



OICU-IOSCO

Risks

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Stakeholders meeting
Madrid, 28 June 2013

Disclaimer

The views and opinions presented in this presentation are of the presenter only and do not necessarily reflect the views and opinions of IOSCO or its individual members.

Agenda

- Introduction
- Risks

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Introduction

- Research Function of IOSCO working on emerging risks (SCRR; Research Department)
- Work:
 - Securities Markets Risk Outlook
 - Systemic Risk Identification Methodology
 - Risk Dashboard
 - Risk Roundtables
 - Risk Surveys
 - Market Intelligence
 - Consultation of IOSCO Committees
 - Input to FSB work streams
 - Hedge Fund data gathering and report
 - Credit Hedge Fund report
 - Exploratory analysis cyber crime

Introduction

Conclusions of Securities Markets Risk Outlook 2012:

	Low	Moderate	High
Unintended consequences of Central Clearing			
Systemic implications of high frequency trading			
Risk build-up via shadow banking activities			
Structured retail product innovation			
Inadequate disclosure of financial risks			
Risks from regulatory uncertainty			

Source: IOSCO Research Department.

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Risks

- Low interest rate environment
- Collateral in a stressed funding environment
- Derivatives markets
- Capital flows in emerging markets
- Cyber-crime

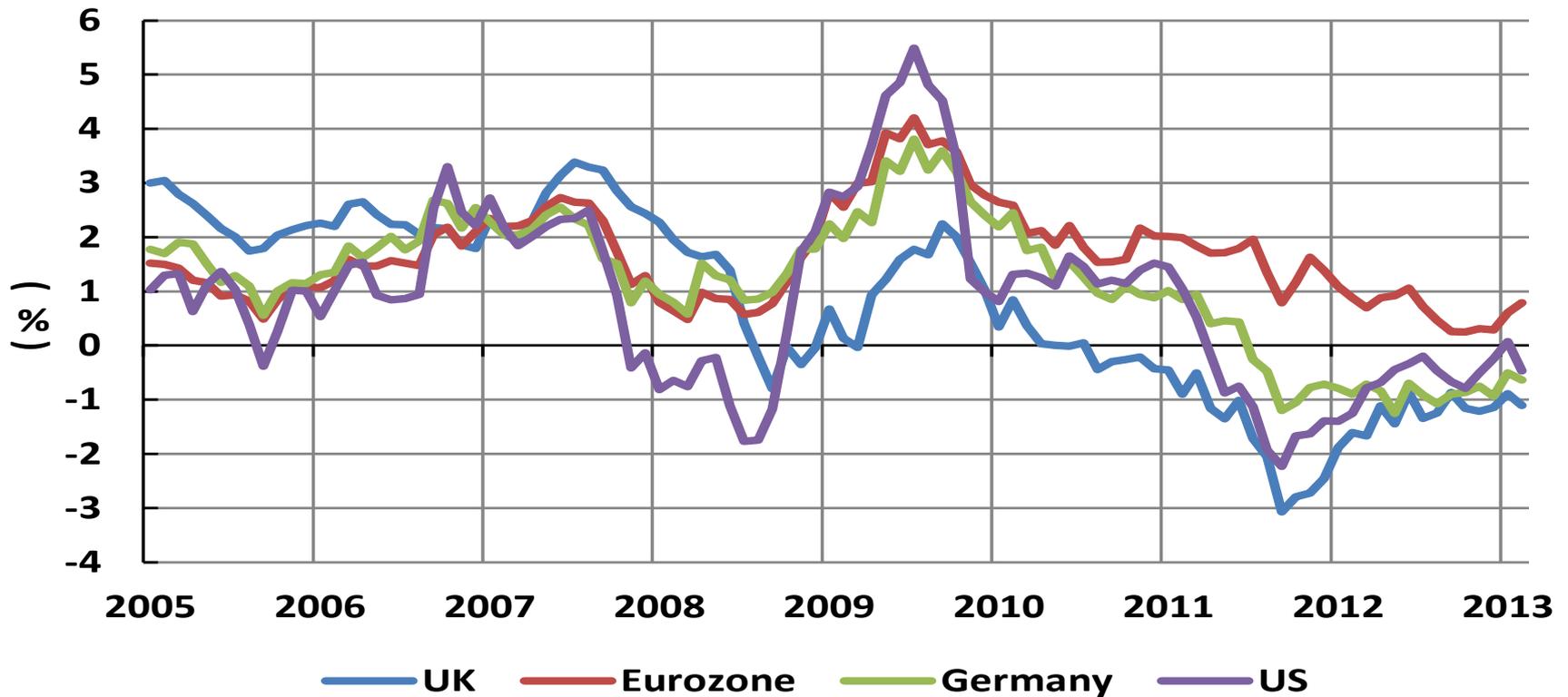
Risks

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Low interest rate environment

Expansionary monetary policies reduce real interest rates to maintain the functioning of the financial markets and to combat the recession

Graph 1: real interest rates

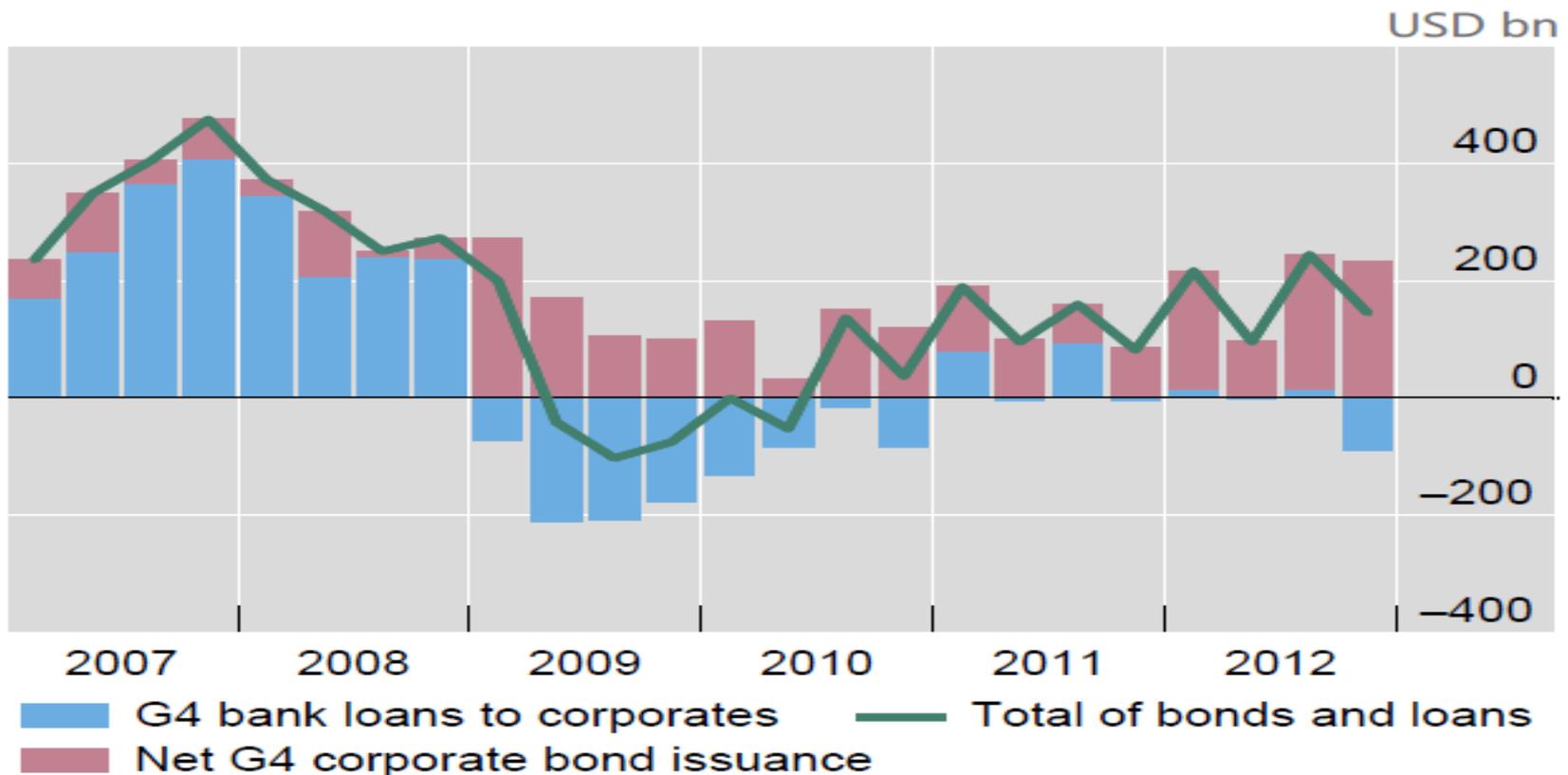


Source: IOSCO Risk Dashboard, Bloomberg

Low interest rate environment

- Decreasing bank lending and increasing role of securities markets...

Graph 2: Bank loans and corporate bond issuances

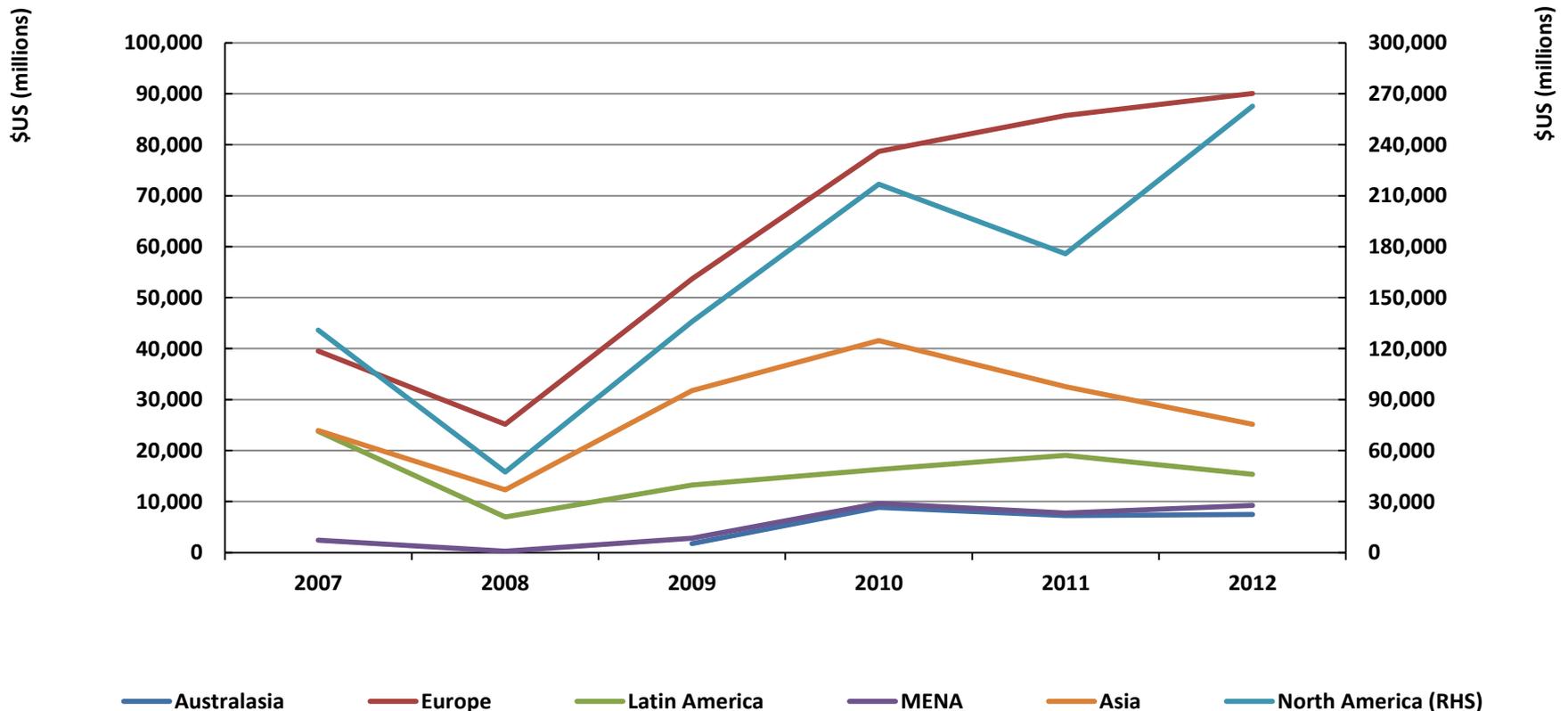


Source: FSB SCAV

Low interest rate environment

- Cheap borrowing for big firms (not SME's) drive corporate bond issuances up...

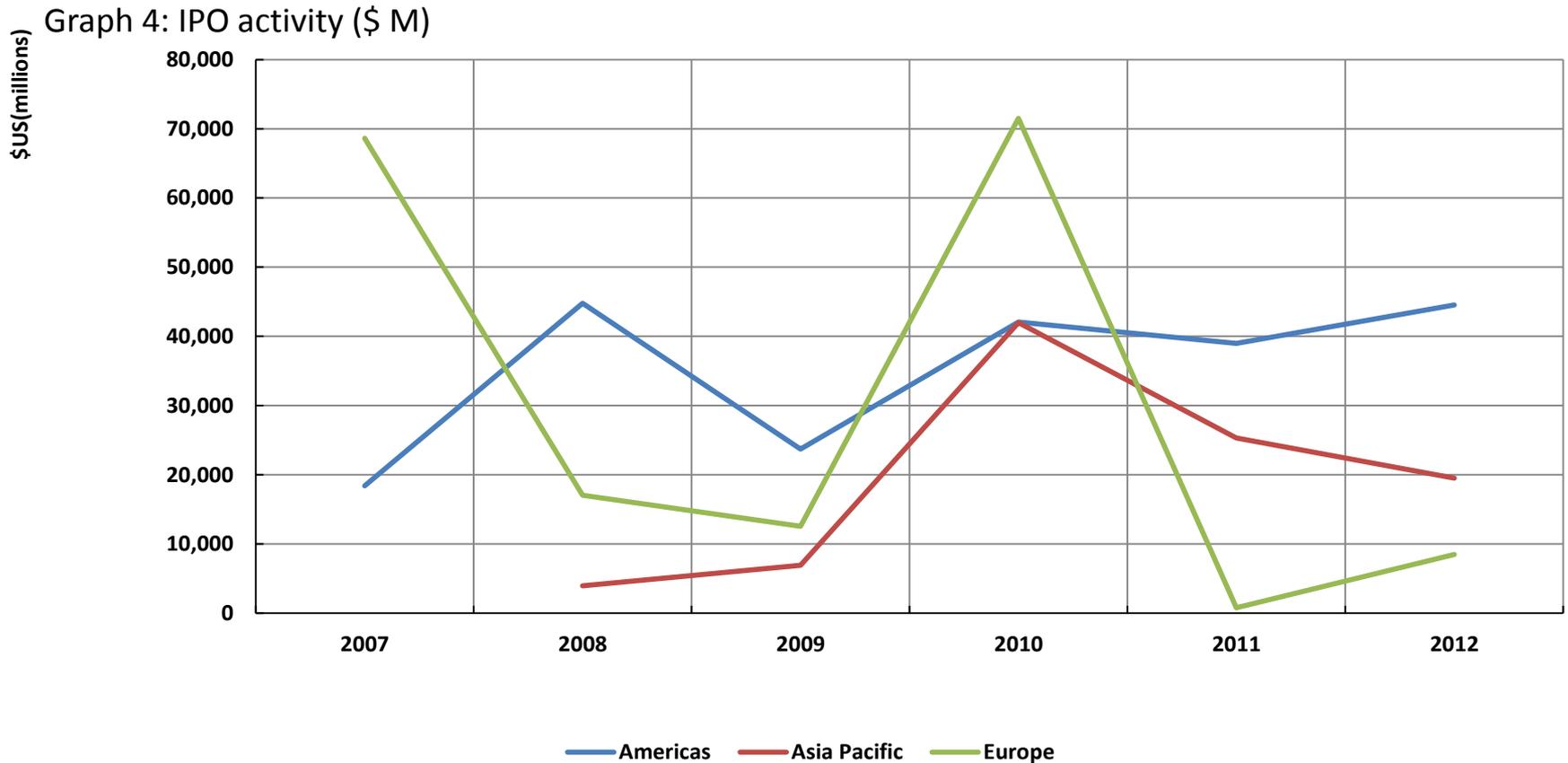
Graph 3: Corporate bond issuances



Source: Dealogic

Low interest rate environment

- While IPOs on the equity markets seems less attractive for firm's funding...

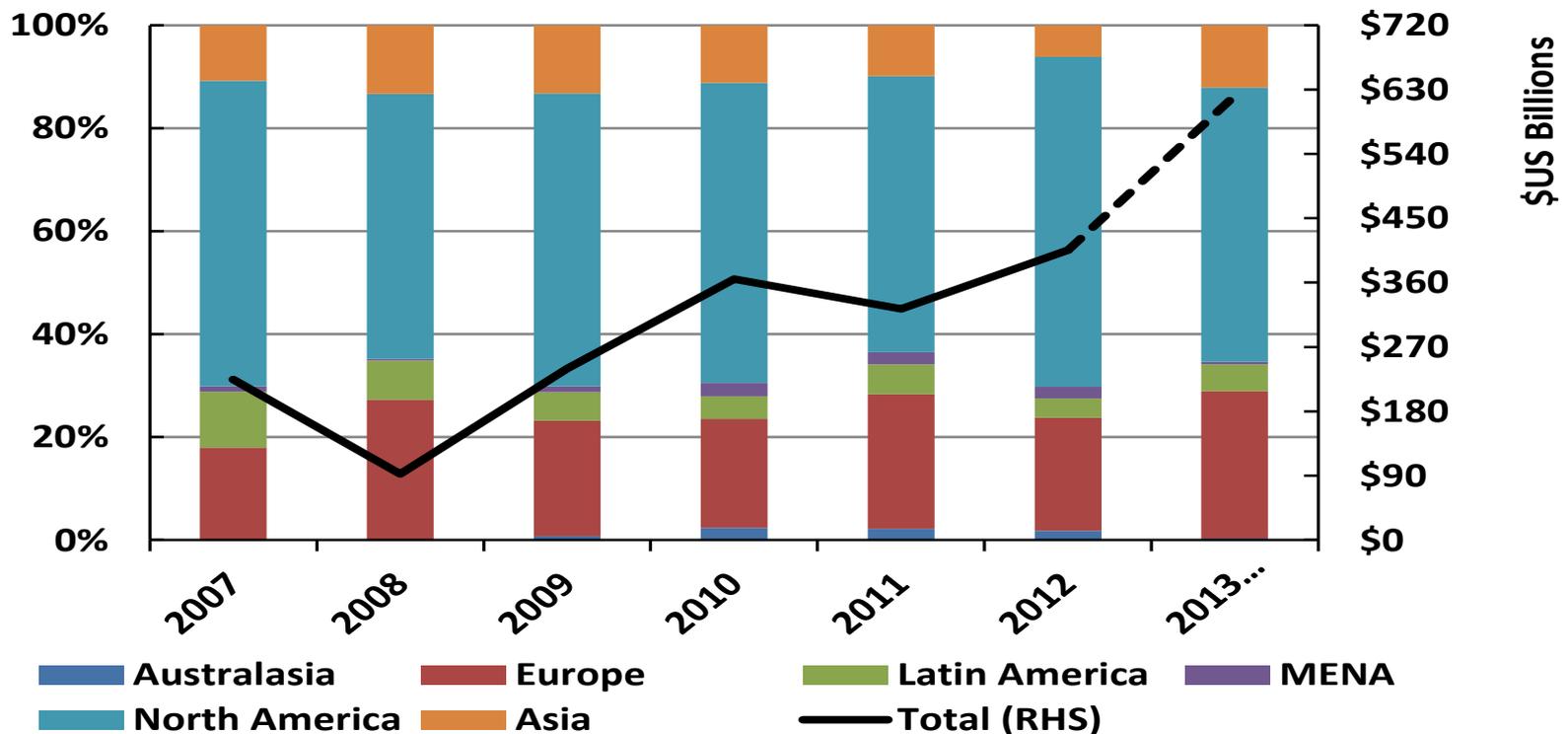


Source: World Federation of Exchanges

Low interest rate environment

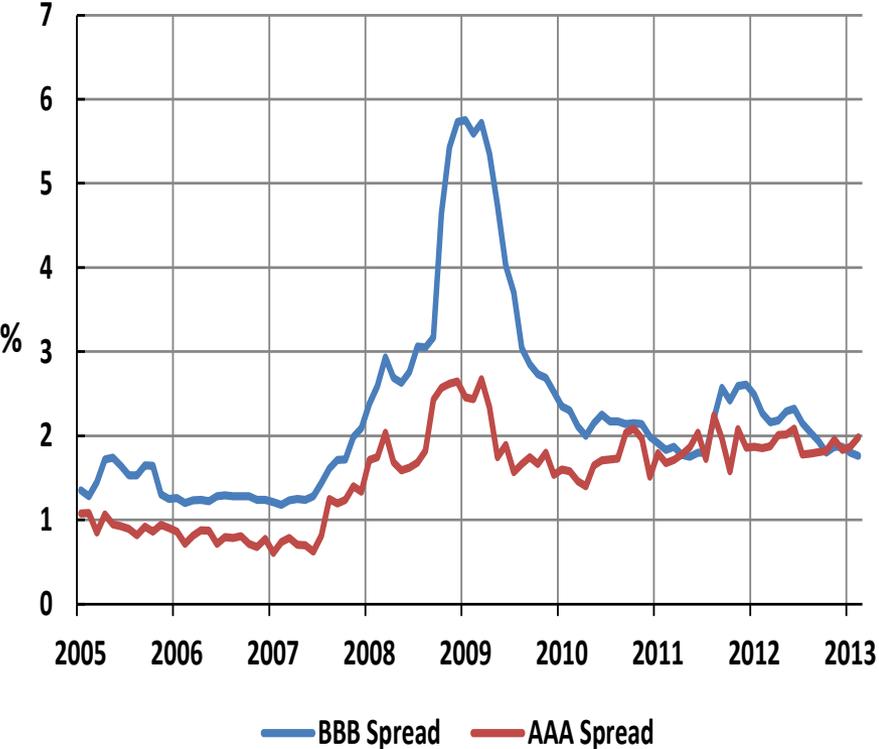
- Certain segments of bond markets show high volumes of issuance, especially high yield...

Graph 5: High yield corporate bond issuance (\$ bn)

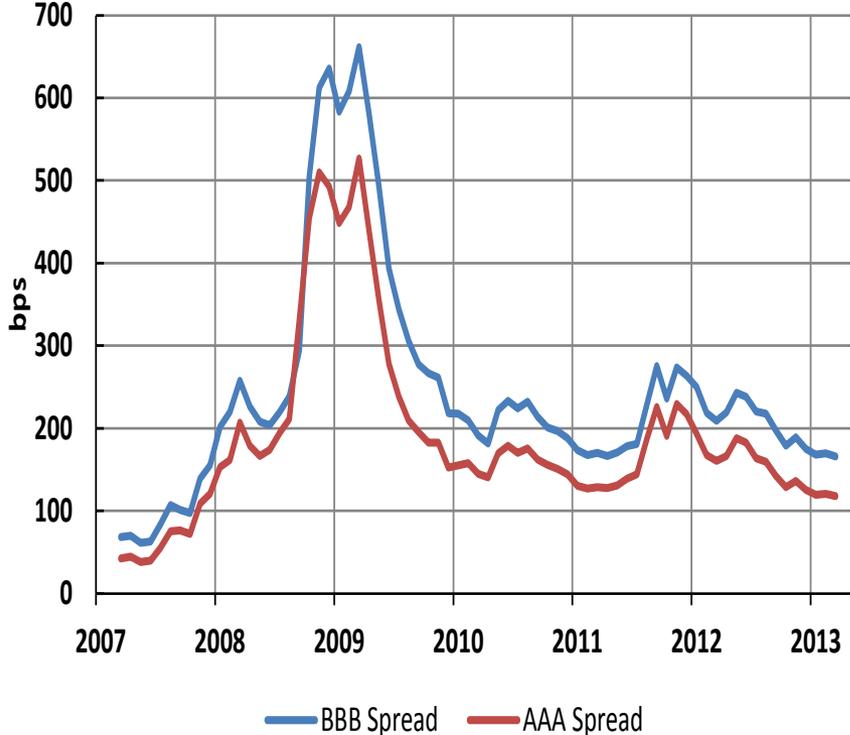


Low interest rate environment

Graph 6A .Private sector spreads over 10yr Government treasuries (percentage points), US



Graph 6B. Private sector spreads over generic Iboxx 10yr yields (percentage points), Euro area



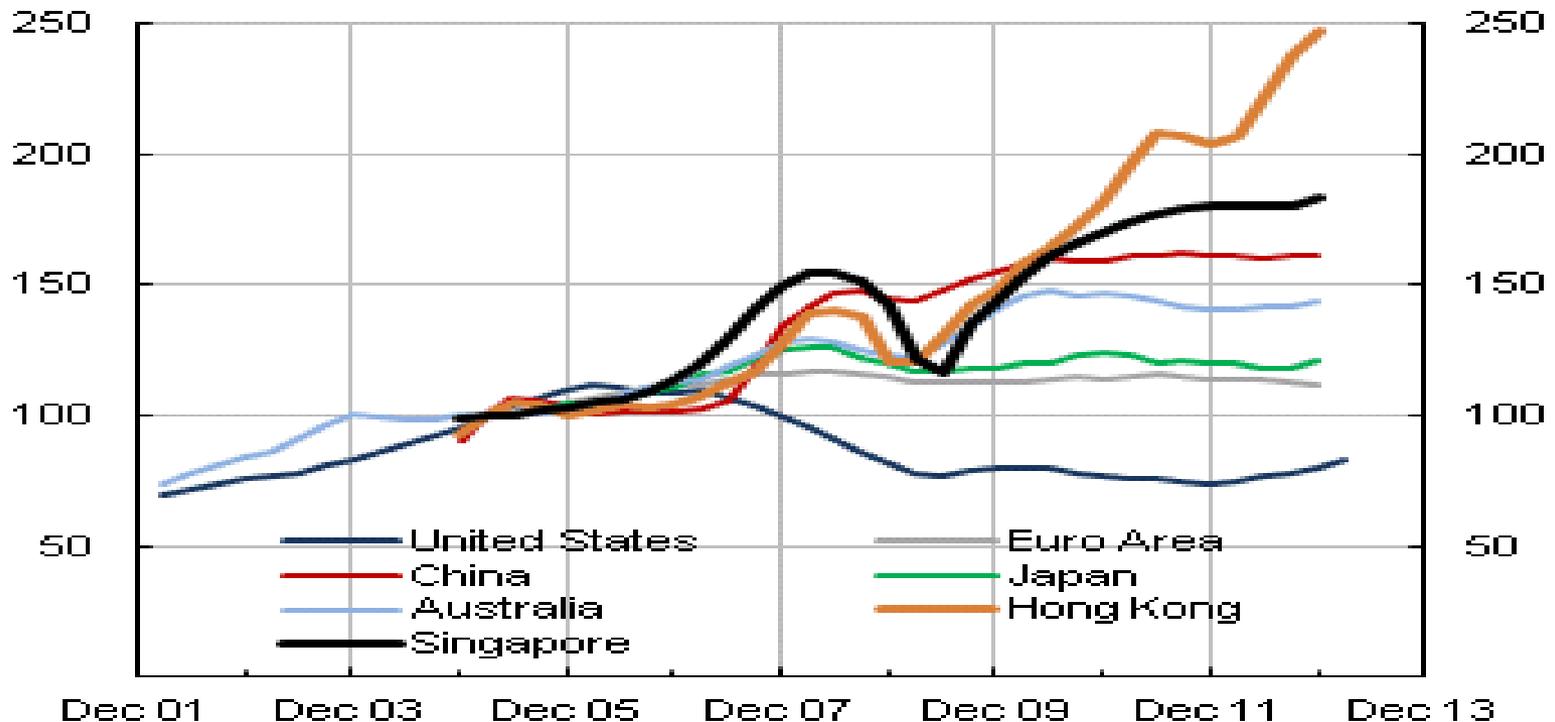
Low interest rate environment

Issues include:

- Varying housing prices with some steep rising in Hong Kong and Singapore, while slowing down in some other countries, and possibly leading to product innovation

March 2005 = 100

March 2005 = 100



Low interest rate environment

Trends:

- High yield bonds sold through collective investment schemes and retail structured products/exchange traded funds and products (ETF, ETP).
- In certain countries search for yield goes into real estate and real estate funds.

Some questions about the risks:

- **Do investors know the risks?**
- **What if interest rates go up or stay low for a very long period?**
- **Could there be problems of investors being locked in?**

And a question about an opportunity for the stimulation of financial stability/global economy:

- **What are the ideas for the inclusion of SME's?**

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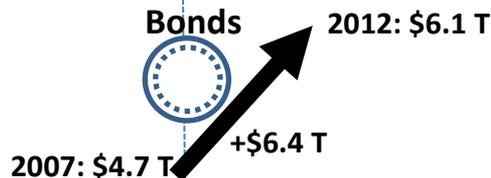
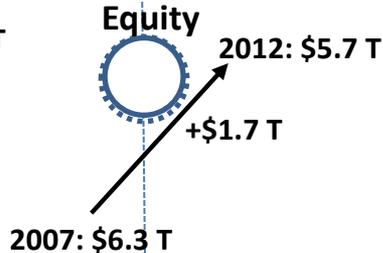
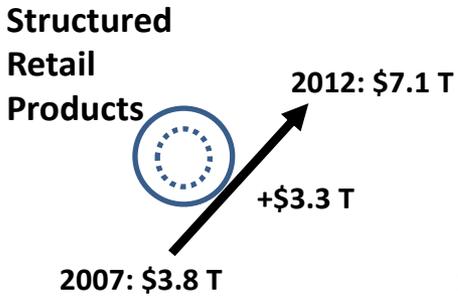
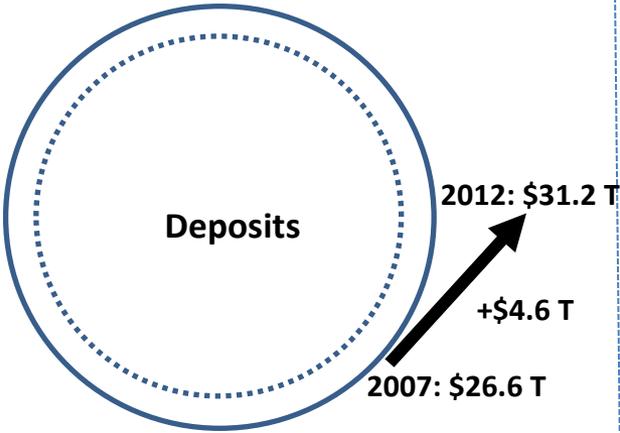
Collateral in a stressed funding environment

Trends:

- Available high quality collateral has shrunk from \$ 10 trillion in 2007 to \$ 6 trillion in recent years (IMF)
- Shift from unsecured to secured financing as confidence has dropped
- Funding environment changed by regulation:
 - Basel capital and liquidity rules (huge impact on collateral)
 - MMF rules (e.g. shortened maturities)
 - Margin requirements OTC derivatives (expected huge impact on collateral)
 - Rules on structured finance products
- Collateral *squeeze*...

Retail

Wholesale

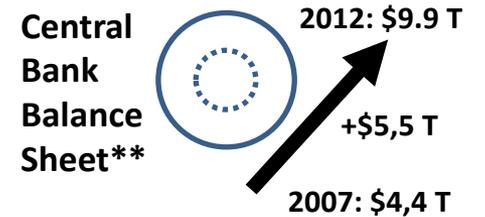


Unsecured

Interbank lending
Eur: -60%
US: -74%

Commercial Paper***
US: \$ 1,4T -> \$ 0,58T

Secured

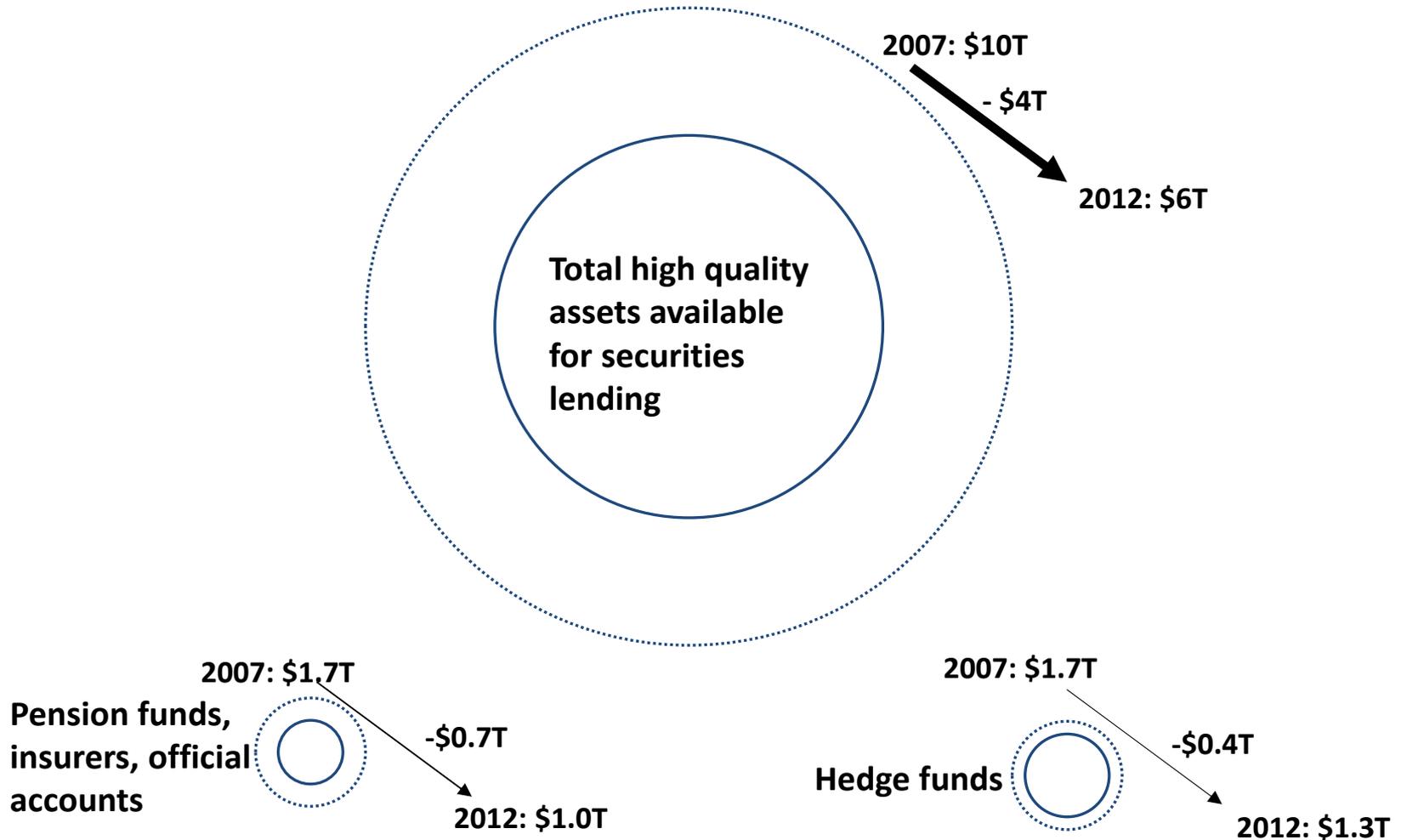


* Note: solid line reflects the size in 2012 and the dotted line 2007

** Balance sheets of the FED, ECB, BoJ, BoE, SNB; *** SEC rule 2a-7 tier-1 CP: FED

Source: IOSCO Research Department, based on Bloomberg, Dealogic, www.structuredretailproducts.com, OECD, FED, ECB

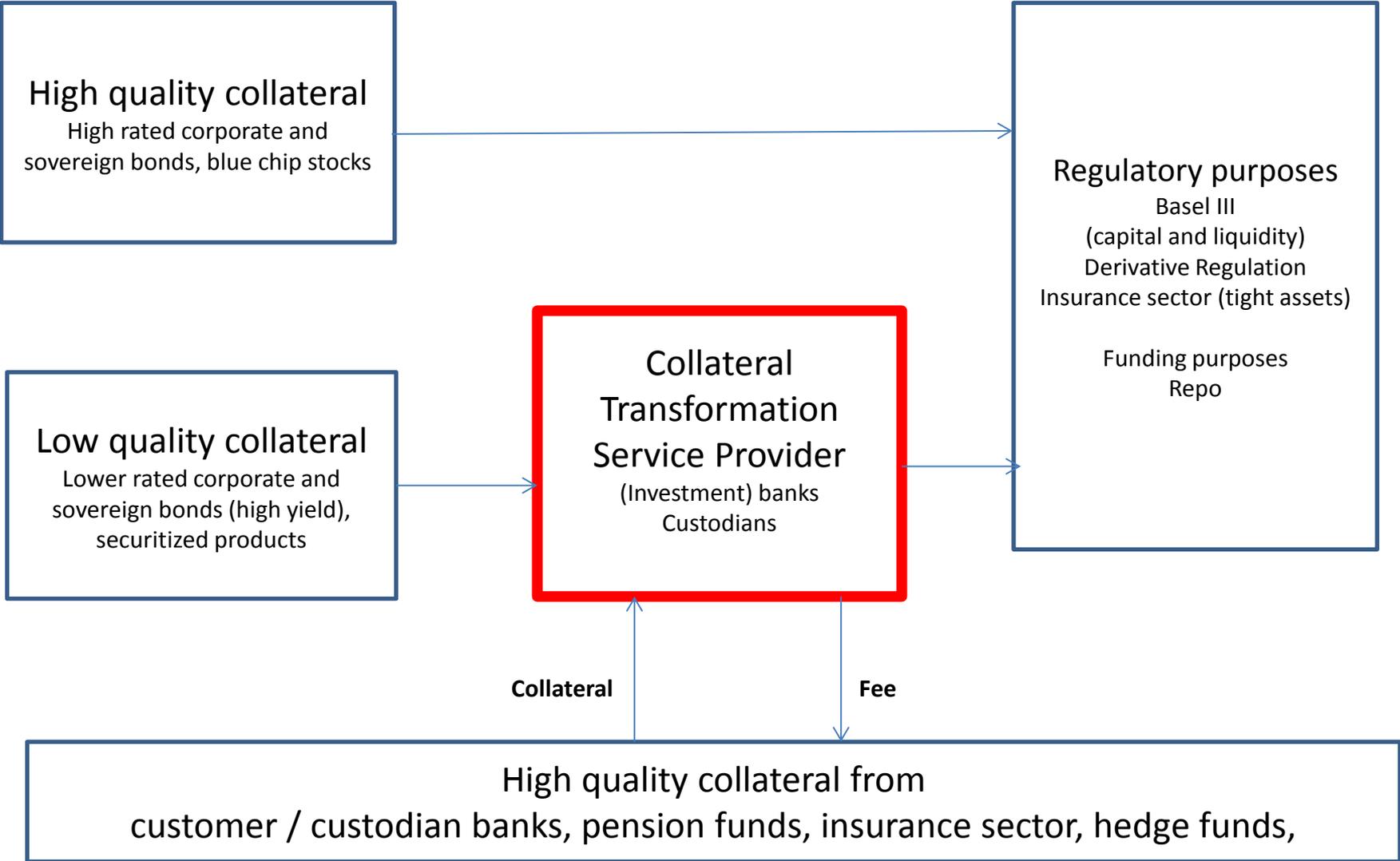
Securities Lending



* Note: solid line reflects the size in 2012 and the dotted line 2007

** Source: IOSCO Research Department based on M. Singh, RMA and Markit

Collateral transformation process



Collateral in a stressed funding environment

- Collateral transformation is a new service and we don't know exactly what it is, nor how big it is...
- We know that it is off-balance sheet
- Just as certain structured products, repo, securities lending and re-hypothecation

Some questions about the risks:

- **Is there (implicit) leverage being created by banks?**
- **Are risks being hidden or shifted out of the regulator's sight?**
- **How long are the collateral chains?**
- **Where do the risks pool?**
- **How big are the interdependencies with CCPs?**

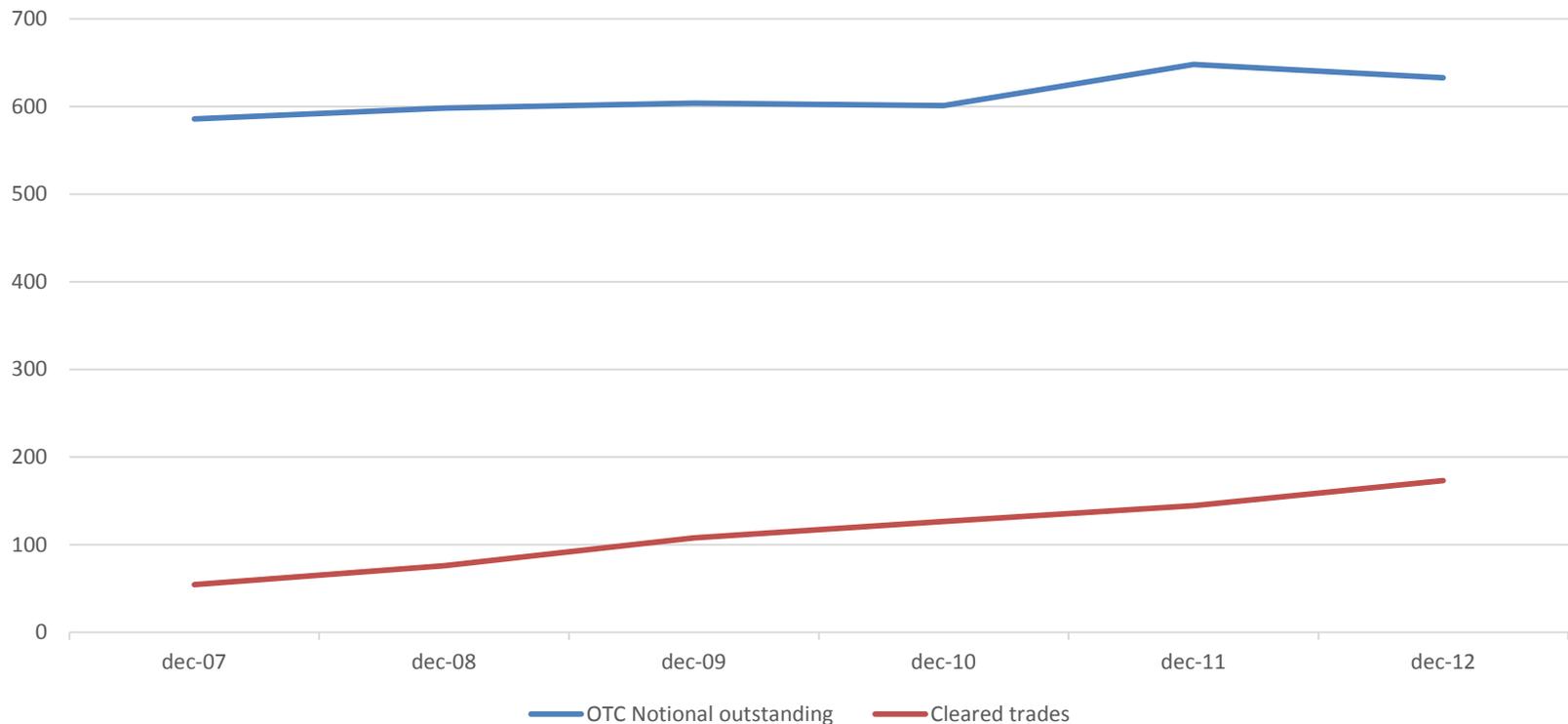
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Derivatives markets

Clearing through CCPs concentrate risks and provide transparency. Last years' CCP usage increased considerably.

Figure: OTC derivatives notional outstanding and cleared trades in trillion \$



Derivatives markets

Figure: Notional volumes and growth of trades cleared by selected CCPs 2011-2012 in billions \$

Organisation	Region	Product	Dec-11	Dec-12	% Chg
CME	US	IRS	\$114	\$1,600	1040%
SGX	Asia	IRS	\$184	\$251	36%
LCH	EU	IRS	\$283,000	\$369,000	30%
Japan SCC	Asia	IRS	-	\$1280	n/a
CME	US	CDX	\$15	\$98	553%
LCH	EU	CDS & ITRAXX	\$68	\$135	99%
ICE	EU	CDS & ITRAXX	\$8,000	\$12,000	40%
ICE	US	CDS & CDX	\$12,000	\$21,000	72%
Japan SCC	Asia	CDS	-	\$3,300	n/a
CLS	Global	FX	\$4380	\$4,610	5%
LCH	EU	FX	-	\$115	n/a
Eurex	EU	IRS; CDS & ITRAXX; Equity;	\$110,784	\$90,084	-19%
NOS Clearing	EU	FX; Commodity			
NYSE/ LIFFE Bclear	UK	IRS; Equities; Commodities	491	371	-20%

Source: IOSCO Research Department based on CME, Singapore Stock Exchange, LCH Clearnet, Eurex, NOS Clearing, International Clearing Exchange, Continuous Link Settlement, NYSE, SCC, the OTCspace

Derivatives markets

Issues:

- Collateral absorbed by CCPs. Further squeeze?
- CCPs following similar risk management model – amplification?
- CCPs accepting lower quality collateral – race to the bottom?
- CCPs becoming active derivatives shops?
- Enhanced interconnection with banks – more concentrated risk?
- What is the resilience of the system:
 - In the case of a huge margin call?
 - In the case a big trader/bank fails?
- Where are the weak spots in the network?

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Volatility of capital flows in emerging markets

Background:

- Surge of capital flow to emerging markets.
- 'Push' and 'pull' factors.
- However cross-border flows are not uniform across emerging markets.
- Capital flows increasingly from emerging markets to emerging markets; emerging markets to advanced markets; and through securities markets.

Volatility of capital flows in emerging markets

Issues:

- Capital inflows are vital for emerging market economic growth but have historically been subject to boom-bust cycles.
- Recovery in advanced economies could trigger sudden stop of capital flow and reversal with destabilizing impacts.
- Political uncertainty and risk in certain emerging economies could also trigger a reversal of flows.
- A shock (political, economic, social etc.) and reversal of flows would have different levels of impact in different emerging economies.
- Shallow markets could also lead to asset price bubbles and increased volatility.
- Financial market development has stalled in some emerging markets.

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Cyber crime

Issues:

- Financial system relies on technological infrastructure.
- Nature of cyber-crime is changing – more sophisticated.
- Methods, motives, purposes and consequences not clear.
- Attack: not an ‘if’ but a ‘when’ question.

Questions:

- **Systemic impact?**
- **How vulnerable are financial market infrastructures?**
- **Awareness is growing, but are regulators prepared?**