

# Session 3

Interplay of business models and regulation in the financial industry: current challenges

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The Global Reform of Financial Regulation and Architecture: How to Balance Safety and Efficiency

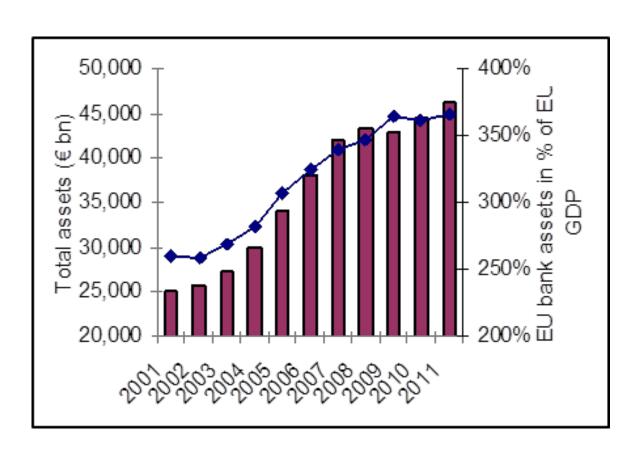
17SEP13 - FMG, London School of Economics

## Liikanen HLEG

- Feb Oct 2012, 11 members
  - Chairman Erkki Liikanen, plus: ex-bankers (i.a. Bänziger), ex-industry (Gallois), consumer protection, ex-supervisor, academics.
  - Mandate: Consider whether there is a need for structural reforms of the EU banking sector or not, and to make any relevant proposals as appropriate, with the objective of establishing a stable and efficient banking system serving the needs of citizens, the economy and the internal market.
- At start: agreeing on a crisis narrative.
  - Crisis narrative: consistent economic explanation of why the crisis happened, and how it progressed.
  - Based on academic literature, interview-hearings in Brussels.
- Conclusion
  - Regulation needs to address Too-big-to-fail issue via resolvability
    - Reduction of complexity
    - Rebuilding creditor liability (no recourse to taxpayers' money)

# EU banking has seen rapid growth

## Total assets of MFIs in EU 2001-2011



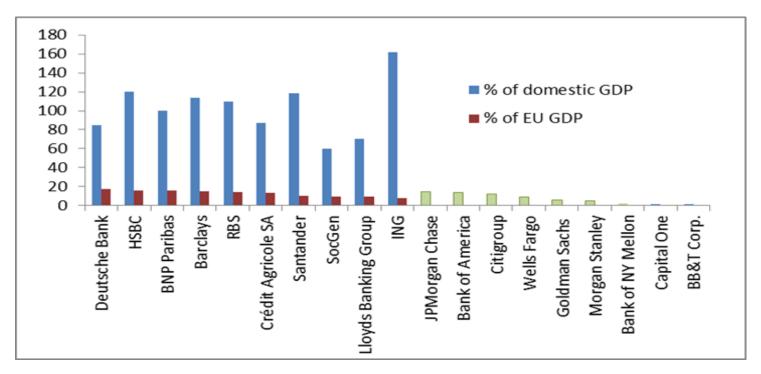
# EU banking sector is large compared to US, J

Size of EU, US and Japanese banking sectors (2010)

	EU	USA	Japan
Total bank sector assets (€ trillion)	42.9	8.6	7.1
Total bank sector assets/	349%	78%	174%
Top 10 bank assets (€ trillion)	15.0	4.8	3.7
Top 10 bank assets/GDP	122%	44%	91%

# **EU** banks are sizable compared to GDP

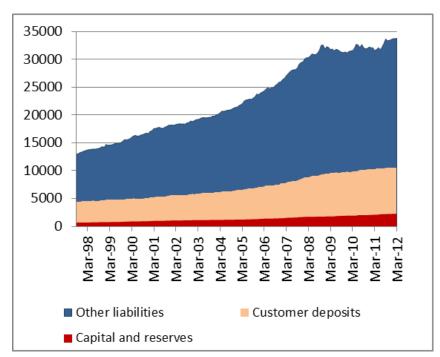
**Total assets of EU and US banking groups** (2011, as % of GDP)



Source: SNL Financial, Eurostat for GDP.

# Shift in bank activities and funding structures

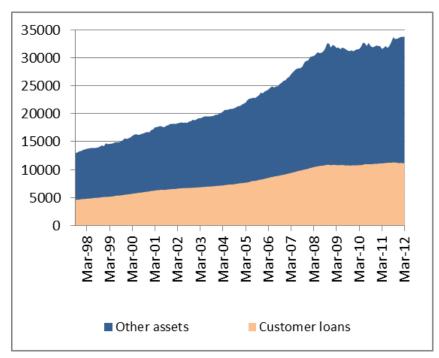
Evolution of liabilities of MFIs
 1998-2012 (euro area, € bn)



Notes: Customer deposits are deposits of non-monetary financial institutions excluding general government.

Source: FCB.

 Evolution of assets of MFIs 1998-2012 (euro area, €bn)

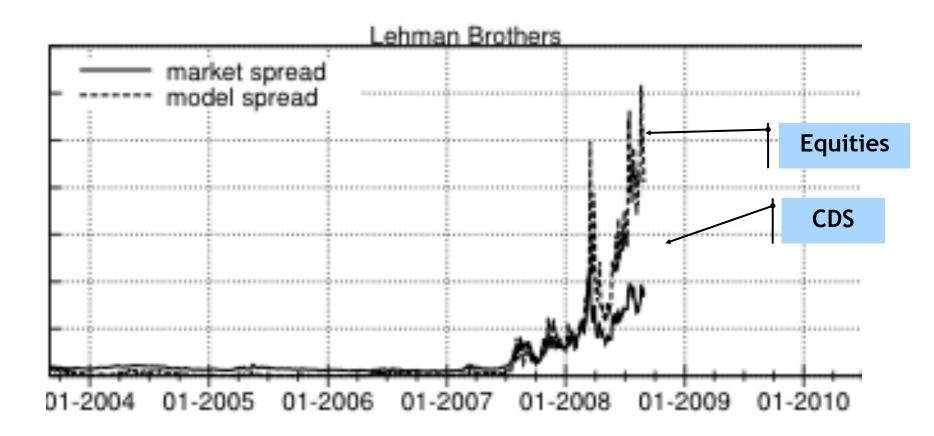


Notes: Customer loans are loans to non-monetary financial institutions excluding general government.

Source: ECB.

## Market prices underestimate risk: CDS@Lehman 2008

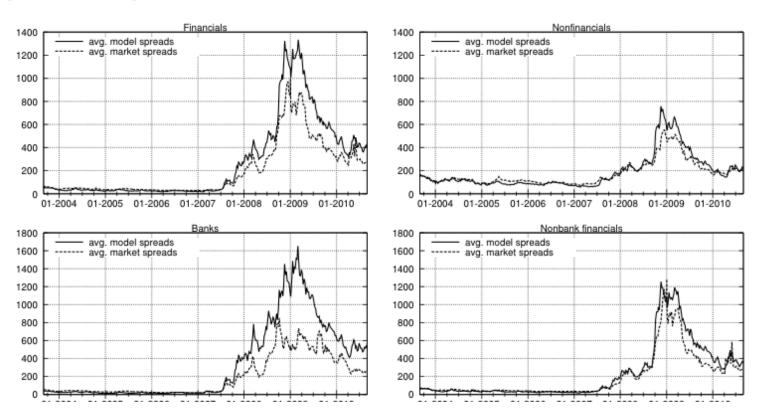
F. Schweikhard/Z.Tsesmelidakis: The Impact of Government Interventions on CDS and Equity Markets, Mai 2011, CFS-Working Paper.



# Risk underestimation: CDS@Banks & Nonfinancials

F. Schweikhard/Z.Tsesmelidakis: The Impact of Government Interventions on CDS and Equity Markets, Mai 2011, CFS-Working Paper.

These charts depict the evolution of weekly averages of CDS market (solid line) and model spreads (dashed line) in basis points for sector aggregates during the period 2004 to 2010. Model predictions are based on the basic calibration scheme outlined in Subsection 4.1.



# Crisis narrative, and responses: Liikanen Report

- Main hypothesis of crisis narrative
  - Bank rescue expectations and systemic risk build-up reinforce each other in a vicious circle, leading to excessive risk taking and systemic risk.
- Experience in many countries: bail-in was unacceptable as policy option,
  - because of collateral damage to other banks (contagion, systemic risk).
  - E.g. Germany: IKB, HRE, WLB.
- This motivates key structural recommendations of Report

# Liikanen Proposal: basic approach

Objective

No recourse to taxpayers' money (pushing systemic risk back to tail of distribution)

Strategy

Facilitating resolvability of banking institutions

Instruments

Separation of trading activities from universal banking

Mandatory issuance of junior bank debt, held outside banking system (*Bail-in* debt)

Result

Re-introducing market discipline into banking system

# Dialectics of business models and regulation

- Regulatory measures are motivated by observed business models.
  - E.g., Volcker rule
- Business models are formed by existing regulation.
  - E.g., SPV as a means of regulatory arbitrage.
  - Similarly, development of internal risk models eyeing risk weights.
- Understanding business models and their response to regulatory change is needed for preserving its impact.
  - Academic knowledge on business models has halted somewhere in the eighties.
  - Today, scale and scope economies estimation in much of the literature relies on rather simple models of the banking firm.
  - Progress, in my opinion requires collaborative effort of academics and practitioners/supervisors.

## Plan for today

- Two cases illustrate dialectics of regulatory intent and expected business response (which typically is not part of the regulatory debate)
- First, separation of proprietary trading from universal banking.
  - Volcker rule; recent French and German regulations.
  - Liikanen proposal, and its possible implications, in comparison.
- Second, mandatory bail-in debt issuance with holding ban.
  - Possible effects on profitability, prices, and market development.
  - Implications for supervision

# Interaction of banking and proprietary trading

#### **Banking**

- Relationship business
- Not scalable
- Safe, if lending book is large and diversified.
- Franchise value via long term pricing.

## (Prop) Trading

- Transactional business
- Scalable, with decreasing returns to scale.
- High risk-return strategy possible.
- No franchise value.

#### Possible problems of banking and trading interaction

- Time inconsistency
   Banks may allocate too many resources to trading, undermining relationship business.
- Risk shifting
   Trading may be used to increase risk, to the benefit of shareholders.

# **Policy implications**

- Relationship banks are tempted to "use their balance sheet" for trading activities.
- Segregating resources within the universal bank (firewalled subsidiaries)...
  - ...solves time inconsistency problem: because capital remains in relationship business.
  - ...solves risk shifting problem: because trading funding is fully risk-sensitive. Not subsidized.
- Volcker, Vickers, Liikanen.
  - All agree on a de-minimis rule,
  - Because banking-trading interaction is beneficial if carried out at moderate level.

# Interview evidence on banking and trading

#### **Traditional investment banking**

- Broker-dealer, active in a defined set of markets. E.g., M&A, corporate loans, foreign exchange products, bond issues, IPOs.
- Personal relationships and repeat interaction matter.
- Bank matches demand and supply.
- Moderately-sized balance sheet leverage is a by-product of the brokerage role.
- Income source mostly fees and commissions.
- If spread income, then from prop trading desk.

#### Modern investment banking (MIB)

- Upgrading into risk-engineered, high value-added services of a central counterparty.
- Real synergies bw. investment banking and commercial/retail bkg.
- "Platform model"

# Financial production platform

#### **Platform explained**

- Platform consits of a wide array of basic products (e.g. options, swaps, CDS, bonds) and processes (structuring, syndication, internalization, netting, electronic crossing networks, dynamic hedging using factor models)
- MIB: from match-finder to provider of counter-party services.
- Consider bespoke financial product, e.g. a corporate credit risk of a particular quality.

#### Platform business and balance sheet growth

- With capacity in place to deliver functional (fin. eng.) services, the bank can start to leverage its generic customer business.
- Building on order flow of its customers, the bank can substitute for the other side of many transactions.
- It makes the market, entering exposures into its trading book.
- Balance sheet reflects accumulation and holding of inventories

# Platform strategy and risk

#### **Professional literature**

- "flow monsters", banks with large flows of customer business that facilitate market making.
- Platform costs are largely fixed, suggesting increasing returns to scale.
- Flow monsters turn into stock monsters, banks with large balance sheets.
- High leverage is by-product of market making, not intended risk strategy.
- So is risk taking.

#### **Implications**

- Market making is indistinguishable from a sequence of prop trades (e.g. factor hedging, London Whale) --> Volcker rule probably ineffective.
- Own capital is at risk, although no prop trading.
- By connecting financial institutions to a wider financial network, hybrids may contribute to systemic risk (Chow/Surti 2011)

# Liikanen on separation

	Separate legal entity (broker-dealer), holding structure, restricted joint liability, exposure limits apply.
Separation of trading (prop trading and market making)	Stand-alone funding of trading activity avoids implicit subsidization.
	Resolution is facilitated.
	Generous de minimis rule applies
	Universal banking model (commercial + investment) remains largely untouched.

## Other features

- Higher capital charges were discussed as an alternative to separation.
- Broker-dealer and universal bank under one holding.
- Broker-dealer has own funding, equity and debt
- Cross guarantees uni-directional (from TB to UB, but not reverse)
- Prop trading not prohibited for holding company (at TB, not at UB)
- Two roads to separation
  - Avenue 1: first, higher capital buffer (not risk-weighted) for banks with large trading book. Then RRP. Second, if RRP not accepted by supervisor, separation is mandatory.
  - Avenue 2: Immediate separation, upon crossing a defined threshold (e.g., trading assets)

## **De-minimis** rule

Mandatory Separation only if the concerned activities amount to a significant share of a bank business.

Assessment to be completed in two stages:

- 1) Identify banks whose assets "held for trading " and "available for sale" exceed:
  - a. a relative threshold of 15-25% of total assets; or
  - b. an absolute threshold of EUR 100bn
- 3) Supervisors decide case-by-case on the basis of the assets to which the separation requirement applies.
  - The threshold is to be calibrated by the Commission.

# **Proposals and their narratives**

**US (Volcker):** Excessive risk taking (through propietary trading)

 $\rightarrow$  Spin off prop trading

**UK (Vickers):** Excessive risk taking (through investment or commercial banking) affects economy's core financial services.

→ Ring-fence core services

**EU (Liikanen):** Systemic risk as the key challenge for prevention and intervention (no banking type was safe).

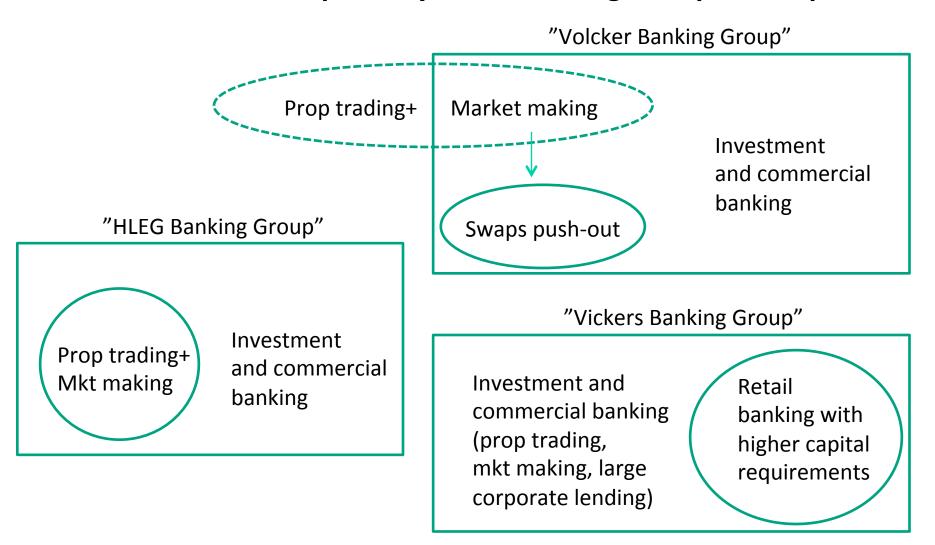
- → Ring-fence complex trading
- → Ensure debt is bail-in able

# **Cautious implications for business models**

## **Prop trading bans and ring-fences**

- Banning generic prop trading (Volcker)
  - Does not erase flow prop trading, unless market making is defined very restrictively (i.e. high-liquidity markets)
- Ring-fencing commercial and retail banking (Vickers)
  - Investment and commercial banking are intertwined, even if there
    is no speculation. "Ancillary" services, like risk management, are
    permitted inside the fence, raising similar concerns as above.
  - May affect MIB severely, because of exposure limits.
- Banning prop trading and market making (Liikanen)
  - Flow prop trading significantly reduced.
  - May affect MIB severely, because of exposure limits.

## **Proposal by HLEG Banking Group in comparison**



## What will be the market response?

- Market response is a general equilibrium issue.
- Emergence of broker-dealers as independent arms of Sifis.
  - Need to fulfill capital requirements as well, including bail-in (first-in-line) debt.
- Will smaller institutions (below-de-minimis) grow their trading business, taking over from the broker-dealers?
  - Probably not, assuming fixed costs in trading to be significant.
  - Rather, and for the same reason, broker-dealers may take over business from smaller institutions.

## Will there be less liquidity?

- What happens to platform strategy of "flow monsters"?
  - Possibly, financial engineering advisory will continue as before, now provided by the broker-dealer, only execution of resulting net positions is outsourced to one/more broker-dealers.
  - Thus, conceivably, platform strategy can be largely maintained.
  - However, broker-dealer has to pay funding costs commensurate with its stand-alone risk.
- Profitability of market making-cum-prop trading likely to shrink
  - (General equilibrium adjustment is complicated to forecast, however)
- Effect on trading volume and liquidity
  - Thakor (US Chamber of Commerce, 2011): Volcker rule will reduce liquidity, increase spreads, lower credit volume, lower economic growth.
  - Does not consider general equilibrium repercussions, e.g. new entrants (broker-dealers), new price level, new market models.

#### Will there be less risk transfer?

- Securitization of the loan book was the early success story of a cooperation between commercial and investment banking. Will this be made impossible?
- Probably no material change, if one allows structuring expertise to be outsourced (to the ring-fenced trading house, for instance).
- Consider the joint effect of separation and bail-in debt issues.
  - Bail-in debt transfers the most junior debt layer in the bank balance sheet to private investors outside the banking system, making it more resilient against shocks.
  - More risk transfer than before the crisis likely.

# Plan for today

- Two cases illustrate dialectics of regulatory intent and expected business response (which typically is not part of the regulatory debate)
- First, separation of proprietary trading from universal banking.
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# First-in-line/Bail-in-ability

Ensuring bank resolvability without recourse to TPM	All banks: <b>Mandatory issuance</b> of designated first-in-line debt.	May be substituted by allequity. Does not imply other debt to be bail-out debt.
	Loss absorption First-in-line bonds are available for write-down (long-term investors can distribute bail-in losses over many periods).	Or conversion into equity (coco bonds), the Swiss example.
	Incidence: First-in-line bonds are priced accordingly ( <b>high coupon</b> compensates for high expected loss).	First-in-line layer may have tranches of different seniority.
	Credibility: First-in-line bond investors <b>must be non-banks</b> , limiting contagion risk (eliminates the rescue imperative for the state).	May be substituted by a 1250% risk weight.

## **Policy implications**

- Bail-in debt addresses head-on the reason for TBTF: fear of contagioin within banking system
- Holding outside financial system is key: anchor bonds.
- Risk is shifted to whom, eventually?
  - Life insurance, pension funds, hedge funds, SWF.
- Impact on corporate governance.
- Note, all debt remains bail-in able, of course (Paul Tucker).

#### A clarification

- Instruments to be bailed-in
  - Cocos, Debt write-down, With pre-determined trigger, With predetermined conversion formula, respecting seniority
- By some commentators, "bail-in bonds" were misread:
  - It has been insinuated that newly created "bail-in bonds" is the one and only instrument to be bailed-in by the supervisor.
  - All other debt instruments, in this interpretation, would continue to benefit from a government guarantee.
  - Needless to say, this turns the Liikanen proposal upside down.
- ALL DEBT IS BAIL-IN-ABLE, subject to seniority, and regardless of its label.

## Summary of structural measures under Liikanen

#### Bail-in

- Re-introducing <u>market discipline</u> via bank funding.
- New role for <u>fund industry</u> (as anchor of banking system).
  - Market probably large enough bail-in debt design details are key.
  - With corporate governance implications (via compensation, via debt-holder activism.
- New role for <u>supervisor</u>: ensuring bail-in ability.
  - Raising bail-in debt may be difficult for banking groups (<u>Verbünde</u>)
    with implicit deposit guarantee schemes.
  - Complement to raising equity, not substitute.
- Compliant with market-enabling <u>Ordnungspolitik</u>.

## Summary of structural measures under Liikanen

## Separation

- Proposal is <u>not</u> about separation of deposit and investment banking - but about ring-fencing of significant trading activities.
  - Reducing complexity s/th RRD can be applied.
  - Avoiding cross-subsidization (from deposit guarantees), forcing trading book activities to be cost covering.
- New institutions in Europe: small number of broker-dealers with large balance sheets.
  - Overall trading activity may <u>decline</u>, because it is more expensive.
  - Overall universal banking may gain, because it is less expensive.
  - Possible effects on large banks and large groups may be smaller than expected, but needs <u>impact study</u>.
- <u>Not</u> fully compliant with <u>Ordnungspolitik</u>.



# New animal in Frankfurt's *House of Finance*: www.safe-frankfurt.de