AE67 SECURITIES AND EXCHANGE COMMISSION

17 CFR Part 255

[Release no. BHCA-3; File no. S7-14-18] BIN 3235-AM10

COMMODITY FUTURES TRADING

COMMISSION

17 CFR Part 75 RIN 3038-AE72

#### Proposed Revisions to Prohibitions and Restrictions on Proprietary Trading and Certain Interests in. and Relationships With, Hedge Funds and Private Equity Funds

AGENCY: Office of the Comptroller of the Currency, Treasury ("OCC"); Board of Governors of the Federal Reserve System ("Board"); Federal Deposit Insurance Corporation ("FDIC"): Securities and Exchange Commission ("SEC"); and Commodity Futures Trading Commission ("CFTC").

ACTION: Notice of proposed rulemaking. SUMMARY: The OCC. Board. FDIC. SEC. and CFTC (individually, an "Agency," and collectively, the "Agencies") ar requesting comment on a proposal that would amend the regulation implementing section 13 of the Bank Holding Company Act (BHC Act). Section 13 contains certain restrictions on the ability of a banking entity and nonbank financial company supervised by the Board to engage in proprietary trading and have certain int rests in, or relationships with, a hedge fund or private equity fund. The proposed amendments are intended to provide

title "Restrictions on Proprietary Trading and Certain Interests in, and Relationships with, Hedge Funds and Private Equity Funds" to facilitate the organization and distribution of comments among the Agencies. Commenters are also encouraged to identify the number of the specific question for comment to which they are responding. Comments should be directed to: OCC: Because paper mail in the Washington, DC area and at the OCC is subject to delay, commenters are encouraged to submit comments through the Federal eRulemaking Portal or email, if possible. Please use the title "Proposed Revisions to Prohibitions and

Restrictions on Proprietary Trading and Certain Interests in, and Relationships with, Hedge Funds and Private Equity Funds" to facilitate the organization and distribution of the comments. You may submit comments by any of the following methods: Federal eRulemaking Portal— "regulations.gov": Go to www.regulations.gov. Enter "Docket ID OCC-2018-0010" in the Search Box and click "Search." Click on "Comment Now" to submit public comments.

· Click on the "Help" tab on the Regulations.gov home page to get information on using Regulations.gov, including instructions for submitting public comments Email: VolckerReg.Comments@

occ.treas.gov. Mail: Legislative and Regulatory Activities Division, Office of the Comptroller of the Currency, 400 7th

Street SW, Suite 3E-218, Washington, DC 20219. Hand Delivery/Courier: 400 7th Street SW, Suite 3E-218, Washington, DC 20219.

 Fax: (571) 465–4326 Instructions: You must include "OCC" as the agency name and "Docket

ID OCC-2018-0010" in your comment. In general, the OCC will enter all comments received into the docket and publish the comments on the Regulations.gov website without change, including any business or personal information that you provide such as name and address information, email addresses, or phone numbers.

attachments and other supporting materials, are part of the public record and subject to public disclosure. Do not include any information in your comment or supporting materials that you consider confidential or inappropriate for public disclosure. You may review comments and other related materials that pertain to this rulemaking action by any of the

following methods: • Viewing Comments Electronically. Go to www.regulations.gov. Enter "Docket ID OCC-2018-0010" in the Search box and click "Search." Click on "Open Docket Folder" on the right side of the screen and then "Comm Comments can be filtered by clicking on 'View All'' and then using the filtering tools on the left side of the screen Click on the "Help" tab on the

Regulations.gov home page to get information on using Regulations.gov Supporting materials may be viewed by clicking on "Open Docket Folder" and then clicking on "Supporting Documents," The docket may be viewed after the close of the comment period in the same manner as during the comment period.

 Viewing Comments Personally: You may personally inspect and photocopy comments at the OCC, 400 7th Street SW, Washington, DC 20219. For security reasons, the OCC requires that visitors make an appointment to inspect ents. You may do so by calling (202) 649-6700 or, for persons who are deaf or hearing impaired, TTY, (202) 649-5597. Upon arrival, visitors will be required to present valid governmentissued photo identification and submit to security screening in order to inspect and photocopy comments. Board: You may submit comments, identified by Docket No. R-1608; RIN 7100-AF 06, by any of the following methods:

 Agency Website: http:// www.federalreserve.gov. Follow the instructions for submitting comments at http://www.federalreserve.gov/ generalinfo/foia/ProposedRegs.cfm Email: regs.comments@ federalreserve.gov. Include docket and RIN numbers in the subject line of the Fax: (202) 452–3819 or (202) 452–

 3102.
Mail: Ann E. Misback, Secretary. Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue NW, Washington DC 20551. All public comments are vailable from the Board's website at http://www.federalreserve.gov/ generalinfo/foia/ProposedRegs.cfm as submitted, unless modified for technical