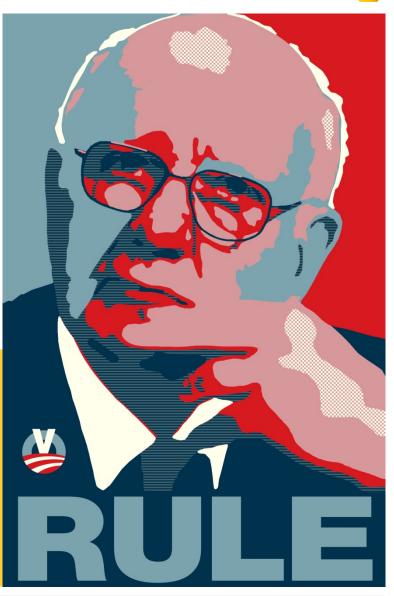


Presentation for the ECB FX Contact Group September 2012

The Volcker Rule

Implications for the FX Market

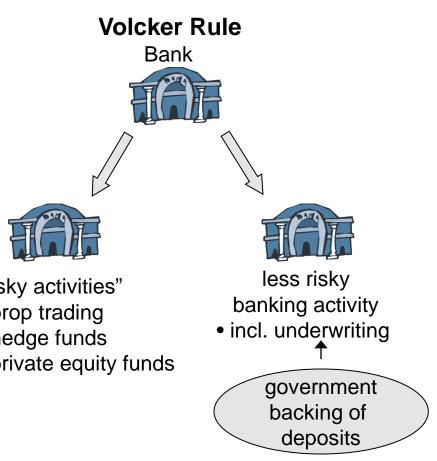




The Volcker rule

General idea: a new version of Glass-Steagall

Glass-Steagall Bank Bank Commercial Bank "risky activities" **Investment Bank** prop trading hedge funds private equity funds **Federal Deposit** Insurance Corporation







Putting the Volcker Rule into context

- Dodd-Frank Wall Street Reform and Consumer Protection Act, Public Law 111-203 July 21 2010 (Dodd-Frank Act)
 - Section 619: (Volcker Rule) "Prohibitions on Proprietary Trading and Certain Relationships with Hedge Funds and Private Equity Funds".
 - Adds new Section 13 to Bank Holding Company Act of 1956 (BHC Act)
- > Common draft by Department of the Teasury (OCC-2011-0014), Board of Governors of the Federal Reserve System (R-14), Federal Deposit Insurance Corporation, Securities and Exchange Commission.
 - "Prohibitions and Restrictions on Proprietary Trading and Certain Interests in, and Relationships with, Hedge Funds and Private Equity Funds" (Proposed Rule)



Prop trading & the fx market

§___.3(a) **Prohibition on proprietary trading**Except as otherwise provided in this subpart, a covered banking entity may not engage in **proprietary trading**.

§___.3(b)(1) Proprietary trading means engaging as principal for the trading account of the covered banking entity in any purchase or sale of one or more **covered financial positions**.

§__.3(b)(3)(i) Covered financial position means any position, including any long, short, synthetic or other position, in: (...) a **derivative**, including an option on a derivative

§___.3(b)(3)(ii) A covered financial position does not include any position that is: (...) **foreign exchange** or **currency**.

fx forwards, fx swaps, fx options

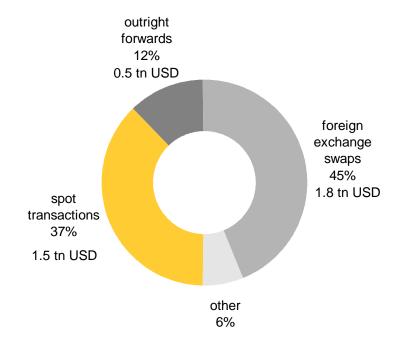
fx spot



Looking at the global forex landscape

Global forex market turnover by instrument

As % of total, share in tn USD



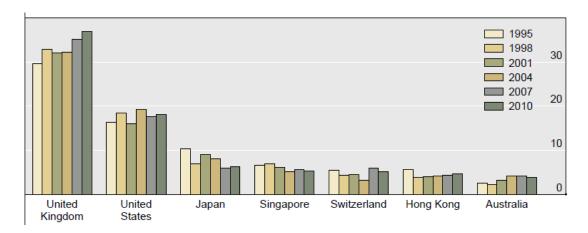
Source: BIS 2010



Looking at the global forex landscape

Geographical distribution of FX market turnover

As % of total

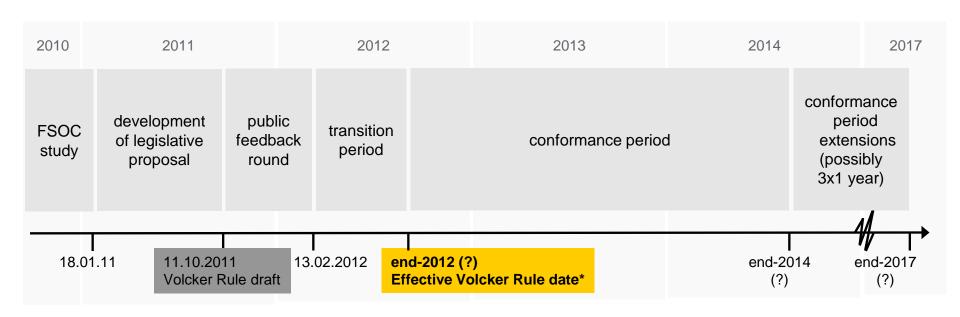


Source: BIS 2010





Implementation time line



^{* &}quot;(...) an entity covered by (...) the so-called Volcker Rule, has the **full two-year period** provided by the statute **to fully conform its activities and investments**, unless the Board extends the conformance period."
Fed press release, April 19 2012



How are European markets affected?

Extraterritorial provisions

The Volcker rule applies to

- insured depository institutions;
- any company that controls an insured depository institution;
- > foreign banks with a branch, agency or subsidiary in the US;
- > any affiliate or subsidiary of those entities.

Dodd-Frank Act, Sec. 619(h)(1)

Trading outside the US by a foreign bank

- > "The following activities are permitted: [...]
 Proprietary trading conducted by a banking entity [...], provided that the trading occurs solely outside of the United States and that the banking entity is not directly or indirectly controlled by a banking entity that is organized under the laws of the United States [...]." Dodd-Frank Act, Sec. 619(d)(1)(H)
- "§ __.6(d)(3) A purchase or sale shall be deemed to have occured solely occurred solely outside of the United States only if [...] no party to the purchase or sale is a resident of the United States; [...] the purchase or sale is executed wholly outside the United States."





Prohibited vs. permitted trading activity

Prohibited activities

- > Prop trading: "principal" risk in order to benefit from near-term price movements
- > "trader initiated"
- Identification by "bright line" indicators

Permitted activities

- Market making, underwriting activities, hedging, transacting in US government securities, and certain other activities specified in Dodd-Frank
- > "customer-initiated"

Additional limitation: "Prudential backstop" (conflict of interest, material exposure to high-risk assets/trading strategies, threat to safety or soundness of banking entity/fin. stability of US)



How to differentiate between prop trading and market making? (1)

The regulators are still uncertain

Six general indicators for prohibited prop trading activities Proposed Rule

- > [...] a trading unit **retains risk** in excess of the size and type required to provide intermediation service to customers;
- > [...] a trading unit primarily generates revenues from price movements of retained principal positions and risks, rather than customer revenues;
- > [...] a trading unit: (i) generates only very small or very large amounts of revenue per unit of risk taken; (ii) does not demonstrate consistent profitability; or (iii) demonstrates high earnings volatility;
-) [...] a trading unit either (i) does not transact through a trading system that interacts with orders of others or primarily with customers of the banking entity's market making desk to provide liquidity services, or (ii) holds principal positions in excess of reasonably expected near-term customer demands:
- > [...] a trading unit routinely **pays fees** rather than earns fees, commissions and spreads;
- the use of compensation incentives for employees of a particular trading activity that primarily reward proprietary risk-taking.



How to differentiate between prop trading and market making? (2)

The regulators are still uncertain – but want to define "bright line" criteria

Ideas in the FSOC study

- > Revenue-based metrics
 - > Historical revenue comparison
 - > Day one P&L
 - > Bid-offer pay-to-receive ratio
- > Revenue-to-risk metrics
 - Profitable trading days as percentage of total days
 - > Sharpe ratios

- > Inventory metrics
 - Inventory turnover
 - > Inventory aging

- > Customer-flow metrics
 - > Customer-initiated trade ratio
 - > Customer-initiated flow to inventory
 - > Revenue to customer-initiated flow ratio



How to differentiate between prop trading and market making? (3)

The regulators are still uncertain – but want to define "bright line" criteria

Questions in the Proposed Rule

- Increase in VaR, Stress VaR, Risk Factor Sensitivities
- Comprehensive P&L) / (Portfolio P&L Spread P&L)
- [(Comprehensive P&L) / (Volatility)] / [(Portfolio P&L) / (Volatility)]
- Inumber of Unprofitable Trading Days based on (Portfolio P&L) / (Volatility)] / [number of Unprofitable Trading days based on (Comprehensive P&L) / (Volatility)]
- > Pay-to-Receive Spread Ratio

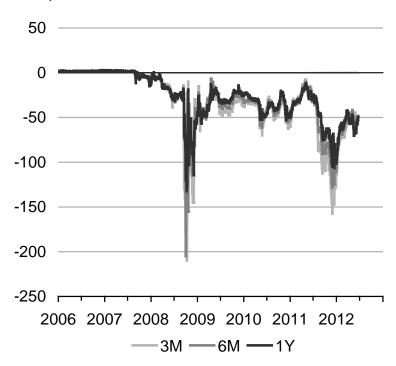


Consequences for the FX market

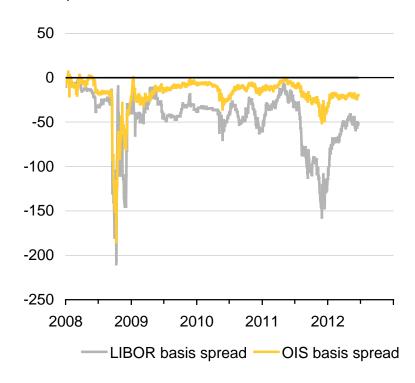
Further de-coupling of spot and swap market - i.e. no return to CIP?

EUR-USD LIBOR basis spread

basis points



LIBOR basis spread vs. OIS basis spread basis points

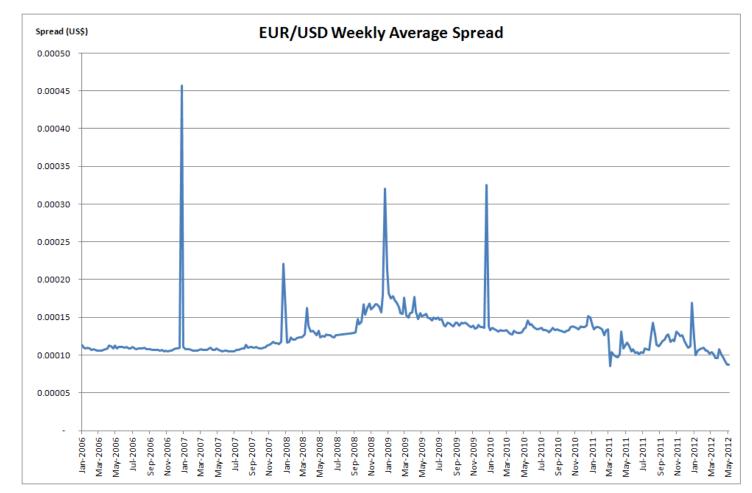


Sources: Bloomberg, Commerzbank Research



Spreads are compressing

...when crisis risk abates



Source: EBS



A model for the effect of the Volcker rule

The effect on spreads and on US banks' market share

Assumptions

- > There are i = 1, ..., N market makers.
- They face monopolistic competition, i.e. the demand for liquidity fo market maker i, D_i, is not totally elastic with respect to changes in the quoted spread s_i. Elasticity is ε_i, with 0 < ε_i < ∞.</p>
- The market making desk generates profits from bid-ask spreads, i.e. the profit is $s_i \cdot D_i$.
- The flow D_i generates market risk for the market maker. The (negative) value of this risk is $R(D_i)$.
- Market makers can use the flow information to generate prop trading profit, i.e. Chinese walls between market making desks and prop desks do not work perfectly.
- > Given some flow D_i , the prop desk of market maker i can generate a (risk-adjusted) profit of $f(D_i)$ from this flow information. Flow information becomes increasingly valuable with market size, i.e. $\Phi' > 0$.

Risk-adjusted profit maximization for market maker i:

$$\max_{s_i} \{ s_i \cdot D_i(s_i) - R[D_i(s_i)] + \Phi[D_i(s_i)] \}$$

Results:

 The profit-maximizing spread for market maker i, s_i*, is given by the FOC

$$[s_i^* - R'(D_i^*) + \Phi'(D_i^*)] / s_i^* = 1 / \epsilon_i$$

where D_i^* denotes the demand, given the profit-maximizing spread: $D_i^* = D_i(s_i^*)$.

- > The spread is smaller than without prop trading (i.e. in the case of $\Phi' = 0$). **Prop trading reduces spreads.**
- > An effective implementation of the Volcker rule would increase spreads quoted by US banks.
- > <u>US banks would lose market share in FX market making.</u>



Main findings

For the FX market

- > The Volcker rule bans prop trading activities.
- > The Volcker rule applies only for FX options, forwards and swaps, not for spot.
- > Only US banks and US activities of foreign banks are effected.
- > The separation of prop trading and market making is difficult. A firm set of bright line criteria has not been set up yet.
- > An effective implementation of the rule could increase market separation between spot and forward markets.
- > An effective implementation would increase spreads. US banks would lose market share.



Contact Details and Disclaimer



Ulrich Leuchtmann

Managing Director
Global Head of FX Research

Mainzer Landstrasse 153 DLZ 2 60327 Frankfurt am Main Germany

Phone +49 69 136 23393 Fax +49 69 136 83944

email ulrich.leuchtmann@commerzbank.com



Disclaimer

This document has been created and published by the Corporates & Markets division of Commerzbank AG, Frankfurt/Main or Commerzbank's branch offices mentioned in the document. Commerzbank Corporates & Markets is the investment banking division of Commerzbank, integrating research, debt, equities, interest rates and foreign exchange. The author(s) of this report, certify that (a) the views expressed in this report accurately reflect their personal views; and (b) no part of their compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or views expressed by them contained in this document. The analyst(s) named on this report are not registered / qualified as research analysts with FINRA and are not subject to NASD Rule 2711.

Disclaime

This document is for information purposes only and does not take account of the specific circumstances of any recipient. The information contained herein does not constitute the provision of investment advice. It is not intended to be and should not be construed as a recommendation, offer or solicitation to acquire, or dispose of, any of the financial instruments mentioned in this document and will not form the basis or a part of any contract or commitment whatsoever.

The information in this document is based on data obtained from sources believed by Commerzbank to be reliable and in good faith, but no representations, guarantees or warranties are made by Commerzbank with regard to accuracy, completeness or suitability of the data. The opinions and estimates contained herein reflect the current judgement of the author(s) on the data of this document and are subject to change without notice. The opinions do not necessarily correspond to the opinions of Commerzbank. Commerzbank does not have an obligation to update, modify or amend this document or to otherwise notify a reader thereof in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate.

The past performance of financial instruments is not indicative of future results. No assurance can be given that any opinion described herein would yield favourable investment results. Any forecasts discussed in this document may not be achieved due to multiple risk factors including without limitation market volatility, sector volatility, corporate actions, the unavailability of complete and accurate information and/or the subsequent transpiration that underlying assumptions made by Commerzbank or by other sources relied upon in the document were inapposite.

Neither Commerzbank nor any of its respective directors, officers or employees accepts any responsibility or liability whatsoever for any expense, loss or damages arising out of or in any way connected with the use of all or any part of this document.

Commerzbank may provide hyperlinks to websites of entities mentioned in this document, however the inclusion of a link does not imply that Commerzbank endorses, recommends or approves any material on the linked page or accessible from it. Commerzbank does not accept responsibility whatsoever for any such material, nor for any consequences of its use.

This document is for the use of the addressees only and may not be reproduced, redistributed or passed on to any other person or published, in whole or in part, for any purpose, without the prior, written consent of Commerzbank. The manner of distributing this document may be restricted by law or regulation in certain countries, including the United States. Persons into whose possession this document may come are required to inform themselves about and to observe such restrictions. By accepting this document, a recipient hereof agrees to be bound by the foregoing limitations



Disclaimer (contd.)

Additional notes to readers in the following countries:

Germany: Commerzbank AG is registered in the Commercial Register at Amtsgericht Frankfurt under the number HRB 32000. Commerzbank AG is supervised by the German regulator Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin), Marie-Curie-Str. 24-28, 60439 Frankfurt am Main, Germany.

United Kingdom: This document has been issued or approved for issue in the United Kingdom by Commerzbank AG London Branch. Commerzbank AG, London Branch is authorised by Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) and subject to limited regulation by the Financial Services Authority. Details on the extent of our regulation by the Financial Services Authority are available from us on request. This document is directed exclusively to eligible counterparties and professional clients. It is not directed to retail clients. No persons other than an eligible counterparty or a professional client should read or rely on any information in this document. Commerzbank AG, London Branch does not deal for or advise or otherwise offer any investment services to retail clients.

United States: This document has been approved for distribution in the US under applicable US law by Commerz Markets LLC ("Commerz Markets"), a wholly owned subsidiary of Commerzbank AG and a US registered broker-dealer. Any securities transaction by US persons must be effected with Commerz Markets. Under applicable US law; information regarding clients of Commerz Markets may be distributed to other companies within the Commerzbank group. This report is intended for distribution in the United States solely to "institutional investors" and "major U.S. institutional investors," as defined in Rule 15a-6 under the Securities Exchange Act of 1934. Commerz Markets is a member of FINRA and SIPC.

Canada: The information contained herein is not, and under no circumstances is to be construed as, a prospectus, an advertisement, a public offering, an offer to sell securities described herein, in Canada or any province or territory thereof. Any offer or sale of the securities described herein in Canada will be made only under an exemption from the requirements to file a prospectus with the relevant Canadian securities regulators and only by a dealer properly registered under applicable securities laws or, alternatively, pursuant to an exemption from the dealer registration requirement in the relevant province or territory of Canada in which such offer or sale is made. Under no circumstances is the information contained herein to be construed as investment advice in any province or territory of Canada and is not tailored to the needs of the recipient. In Canada, the information contained herein is intended solely for distribution to Permitted Clients (as such term is defined in National Instrument 31-103) with whom Commerz Markets LLC deals pursuant to the international dealer exemption. To the extent that the information contained herein references securities of an issuer incorporated, formed or created under the laws of Canada or a province or territory of Canada, any trades in such securities may not be conducted through Commerz Markets LLC. No securities commission or similar regulatory authority in Canada has reviewed or in any way passed upon these materials, the information contained herein or the merits of the securities described herein and any representation to the contrary is an offence.

European Economic Area: Where this document has been produced by a legal entity outside of the EEA, the document has been re-issued by Commerzbank AG, London Branch for distribution into the EEA.

Singapore: This document is furnished in Singapore by Commerzbank AG, Singapore branch. It may only be received in Singapore by an institutional investor as defined in section 4A of the Securities and Futures Act, Chapter 289 of Singapore ("SFA") pursuant to section 274 of the SFA.

Hong Kong: This document is furnished in Hong Kong by Commerzbank AG, Hong Kong Branch, and may only be received in Hong Kong by 'professional investors' within the meaning of Schedule 1 of the Securities and Futures Ordinance (Cap.571) of Hong Kong and any rules made there under.

Japan: Commerzbank AG, Tokyo Branch is responsible for the distribution of Research in Japan. Commerzbank AG, Tokyo Branch is regulated by the Japanese Financial Services Agency (FSA).

Australia: Commerzbank AG does not hold an Australian financial services licence. This document is being distributed in Australia to wholesale customers pursuant to an Australian financial services licence exemption for Commerzbank AG under Class Order 04/1313. Commerzbank AG is regulated by Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) under the laws of Germany which differ from Australian laws.

Hong Kong Branch

Tel: +852 3988 0988

Commerzbank AG 29/F. Two IFC

8 Finance Street

Central

Hong Kong

© Commerzbank AG 2012. All rights reserved. Version 9.14

Commerzbank Corporates & Markets

New York Branch Singapore Branch Frankfurt London Commerzbank AG Commerzbank AG Commerzbank AG Commerzbank AG DLZ - Gebäude 2. London Branch 2 World Financial Center. 8. Shenton Way, #42-01 Händlerhaus PO BOX 52715 31st floor Singapore 068811 Mainzer Landstraße 153 30 Gresham Street New York, 60327 Frankfurt London, EC2P 2XY NY 10281 Tel: + 49 69 136 21200 Tel: + 44 207 623 8000 Tel: + 1 212 703 4000 Tel: +65 63110000

Ulrich Leuchtmann | Head of FX Research | September 2012