



# The Crisis, Financial Innovation and the Supply of Risk Capital: February 2012

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(The views presented here are my own & do not reflect those of the OECD or any of its member governments.)

February, 2012

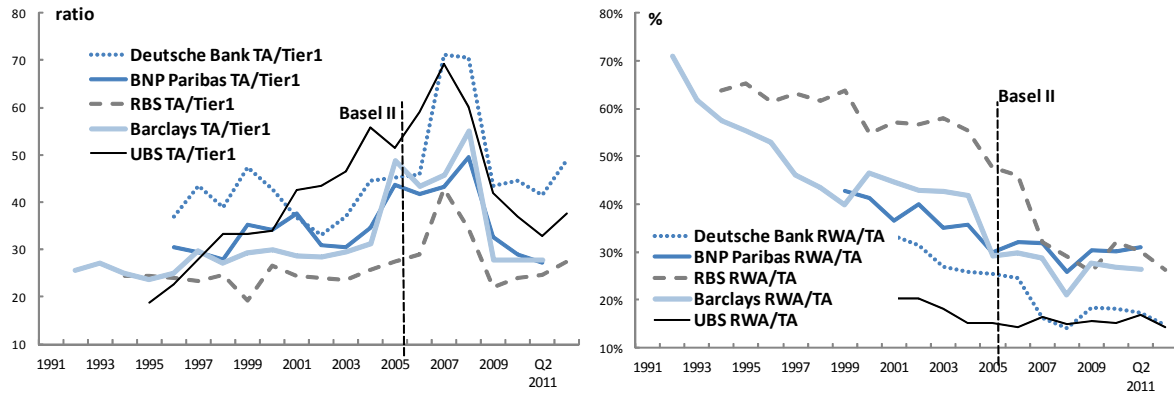
## Figure 1: Risk and the Crisis

- The fundamental cause of the crisis was the under-pricing of risk.
- There are always 2 basic causes of excess risk: (1) too much leverage; & (2)—for given leverage—increased dealing in high risk products.
- Risk-weighted asset optimisation makes a mockery of the Basel tier 1 rule. Banks model their own risk & anyway can use derivatives to alter the risk characteristics of assets to which the risk weights apply.
- The OECD has consistently argued for (1) a leverage ratio and (2) the separation of retail & investment banking from the outset of the crisis.



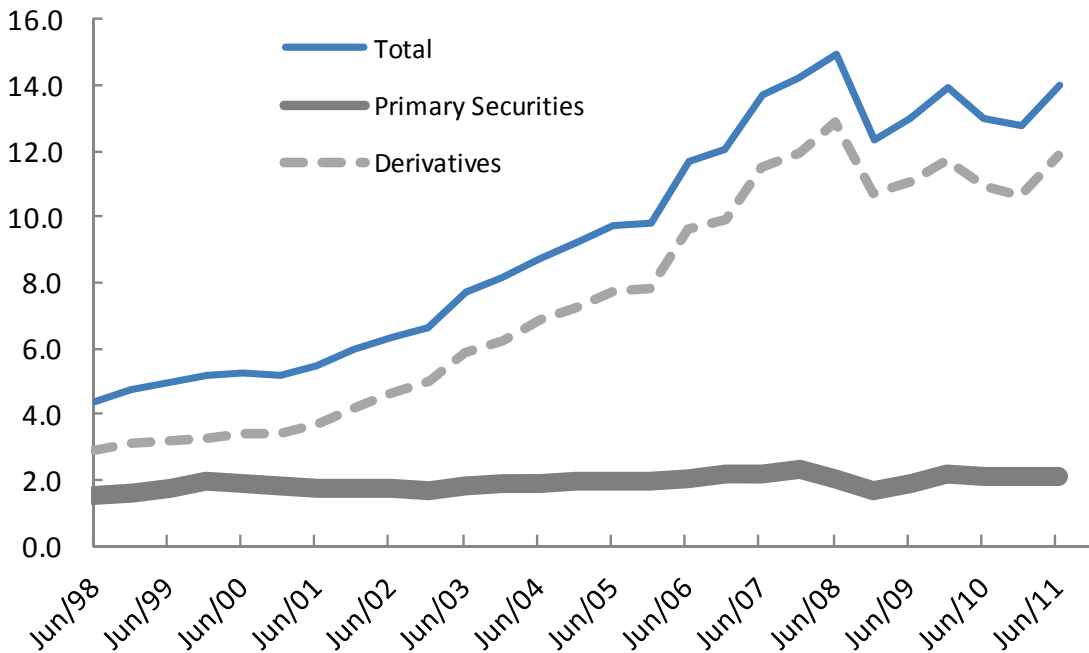
Source: OECD

## Figure 2: Basel vs RWA/TA & Leverage



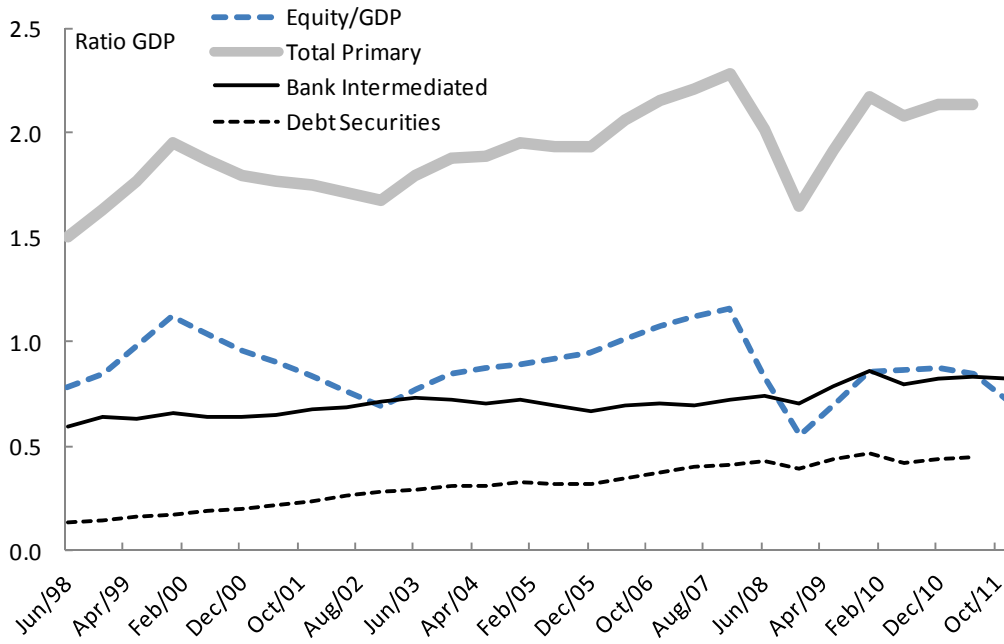
Source: Bank Reports, OECD

## Figure 3: Primary Assets v Derivatives



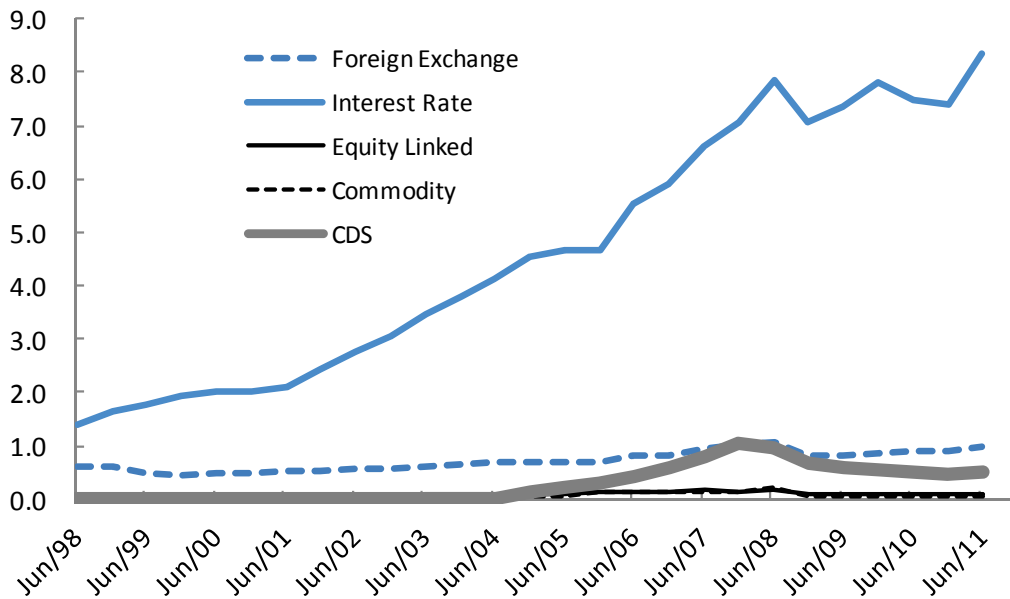
Source: BIS, Datastream, World Federation of Stock Exchanges, OECD

### Figure 4: Primary Securities Composition



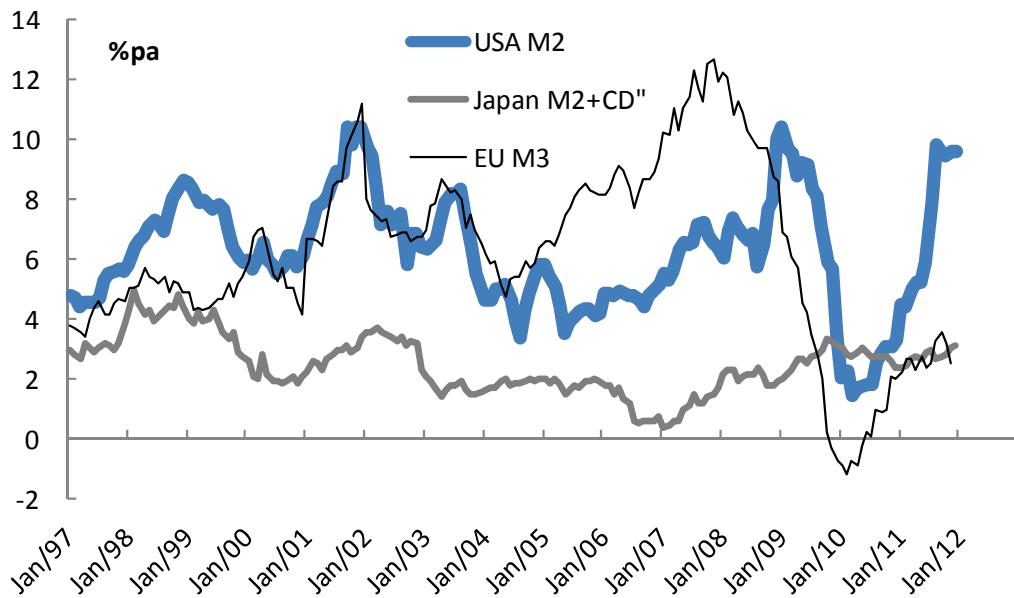
Source: BIS, Datastream, World Federation of Stock Exchanges, OECD

### Figure 5: Derivatives Composition



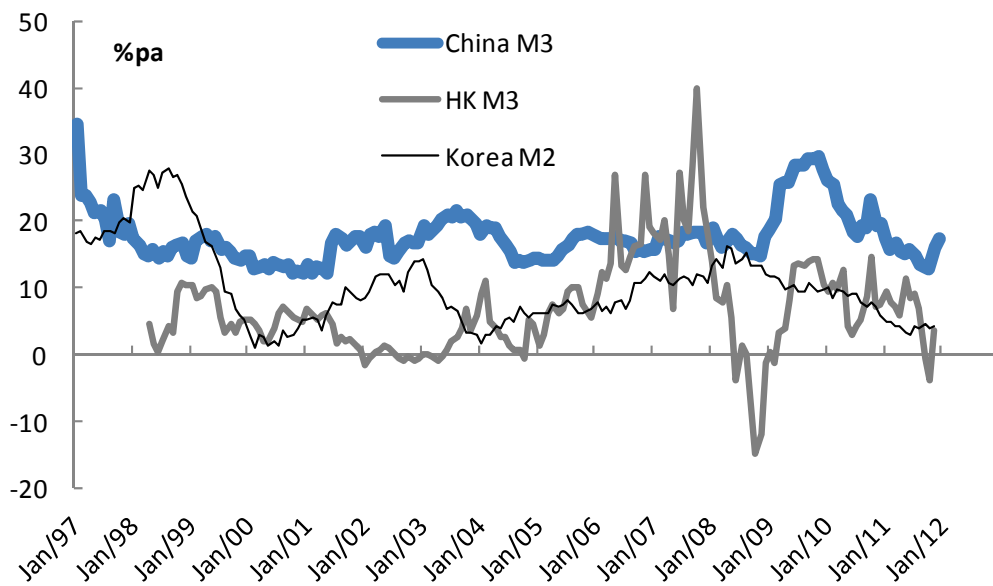
Source: BIS, Datastream, World Federation of Stock Exchanges, OECD

### Figure 6: Money Supply Selected OECD Countries



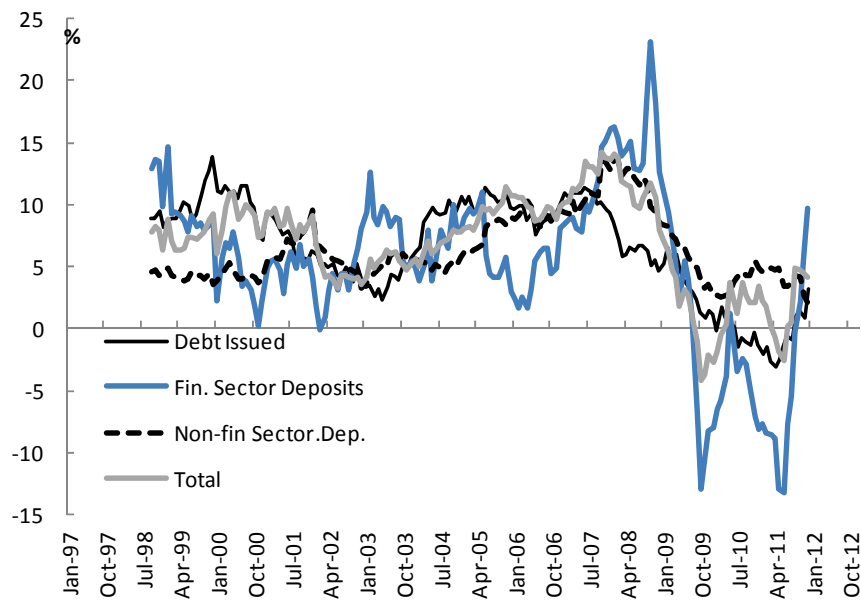
Source: BCBS, OECD

### Figure 7: Money Supply in Asian Countries



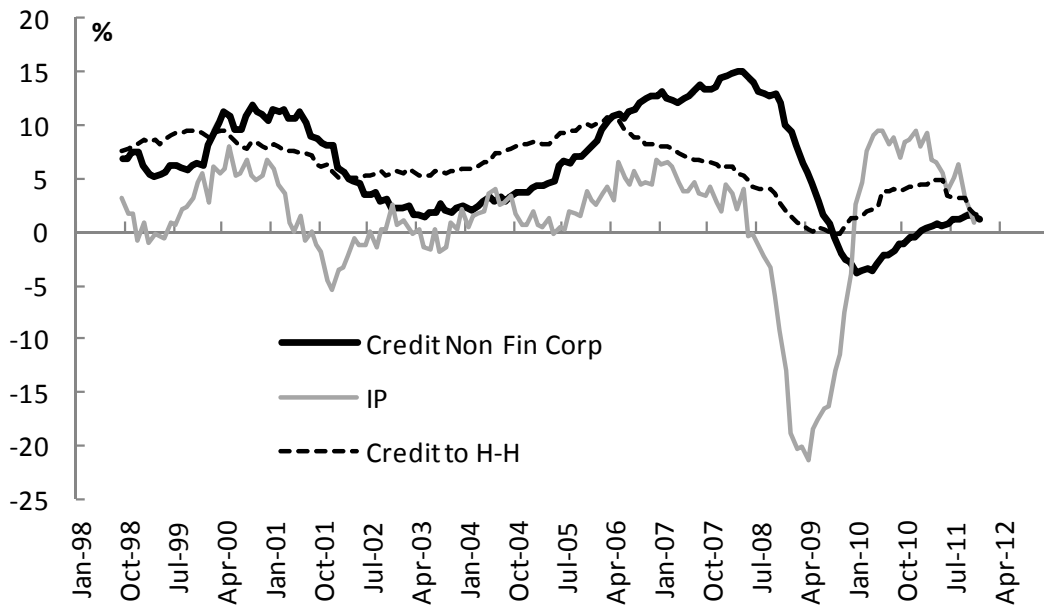
Source: Datastream, OECD

## Figure 8: Funding Trends in Europe



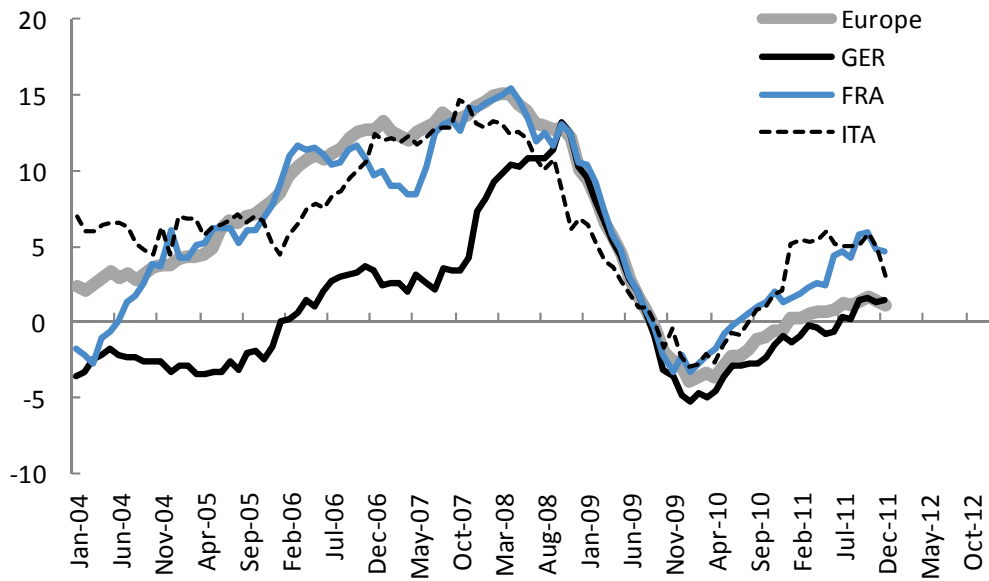
Source: ECB, OECD

## Figure 9: Lending and Activity in Europe



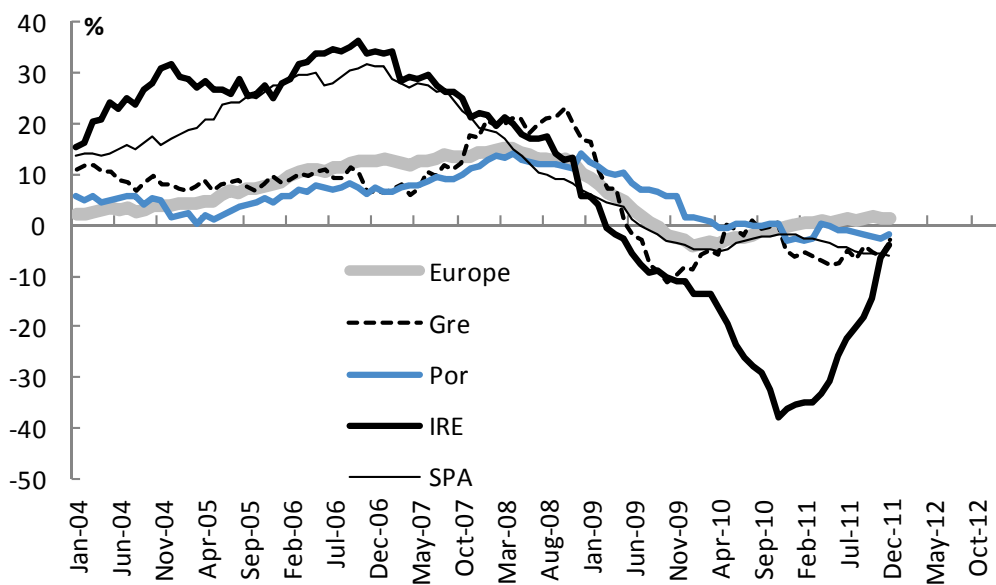
Source: Datastream, ECB, OECD

### Figure 10: Credit to Non-Financial Corporations, Larger EU



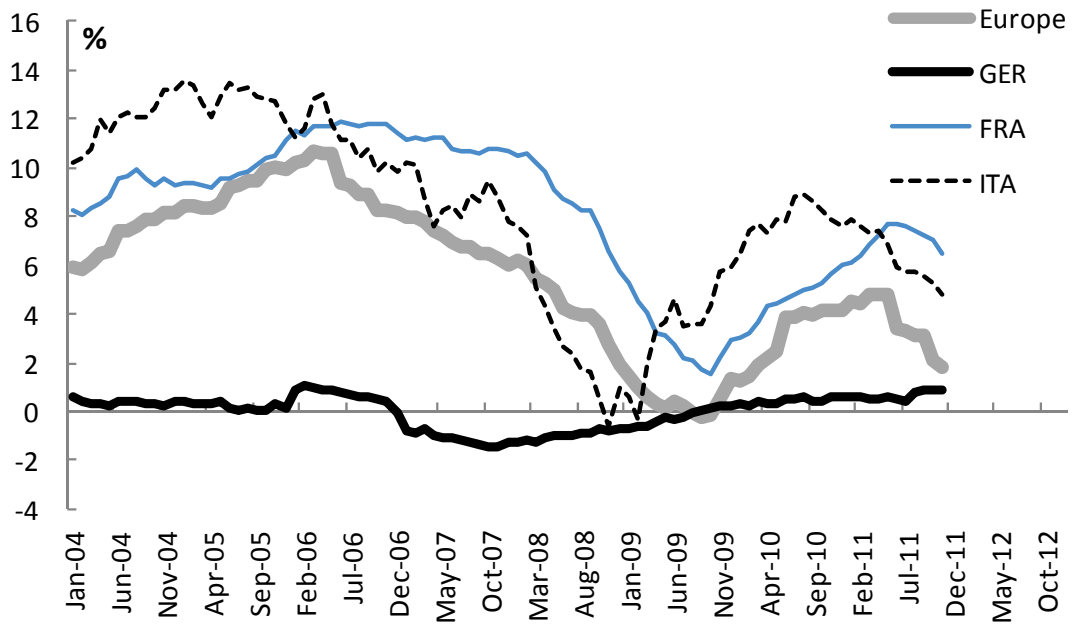
Source: Datastream, ECB, OECD

### Figure 11: Credit to Non-Financial Corporations, Smaller EU



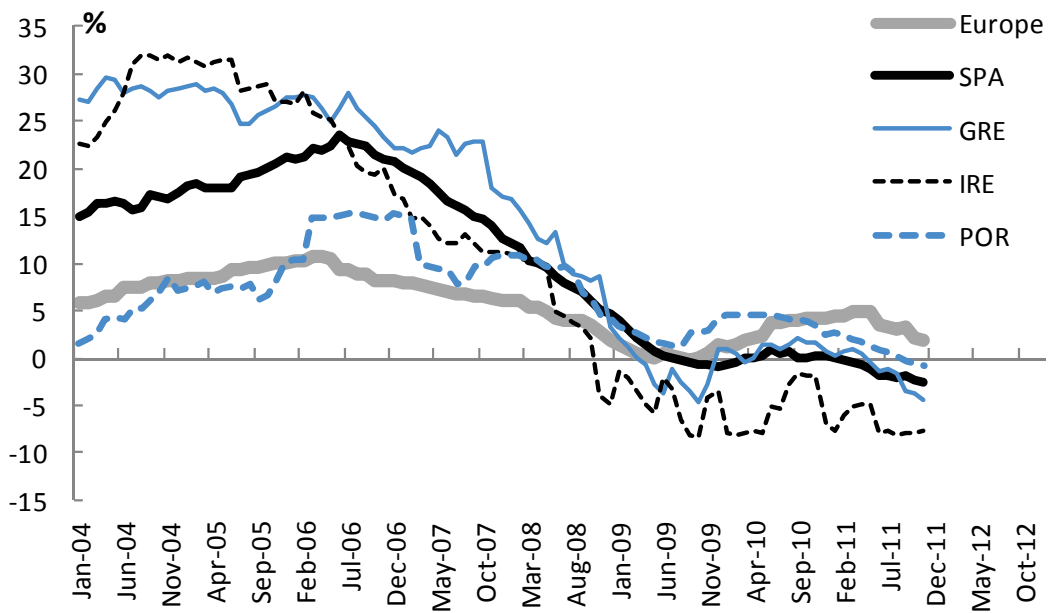
Source: Datastream, ECB, OECD

### Figure 12: Credit to Households, Larger EU



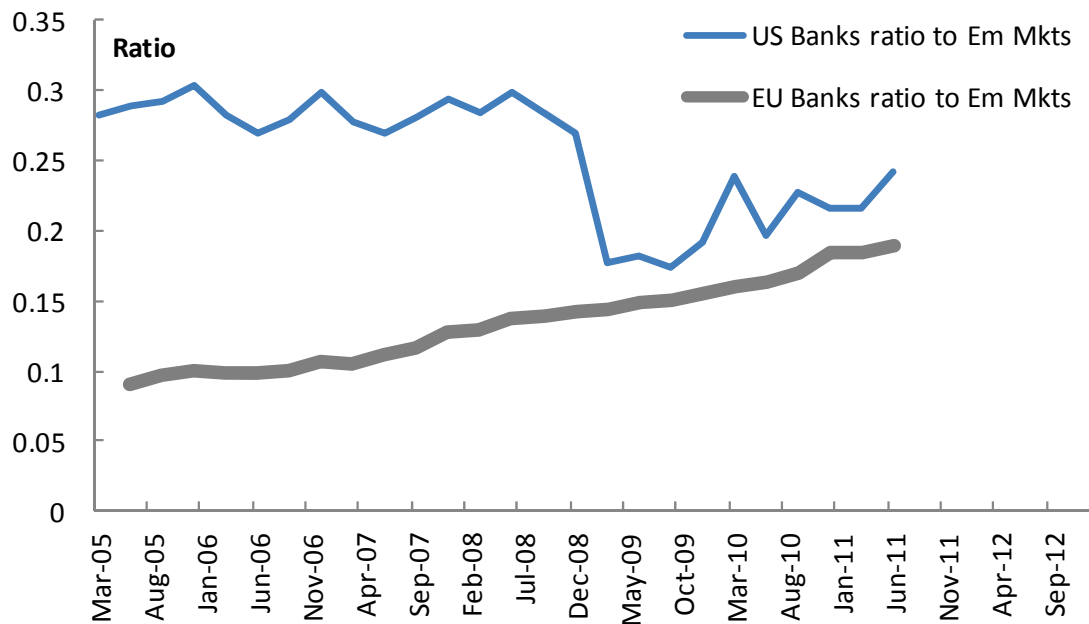
Source: Datastream, ECB, OECD

### Figure 13: Credit to Households, Smaller EU



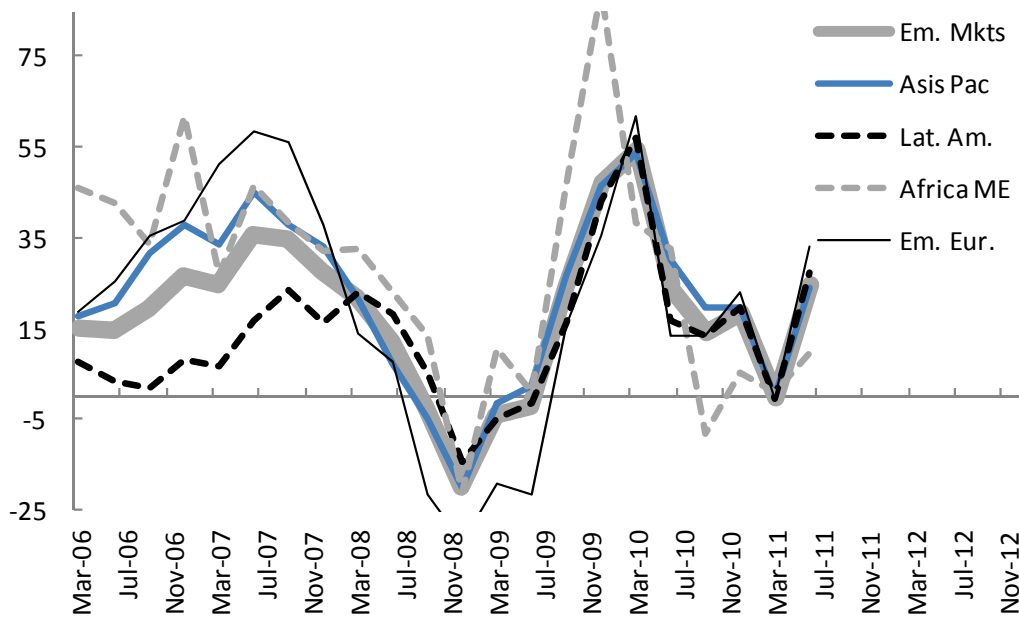
Source: Datastream, ECB, OECD

### Figure 14: US & EU Shares of Cross-Border Lending to Emerging Markets



Source: BIS, OECD

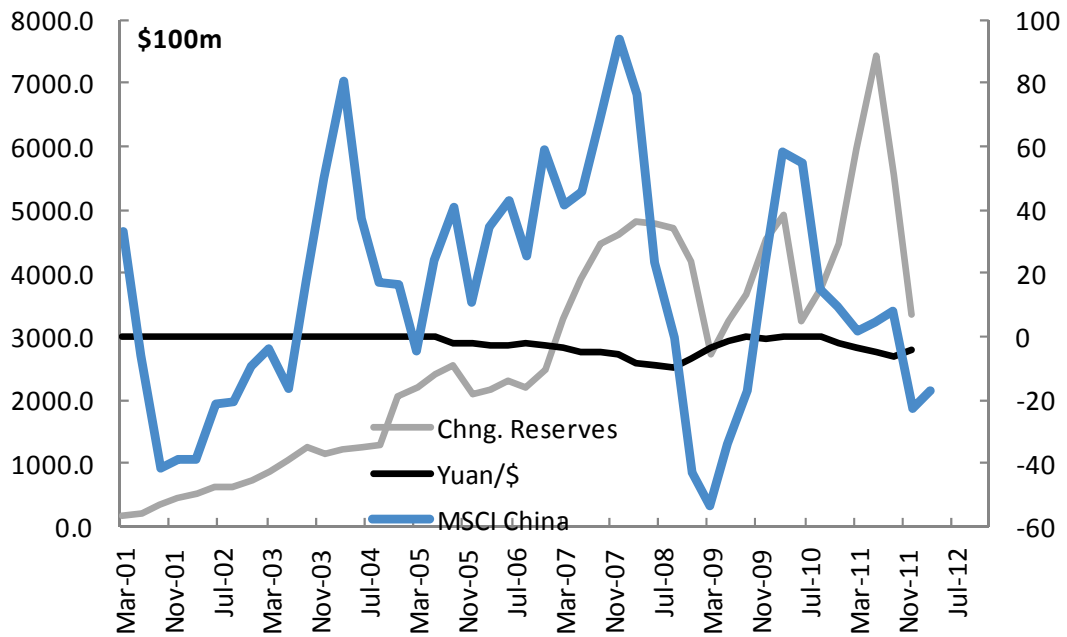
### Figure 15: European Bank Cross Border Lending to Emerging Regions



Source: BIS, OECD

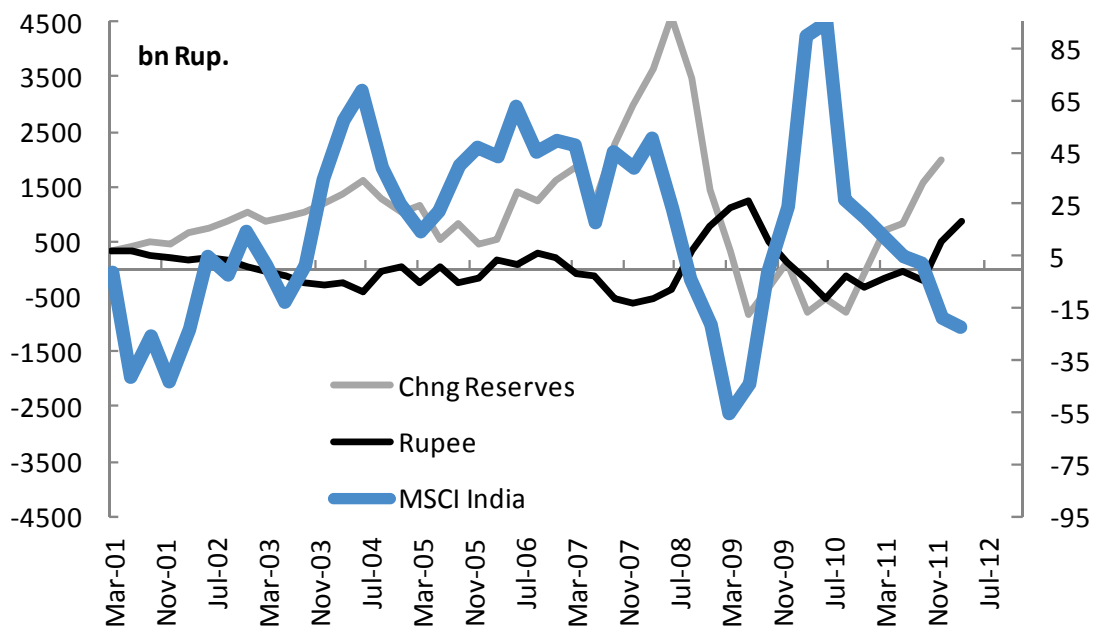


**Figure 16: China: Reserves, the Exchange Rate and the Stock Market**



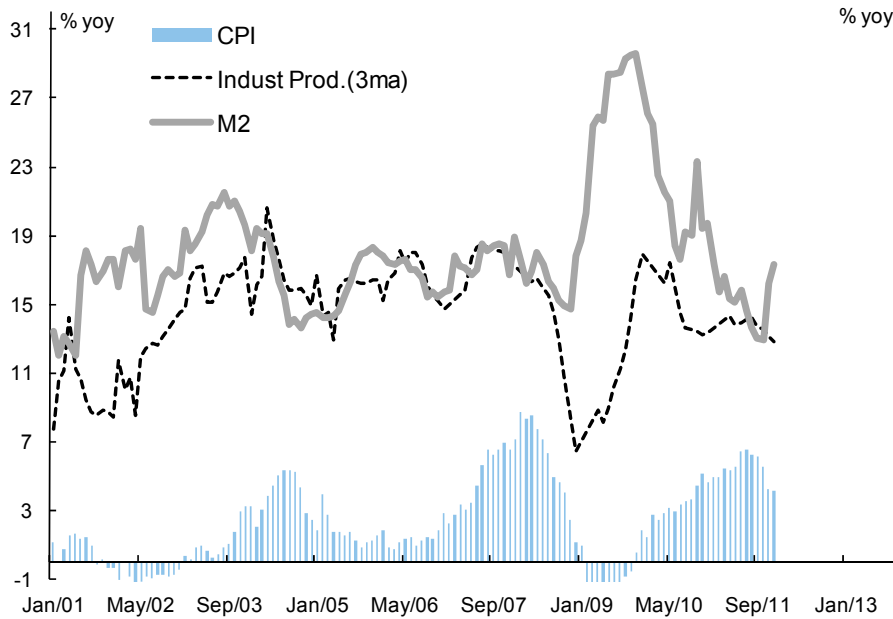
Source: Datastream, OECD

**Figure 17: India: Reserves, the Exchange Rate and the Stock Market**



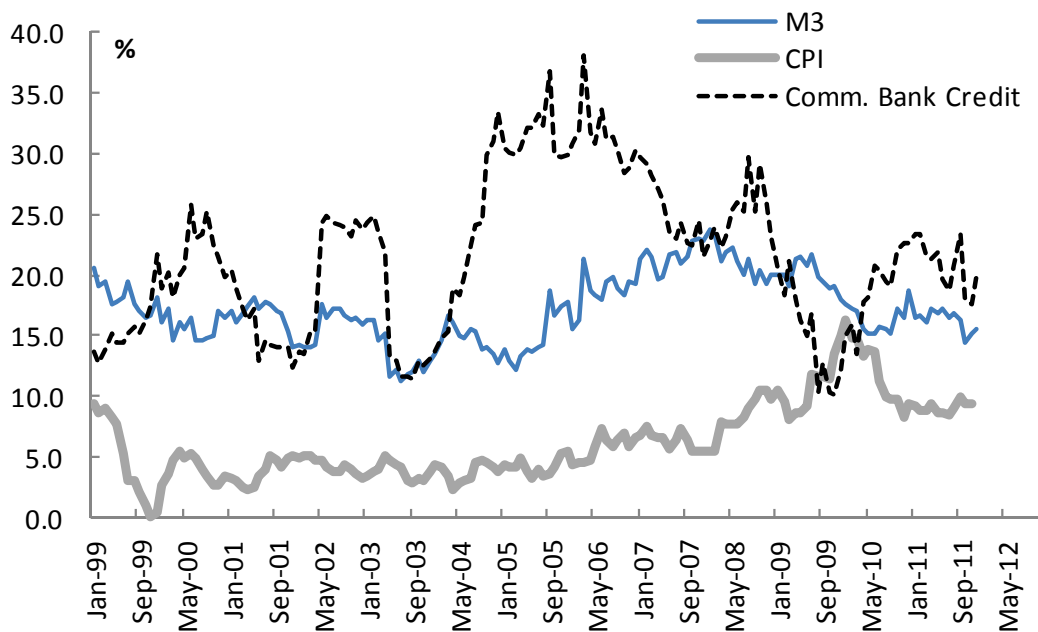
Source: Datastream, OECD

### Figure 18: China: M2, IP and Inflation



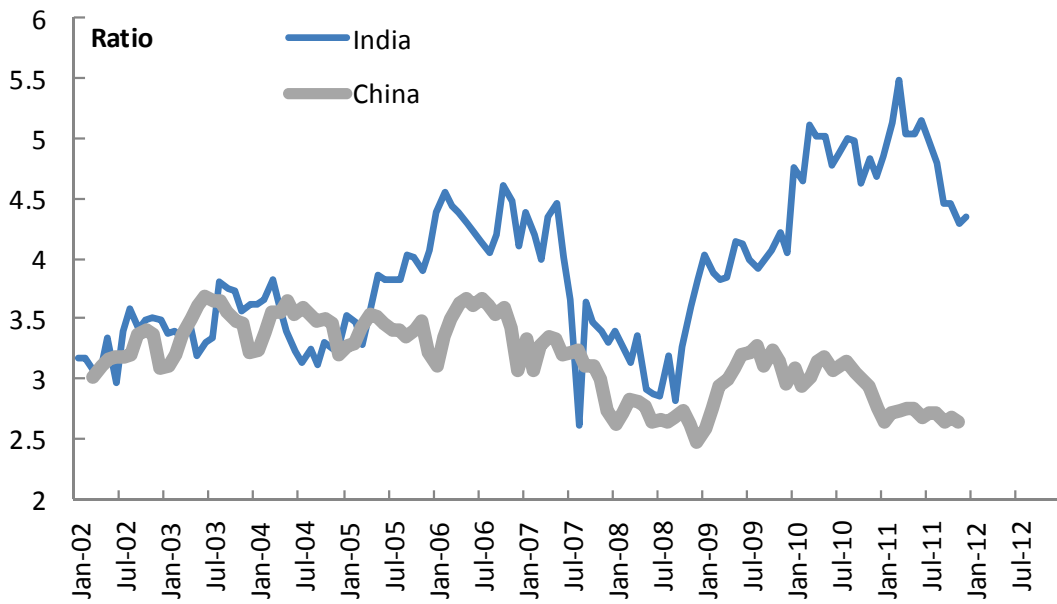
Source: Datastream, OECD

### Figure 19: India: Money supply Credit and Inflation



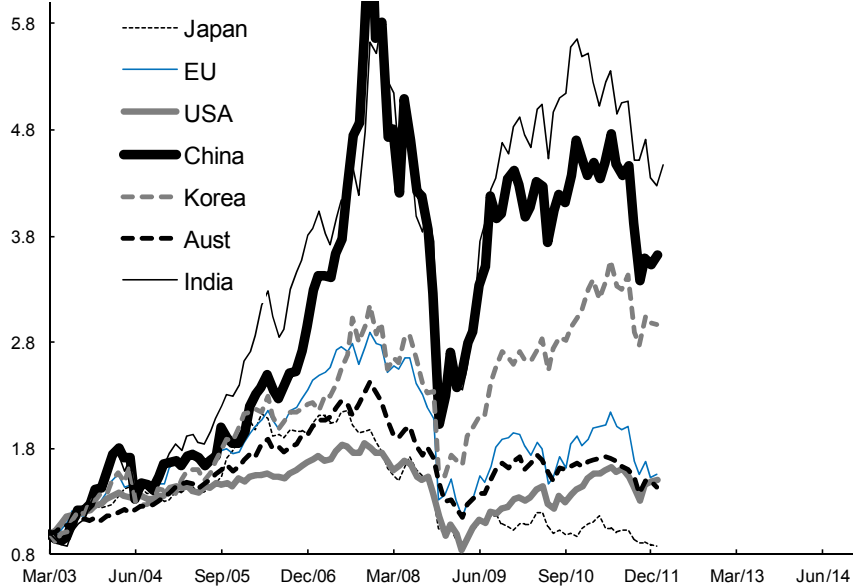
Source: Datastream, OECD

### Figure 20: Credit Multipliers China and India



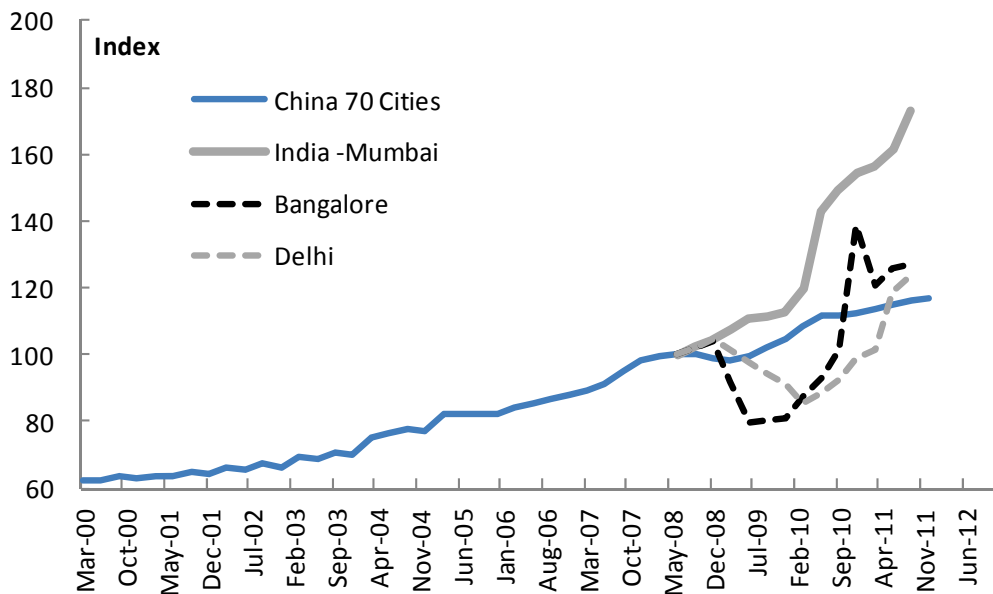
Source: Datastream, OECD

### Figure 21: Equity Prices: Global



Source: Datastream, OECD

## Figure 22: House Prices: China and India



Source: Datastream, OECD

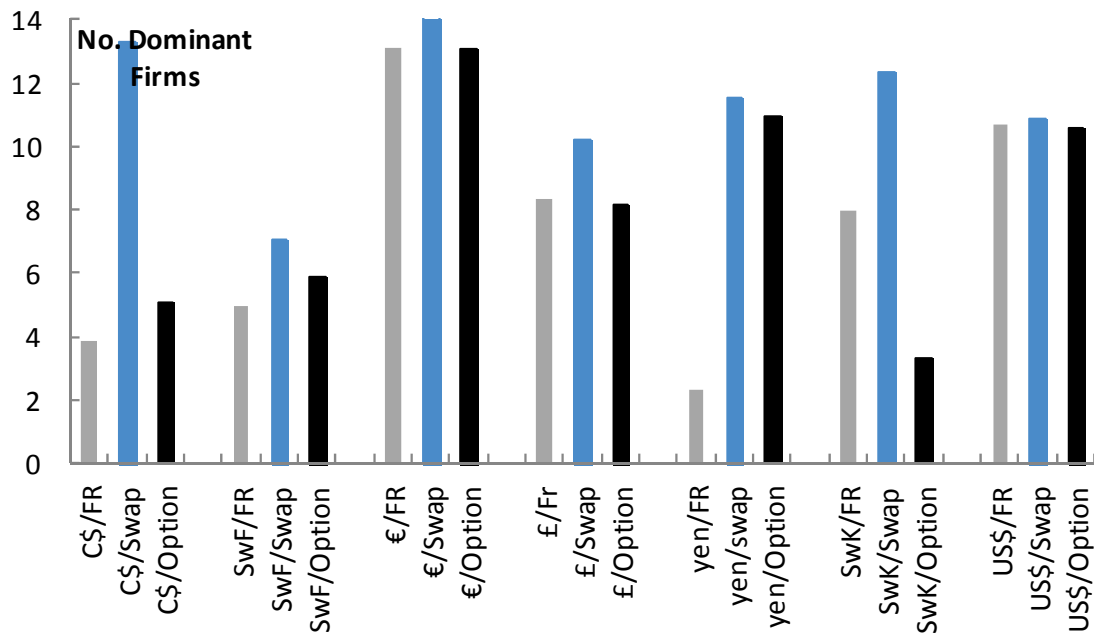
## Figure 23: What is lacking

- The crisis has resulted in new problems of deleveraging in some parts of the world, a fall off in the provision of equity risk capital and the continuation of banks promoting derivatives as a business model—one of the original causes of the crisis.
- There is too much risk capital in certain parts of Asia, and no sign that the crisis in the West is a problem in the financial sphere.
- What is clearly lacking is international consistency in what countries do and what they might be exposed to. Without this consistency, issues will continue to arise about regulatory arbitrage and business migration from more to less controlled jurisdictions.
- Asia could risk becoming the recipient region for this less regulated search if it is not careful. There is a strong risk of asset bubbles in Asia.
- A lot more consistency would come about if countries would begin to focus more on the 2 key proposals that the OECD has backed from the outset of the crisis:
  1. A leverage ratio, based on more equity, of 5%. The US, Canada and Switzerland are already on board and Europe needs to join. As different accounting systems apply this needs to be resolved, and more transparency generally about hidden losses and the real capital needs of banks have to be solved.
  2. Formal separation of traditional banking (retail) from investment banking as now accepted by the UK. This helps solve the resolvability issue. It removes TBTF cross-subsidisation. This helps SME lending with its domestic focus, insulating it from the behavior of global capital markets. This permits higher capital standards for traditional retail banks.



Source: OECD

**Figure 24: Herfindahl: Interest Rate Derivatives; Bank/Non-bank**



Source: BIS, OECD

**Figure 25: Expected GSIFI ROE's Post Regulatory Reform**

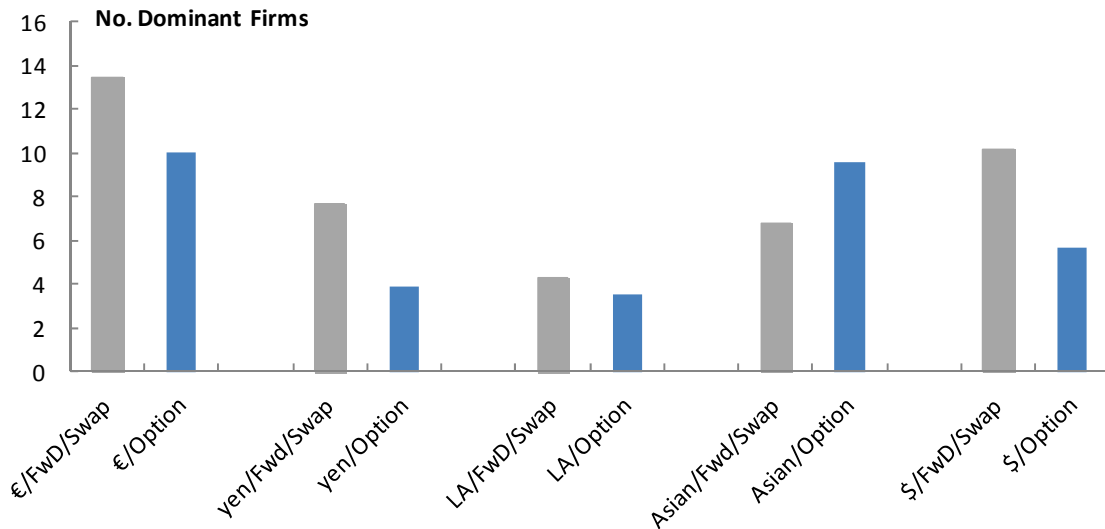
	CS	UBS	DBK	GS	MS	BNP	SG	BARC	BAC	Citi	Avg.
ROE before reg. Changes	23.5	22.7	19.9	23.4	19	19.2	17.2	17.8	na	na	20.3
Post Reg. ROE	13	11.5	10.5	13.8	12.4	13.8	10.2	12	na	na	12.1
Equity Derivatives Post Reg ROE's											
Structure products	15	13	16	11	5	21	27	15	5	4	14
Flow equity	15	15	15	30	18	19	15	21	20	8	18
Delta one (ETF,s, Swaps, fut. fwds)	38	45	34	32	53	51	55	49	32	23	40
Convertibles	27	36	23	26	42	24	18	42	36	44	30
Prop. Trading	23	36	24	21	37	12	31	29	17	22	24
Total	22	26	21	20	22	24	29	27	17	15	22

- Mechanically ROE's halve with all reforms.
- Equity derivatives unexploited.
- Delta One products are booming now; and it will continue.
- Structured products in the EU.
- Convertibles.
- Prop. Trading (especially in EU).



Source: JP Morgan, OECD.

## Figure 26: Herfindahl: Equity Derivatives; Bank/Non-Bank



Source: BIS, OECD

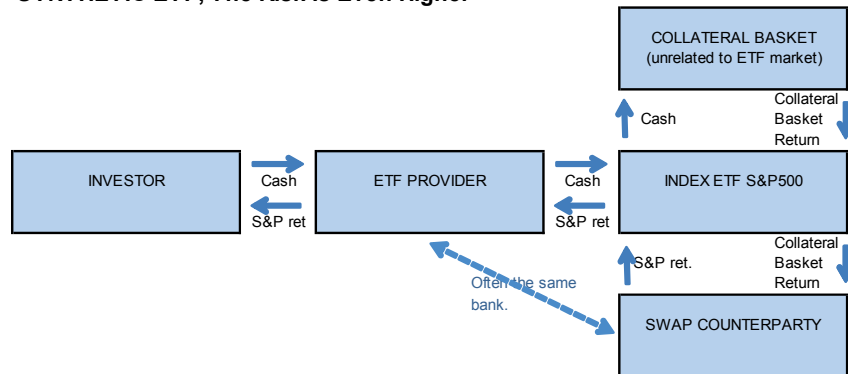
## Figure 27: ETFs: the Next CDO Type Crisis

### CASH ETF & STOCK LENDING/LIQUIDITY

Investor: Invests cash in ETF		Provider: accepts deposit lends stock		Stock Borrower, sells stock	
Asset	Liability	Asset	Liability	Asset	Liability
ETF holding		Buys stock & lends it	Investors deposit	Cash on Sale	Stock
100		100 Loan	100	100	100

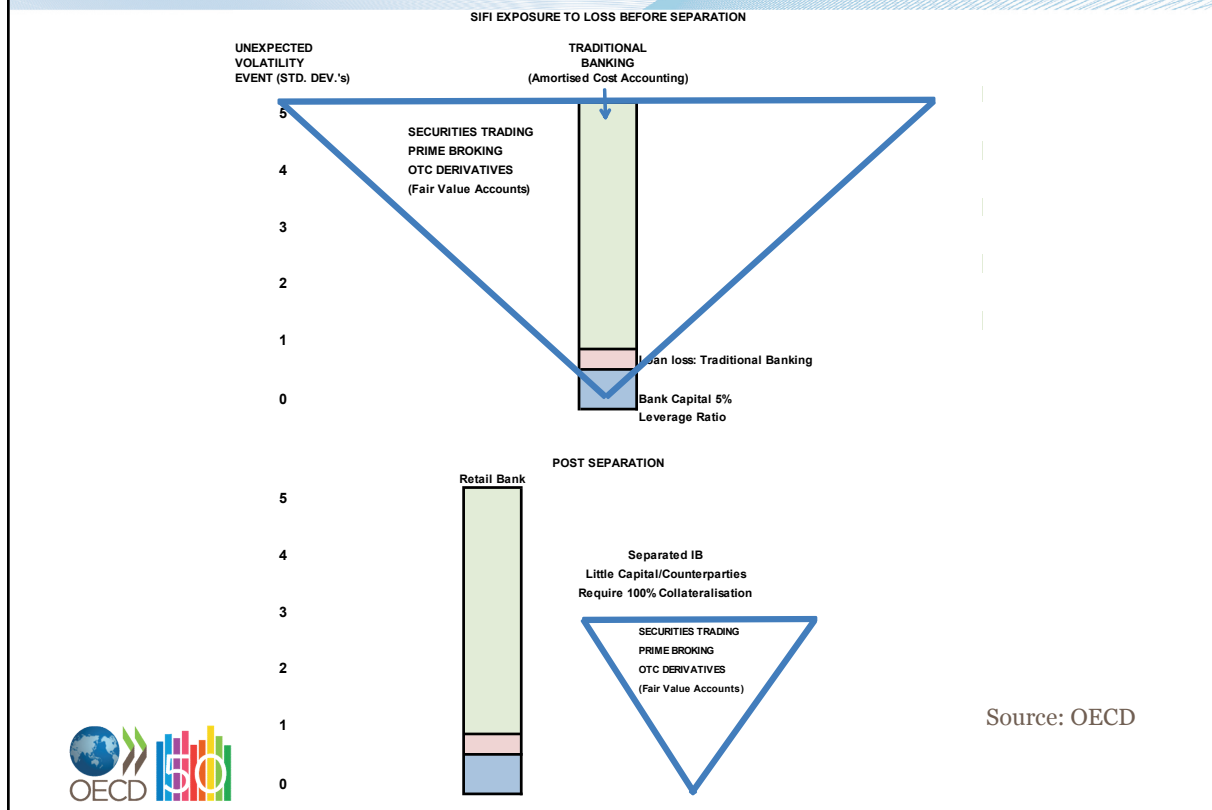
Investor wants to withdraw deposit today, but the stock loan is not due. Borrows from a liquidity provider, collateralising the stock. What happens in a liquidity crisis? What happens if the borrower fails?

### SYNTHETIC ETF, The Risk Is Even Higher



Source: OECD

## Figure 28: Firewall NOHC Structure



## Figure 29: Separation Issue: Which Activities?

- Prime broking.
- OTC derivatives?
- Securities trading  
( Including origination & market making)
- Repo funding, re-hypothecation.
- Proprietary trading (directional & relative value)
- Bank hedge funds, private equity & SPV's
- NOHC Structure: Operational flexibility—can better meet prudential requirements by allowing appropriate allocation of risk between prudentially & non-prudentially regulated businesses

