



UNIVERSITY OF EDINBURGH
Business School

CRC | Credit
Research
Centre

Credit Scoring and Credit Control XIV

26 – 28 August 2015

#creditconf15 @uoebusiness



CreditToday
THE MAGAZINE FOR THE COMMERCIAL AND CONSUMER CREDIT INDUSTRY



FICO™



OTC Derivatives Market Reform: Looking Back and Looking Forward

AUGUST 2015

ERIK HEITFIELD
FEDERAL RESERVE BOARD

The views expressed here are my own and do not reflect the opinions of the Federal Reserve Board of Governors or its staff.

The G-20 Reform Agenda

Financial crisis revealed frailty in the OTC derivatives market

Large concentrations of bilateral counterparty exposures

Inconsistent risk management

Lack of transparency

Adverse feedback loops (e.g., margin spirals)

2009 G-20 commitments

All standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate

All standardized OTC derivatives contracts should be cleared through central counterparties

OTC derivative contracts should be reported to trade repositories

Non-centrally cleared contracts should be subject to higher capital requirements

- In 2010, the G-20 also committed to impose minimum margin requirements for non-cleared contracts

2009 G-20 commitments

G-20 leaders committed to achieving reforms by end-2012

The G-20 asked the Financial Stability Board (FSB) and its members to assess implementation and whether it is sufficient to

- improve transparency in the derivatives markets
- mitigate systemic risk, and
- protect against market abuse

G-20 commitments spurred worldwide action

Dodd-Frank Act passed in July 2010

European Market Infrastructure Regulation (EMIR) finalized in February 2012

Smaller jurisdictions (e.g., Japan, Hong Kong, Singapore) are also implementing reforms

Financial Stability Board is issuing biannual reports on G-20 derivatives market reforms

International standards-setting bodies are coordinating reform efforts, including

- BCBS – Basel III
- CPMI-IOSCO – Principles for Financial Market Infrastructures
- BCBS-IOSCO – Working Group on Margining Requirements
- CPMI-IOSCO – Aggregation Feasibility Study Group, Data Harmonization Working Group

G-20 Reform progress report – July '15

Regulators in most jurisdictions have the necessary legislative authority to achieve reforms in most areas

Summary of Jurisdictional Progress of OTC Derivatives Market Reforms

Reforms to jurisdictional frameworks, as at end-June 2015

		Trade Reporting	Central Clearing	Capital	Margin	Platform Trading
Argentina	AR	3	3		1	3
Australia	AU				1	1
Brazil	BR				1	1
Canada	CA		3		1	2
China	CN			1		3
European Union	EU				2	3
Hong Kong	HK	3	1		1	1
India	IN		3		1	1
Indonesia	ID		3	1	1	1
Japan	JP				2	1
Rep. of Korea	KR		3	3		
Mexico	MX		1	3	1	1
Russia	RU		2		2	
Saudi Arabia	SA		1		1	1
Singapore	SG				1	1
South Africa	ZA	2	2		2	1
Switzerland	CH	1	1		1	1
Turkey	TR	1	1	1	1	1
United States ⁵	US			3	2	

Legend*

Red: No authority

Yellow-1: Legislative framework in force or proposed

Yellow-2: Rules proposed

Yellow-3: Rules adopted

Blue: Rules in force for >90% of market

*See the FSB ODWG July 2015 progress report for complete definitions.

Source: FSB OTC Derivatives Working Group, July 2015

Dodd-Frank Title VII embeds a bifurcated approach to swaps regulation

SEC regulates securities-based-swaps

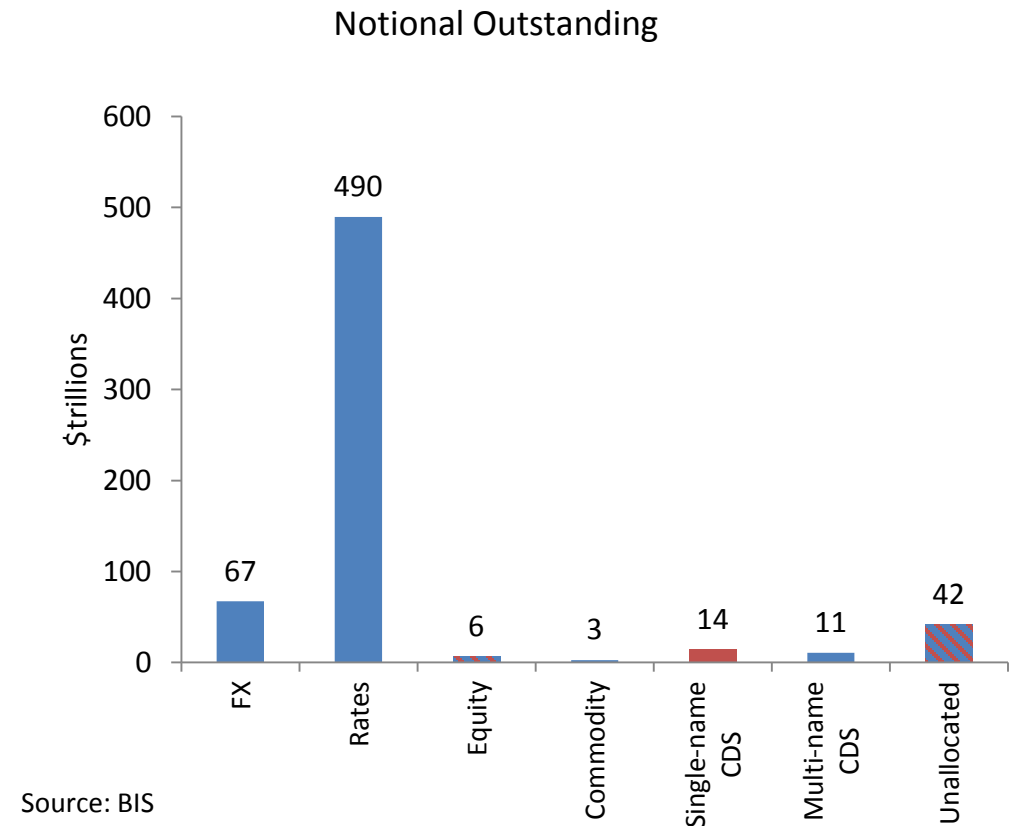
- Swaps whose value depends on a single security or a narrow basket of securities (9 or fewer)
- Primarily single-name CDS and TRS or single equity variance or dividend swaps

CFTC has jurisdiction over all other swaps

- Swaps whose value depends on a rate or broad index
- Including IRS, FX, commodity swaps, and credit and equity index products

The Fed has an important role to play because

- We participate in the Financial Stability Oversight Council
- We supervise the largest dealer banks
- Under Title VIII, the Fed has authority to review CFTC/SEC risk management standards for designated financial market utilities (DFMUs)



Central Clearing

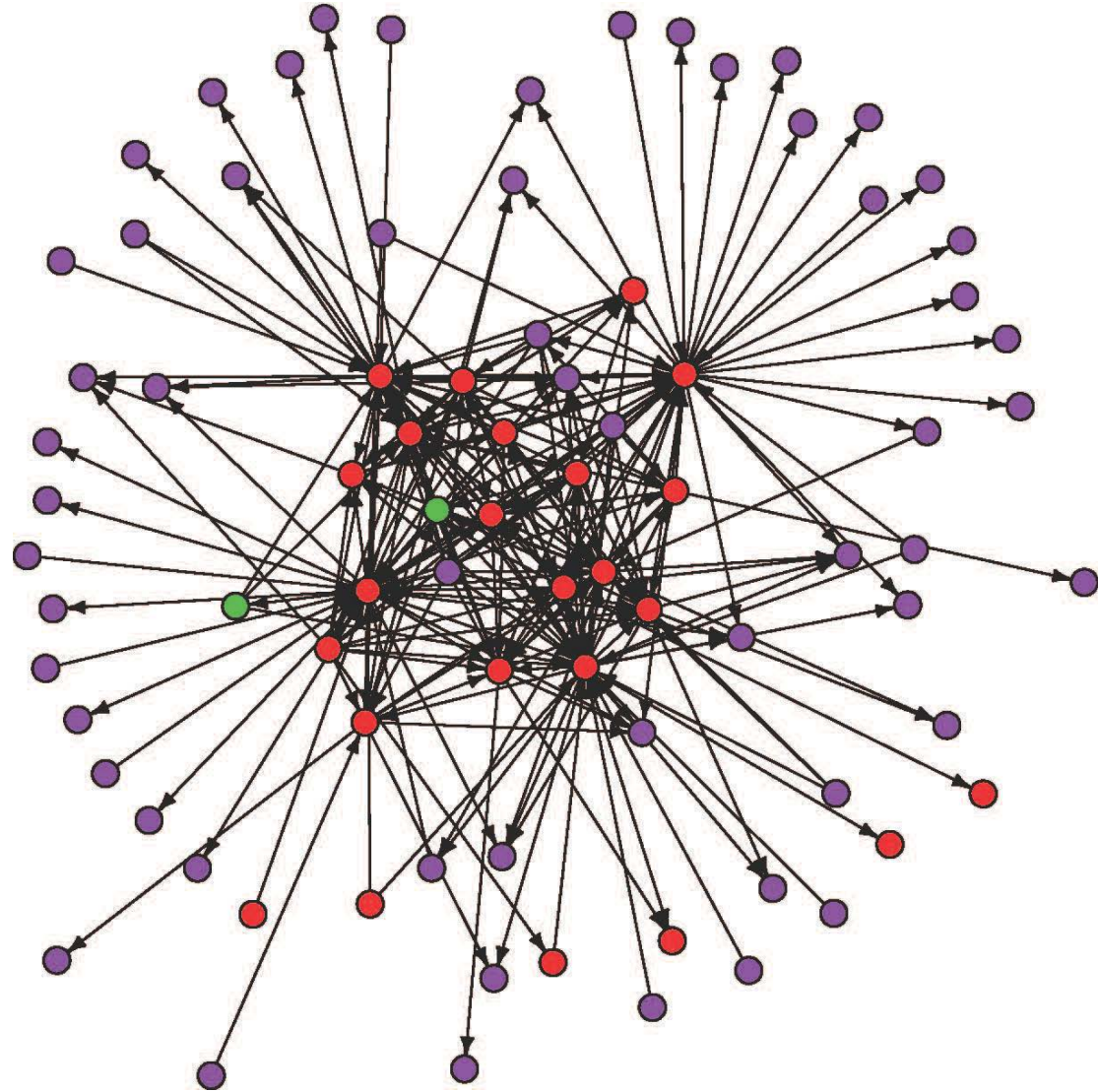
“ALL STANDARDIZED OTC DERIVATIVE CONTRACTS SHOULD BE ...
CLEARED THROUGH CENTRAL COUNTERPARTIES BY END-2012 AT
THE LATEST.”

Network of CDS exposures

Gross Notional (Trillion USD)

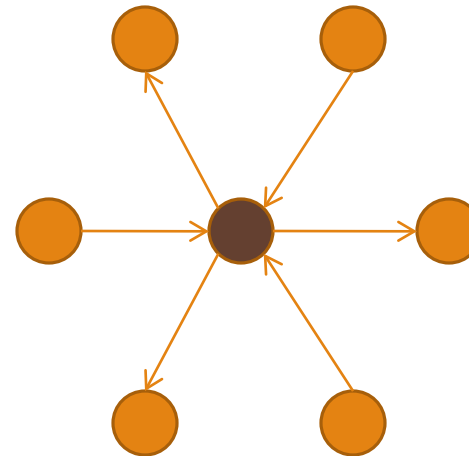
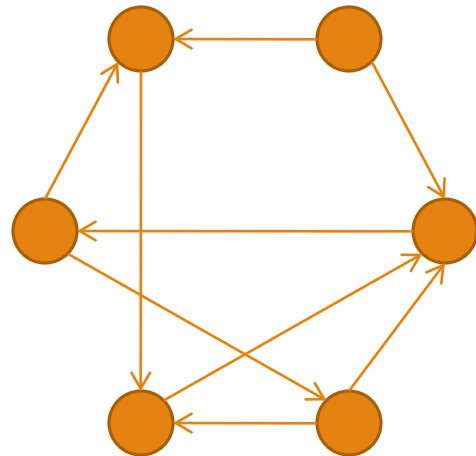
	Seller	
Buyer	Dealer	Customer
Dealer	7.1	3.6
Customer	3.5	0.6

Source: DTCC



Central clearing

A central counterparty interposes itself between every trade, transforming a decentralized trading network into a “hub-and-spoke” network



Central clearing can mitigate risk by...

Improving transparency

Reducing bilateral exposures

Imposing common margin rules and operational requirements on clearing members

Mutualizing losses

Mandatory clearing requirements

In December 2012, the CFTC issued its first list of swap products designated for mandatory clearing

- “Plain vanilla” interest rate swaps
 - Covers fixed-for-floating, basis swaps, overnight index swaps, forward rate agreements
 - Does not cover swaps with embedded optionality or cross-currency swaps
- CDS index products
 - Most series of major CDX and iTraxx indexes
 - Does not cover standardized index tranches or bespoke index products

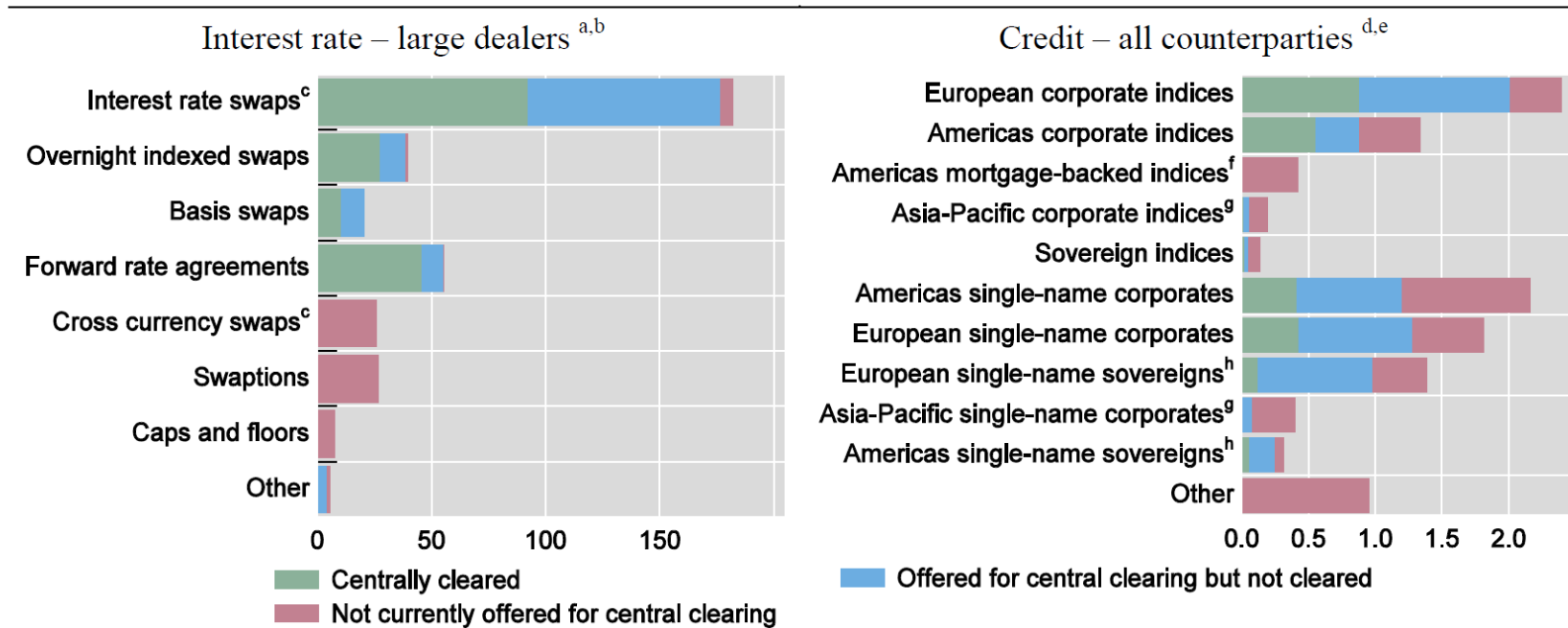
The European Commission has forwarded a similar list of products for consideration by the European Parliament and Council. If approved, mandatory clearing in Europe could begin in mid 2016

In June 2012 the SEC adopted rules governing how it would make clearing determinations but has not yet designated any products for mandatory clearing

Potential for growth in clearing

Central Clearing of OTC Interest Rate and Credit Derivatives by Product Type

Outstanding notional amounts, USD trillions, as at end-June 2015



Source: FSB OTC Derivatives Working Group, July 2015

Trading

“ALL STANDARDIZED OTC DERIVATIVE CONTRACTS SHOULD BE TRADED ON EXCHANGE OR ELECTRONIC TRADING PLATFORMS, WHERE APPROPRIATE...BY END-2012 AT THE LATEST”

Mandatory SEF trading requirements

DFA Title VII requires that swaps mandated for clearing must also be traded on a swap execution facility (SEF) or designated contract market (DCM) if the swap is “made available to trade” (MAT) by at least one SEF/DCM.

Under CFTC rules published in May 2013, MAT determination depends on factors such as trading volume and bid/ask spreads that capture market depth and liquidity

Mandatory SEF/DCM trading in the US began in February 2014 for

- Selected standardized USD-, EUR, and GBP-denominated fixed-for-floating interest rate swaps
- The most widely traded series of CDX and iTRAXX CDS index swaps

In Europe, mandatory trading requirements will likely begin in 2017 when provisions of MiFID II become effective

Capital

“NON-CENTRALLY CLEARED CONTRACTS SHOULD BE SUBJECT TO HIGHER CAPITAL REQUIREMENTS.”

Basel III

Basel III

- The BCBS published an interim risk-based capital treatment for bank exposures to CCPs in July 2012
- Following a quantitative impact study and additional consultation with the CPMI and IOSCO, the BCBS revised its standards for bank CCP exposures in April 2014
- New standards will come into effect in 2017

US implementation

- US banking Agencies (FRB, OCC, FDIC) finalized rules implementing Basel III risk-based capital standards in July 2013
- Revised rules consistent with the new BCBS framework for bank CCP exposures were published in December 2014

Capital rules incentivize clearing through well-regulated CCPs

Qualified Central Counterparties (QCCP) definition

- An entity licensed to operate as a CCP by the relevant regulator
- Must be based and supervised in a jurisdiction where the regulator applies rules consistent with the PFMI

Bank exposures to QCCPs

- 2% base risk weight for trade exposures to a QCCP
- Capital risk weights for clearing member contributions to QCCP default fund depends on
 - Estimated financial resources needed by the CCP to cover its own counterparty risk
 - The clearing member's default fund contribution relative to those of other members and the CCP's own resources
 - 2% risk weight floor

$$K_{CM} = \max \left(K_{CCP} \cdot \left(\frac{DF_i^{pref}}{DF_{CCP} + DF_{CM}^{pref}} \right); 8\% * 2\% * DF_i^{pref} \right)$$

For non-qualified CCPs

- Standardized Approach applied for bank's trade exposures
- Dollar-for-dollar capital (i.e., 1250% risk weight) for default fund contributions

Margin

“WE CALL ON THE BASEL COMMITTEE ON BANKING SUPERVISION, THE INTERNATIONAL ORGANIZATION FOR SECURITIES COMMISSION TOGETHER WITH OTHER RELEVANT ORGANIZATIONS TO DEVELOP FOR CONSULTATION STANDARDS ON MARGINING FOR NON-CENTRALLY CLEARED OTC DERIVATIVES BY JUNE 2012...”

Current margin practices vary widely among counterparties

Dealer-to-dealer

- Variation margin reconciled and settled daily
- No initial margin requirements

Dealer-to-client

- Variation margin
 - Frequency can vary from daily to monthly or longer
 - Exposure thresholds and minimum transfer amounts may be linked to client credit quality
 - May be one-way (client → dealer) or bilateral (client ↔ dealer)
- Initial margin
 - Portfolio vs. trade-by-trade approaches
 - Initial margin requirements may be linked to client credit quality

New standards for non-cleared swaps margin

Working Group on Margining Requirements (WGMR)

- Established in September 2011 by BCBS and IOSCO to develop a framework for margining non-centrally cleared OTC derivatives
- After producing two consultative papers and a quantitative impact study, the WGMR published standards in September 2013
- Originally scheduled to begin phasing in starting December 2015, the transition schedule has been pushed back to September 2016

US Implementation

- DFA Title VII requires prudential and market regulators to establish margin requirements for SDs and MSPs
- In 2011 and 2012, prior to finalization of the WGMR standards, prudential regulators, the CFTC, and the SEC proposed rules
- US prudential regulators re-proposed rules consistent with the WGMR standards in October 2014. CFTC re-proposed rules in September 2014

WGMR standards

Should cover all non-cleared derivatives

Financial firms and systemically important entities should exchange initial and variation margin

Methodologies should

- Cover current exposure (variation margin) and potential future exposure (initial margin)
- Cover exposures with a high degree of confidence

Collateral should be liquid with appropriate haircuts

Initial margin should be exchanged without netting and held in such a way to ensure that

- The margin is immediately available to the collecting party in the event of the counterparty's default; and
- The collected margin must be subject to arrangements that fully protect the posting party in the event that the collecting party enters bankruptcy

Transactions between a firm and its affiliate should be subject to appropriate regulation

Regulatory regimes should be consistent and non-duplicative

Trade Reporting

“OTC DERIVATIVE CONTRACTS SHOULD BE REPORTED TO TRADE REPOSITORIES.”

Implementation of trade reporting requirements are well advanced

DFA requires that swaps transactions be reported to swap data repositories (SDRs) regulated by the CFTC or SEC

- Reporting requirements for CFTC-regulated swaps were phased on over 2013

In Europe, mandatory trade reporting began in February 2014

Trade Reporting Requirements in FSB Member Jurisdictions

As at end-October 2014

Asset class	Jurisdictions																			
	AR	AU	BR	CA	CN	EU	HK	IN	ID	JP	KR	MX	RU	SA	SG	ZA	CH	TR	US	
CO		■	■	■		■					■	■					■		■	
CR		■	■	■	■	■		■		■	■	■			■		■		■	
EQ		■	■	■		■				■	■	■					■		■	
FX		■	■	■	■	■	■	■	■	■	■	■	■	■	■		■	■	■	
IR		■	■	■	■	■	■	■	■	■	■	■		■	■		■		■	

■ Requirements in effect for all sub-products ■ Requirements in effect for some sub-products

CO = commodity, CR = credit, EQ = equity, FX = foreign exchange, IR = interest rate

Source: FSB OTC Derivatives Working Group, November 2014

Legal and technical barriers pose challenges

Legal barriers to data access

- In some jurisdictions legal barriers such as bank secrecy laws, privacy laws, and international agreements requirements impose restrictions on what data can be reported into trade repositories and how data can be shared, particularly across borders
- In the US, indemnification requirements written into the DFA prevent many regulators from directly accessing SDR data

Lack of common standards pose technical barriers to data aggregation

- Need for data field harmonization across trade repositories
- Lack of unique transaction identifiers (UTIs) makes it difficult for avoid double counting (e.g., when two parties to a trade report to different trade repositories)

CPMI and IOSCO are working to develop guidance on the definition, format and usage of key TR data elements needed to facilitate the aggregation of data across trade repositories

- Unique transaction identifiers
- Unique product identifiers
- Data field harmonization

Conclusions

Significant progress, but significant challenges as well

Though the G-20 leader's 2012 deadline was not fully met, significant progress has been made in a number of reform areas

- Mandatory clearing and trading requirements are in place in the US and are being developed in Europe
- Capital standards for OTC derivative exposures to CCPs have been finalized and are being implemented around the world
- Margin standards for non-cleared derivatives have been finalized, though more work needs to be done to implement them
- Trade reporting requirements are in place in most FSB jurisdictions including the US and Europe for some or all product classes

Continued progress hinges on coordination and cooperation among regulators

Resources

FSB OTC Derivatives Working Group, 9th report on reform implementation

- <http://www.financialstabilityboard.org/wp-content/uploads/OTC-Derivatives-Ninth-July-2015-Progress-Report.pdf>

CPMI-IOSCO Principles for financial market infrastructures

- [https://www.bis.org/cpmi/publ/d101a.pdf?](https://www.bis.org/cpmi/publ/d101a.pdf)

BCBS capital requirements for bank exposures to CCPs

- <http://www.bis.org/publ/bcbs282.pdf>

US implementation of Basel III

- <http://www.federalreserve.gov/bankinforeg/basel/USImplementation.htm>

BCBS-IOSCO margin requirements for non-centrally cleared derivatives

- <http://www.bis.org/bcbs/publ/d317.htm>

FSB Aggregation Feasibility Study Group final report

- http://www.financialstabilityboard.org/wp-content/uploads/r_140919.pdf



UNIVERSITY OF EDINBURGH
Business School

CRC | Credit
Research
Centre

Credit Scoring and Credit Control XIV

26 – 28 August 2015

#creditconf15 @uoebusiness



CreditToday
THE MAGAZINE FOR THE COMMERCIAL AND CONSUMER CREDIT INDUSTRY



FICO™

