

# DILEMMATA OF MACROPRUDENTIAL SURVEILLANCE

ESE Conference 2013

The Future of European Financial Supervision

26/27 September 2013

Frankfurt am Main, Germany

*by Paul Bernd Spahn*

# Microprudential vs. macroprudential

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- Microprudential rules take a partial-equilibrium view focusing on an institution's own financial risks, but **ignoring externalities it can inflict on other players**
- **They also discount the systemic relevance** of a firm's size, leverage, interconnectivity, expected government interventions, and other reactions of market participants
- Macroprudential regulation takes a general-equilibrium view **integrating the endogeneity of risks and other externalities into inclusive sets of balance sheets, in order to preserve overall financial stability**

# Policy areas and main objectives

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# The credit cycle

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- Externalities typically arise **during a credit cycle**
  - As long as asset prices rise and delinquency rates fall, the banking industry will expand its credits – possibly beyond reasonable limits
  - During a downturn, banks tend to react by
    - cutting down on new credits and
    - selling risky assets to restore capital adequacy
- **Collectively**, this response will lower asset prices, collapse liquidity, undermine trust in the financial system, and affect the real economy

# Contagion

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- Financial institutions (banks, security houses, hedge funds, etc.) typically engage **in mutual exposures**
  - ▣ During a boom, credit spirals expand via mutual lending, refinancing, and ease in mobilizing collaterals
  - ▣ During a downturn, this network of mutual claims and liabilities entails systemic risks through the collapse of credit links, forced asset sales, or defaults
  - ▣ Securitization and derivatives lower idiosyncratic risks, but strengthen systemic linkages, and thus contagion risk
- **Cyclical lending patterns and systemic contagion risks are intimately related**

# Externalities

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- There are hence three main types of externalities that could pose “systemic risks”:
  - ▣ Boom and bust cycles linking financial and economic activities (pro-cyclicality)
  - ▣ Collective exposure to frail financial institutions (Lehman), unsustainable government debt (Greece), or collapsing markets (ABS, CDOs, repos)
  - ▣ Expectations of government interventions (“event risks”) to support systemic institutions (“too big to fail”, moral hazard)
- These risks go beyond microprudential supervision

# Regulatory implications (2)

- Yet the task goes beyond adapting existing tools:
  - ▣ Ideally, supervisors should not only assess idiosyncratic risks, but assess the health of financial institutions more comprehensively, including their joint exposure and mutual inter-linkages (including cross-border)
  - ▣ In particular they should account for the increasing share of intermediation that takes place outside regulated institutions (“shadow banking”)
  - ▣ Supervisors should anticipate, and prevent, regulatory arbitrage between institutions and markets, while shoring up essential financial functions in general

# Macroprudential topics

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- One can discuss macroprudential supervision according to
  1. Macroprudential gear to enhance microprudential tools
  2. Monitoring and controlling the credit cycle
  3. The special surveillance of “systemic institutions”, agency problems (e.g. CCPs), and resolution mechanisms
  4. The setup of institutions for supervision to account
    - for global economic and financial aspects,
    - the international harmonization of regulatory principles,
    - the coordination of regulatory actors and actions,
    - and the cross-border sharing of information
  5. The interactions between regulatory provisions and monetary and fiscal policy (re-)actions (e.g. bail-outs)



# Macroprudential topics

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# Macroprudential instruments

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- The instruments focus on prudential indicators such as bank capital, liquidity and leverage standards, collateral requirements or loan-to-value limits, etc.
- We'll delve into macroprudential instruments after the coffee break with Mr. Houben's presentation on

**11.10 - 11.50**    **Macroprudential Instruments and How They Work**  
Aerdt Houben  
Director Financial Stability Division,  
De Nederlandsche Bank



# Macroprudential topics

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# Countercyclical provisions (1)

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- In crises banks tend to reduce assets to meet capital adequacy rather than raising fresh capital
- A response to the dilemma of balance sheet shrinkage is time-varying capital requirements, with higher ratios in good times than in bad times
- It maximizes a welfare function that weighs
  - ▣ the microprudential objective of protecting the deposit insurance fund and taxpayers; and
  - ▣ the macroprudential objective of maintaining credit creation during recessions

# Countercyclical provisions (2)

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- Time-varying capital ratios could, for instance, be linked to
  - asset prices
  - credit expansion and leverage
  - a rate consistent with an inflation target
- Liquidity buffers can be built by considering factors that reflect maturity mismatches, for instance
- Some authors suggest that multipliers be greater in a boom than during de-leveraging

# Example of a capital surcharge (1)

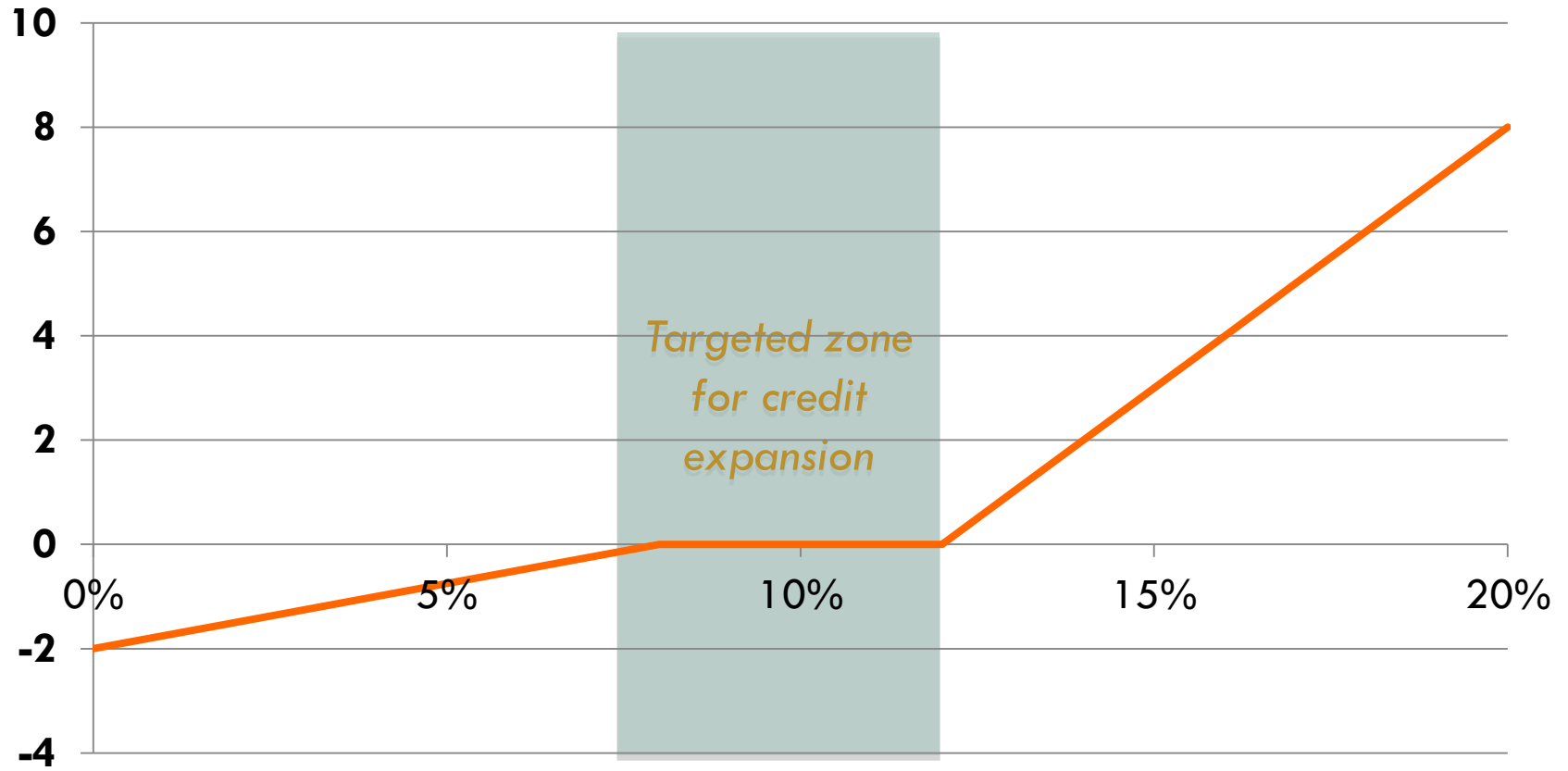
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- Assuming that Germany's Financial Stability Committee decides that the targeted zone for the expansion of credit compatible with price stability lies between 8% and 12%
- Then a “normal” capital adequacy rate of 8% would be adjusted by adding a capital surcharge equivalent to the “excess growth rate” of credit
  - ▣ if higher than the target with a penalty of 100%
  - ▣ if lower than the target with a bonus of 25%

# Example of a capital surcharge (2)

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**Additional charge on capital**



# Critique

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- This model, while ideal to capture externalities in principle, comes close to interventionist policies
- It raises important systemic question in a market economy:
  - Which are **the parameters** the Committee decides on, the currency area, the national economy, or a specific sector (e.g. property market)? (Broad-spectrum tools risk unintended effects in sectors with no problems)
  - Since the capital surcharge **acts as a tax, especially where specific**: Are supervisory institutions permitted to levy surcharges without explicit parliamentary control?



# Countercyclical provisions (3)

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- This raises the question of discretionary versus rule-based supervisory intervention
- Cyclicity and other risk biases are however not only of regulatory concern
- For instance fair value and mark-to-market accounting have significantly contributed to procyclical developments during the sub-prime crisis
- The same is true for Rating Agencies as well as monetary and fiscal policy actions, which played a significant part in creating perverse incentives

# Macroprudential topics

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# Resolution mechanisms for banks

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- Managing the resolution of a bank facing serious financial difficulties efficiently (and with minimal costs to taxpayers and the real economy) also entails externalities of concern
- However Mr Enria's speech yesterday discussed the Single European Resolution Mechanisms in the context of the European Banking Union, so we can skip this subject here

# “Systemic institutions” (1)

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- “Systemic institutions” are characterized by **large contributions to collective risks** (externalities)
- The US Dodd-Frank Act designates banks with \$50 billion or more in assets as systemically important
- It also requires that nonbank financial companies, financial market utilities and payment, clearing, and settlement services be explicitly designated “systemic”
- Preferable is to apply similar capital standards for a given type of asset irrespective of who holds it — a bank, a hedge fund, or a special-purpose vehicle

# “Systemic institutions” (2)

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- For instance, a non-discriminatory regulation could be the application of uniform broad-based minimum margin requirements for ABS
- This could do two things
  - ▣ counter the migration of highly leveraged financial instruments toward the shadow-banking system
  - ▣ reduce, for ABS in shadow-banks, externalities of potential market pressures through forced-selling

# “Systemic institutions” (3)

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- The Basel Committee and the Financial Stability Board (FSB) of the G20 countries
  - ▣ are developing an integrated approach to systemic financial institutions that include a blend of capital surcharges, contingent capital and bail-in debt
  - ▣ are requesting higher capital requirements for trading and derivative activities, complex securitizations and off-balance sheet exposures as well as for inter-financial sector exposures

# “Systemic institutions” (4)

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- In particular Basel III
  - promotes the establishment of strong standards for financial market infrastructures, including central counterparties (CCPs)
  - lowers risk weights for collateral and mark-to-market exposures to CCPs meeting these standards, providing an incentive to move OTC, in particular standardized derivatives trading, to such CCPs
  - requires banks to perform their own internal assessments of externally rated securitization exposures to alleviate exposure to rating agencies

# OTC derivatives

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- We shall learn more about the actual state on OTC derivatives trading in Mr Gauthier's presentation

**11.50 - 12.30** **Update on the Regulation of OTC Derivatives**  
(in the context of macroprudential supervision)  
Nicolas Gauthier  
Policy Officer, Internal Market and Services DG,  
Financial Services Policy and Financial Markets,  
Financial Markets Infrastructure,  
European Commission



# Macroprudential topics

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# The institutional setup

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- The institutional setup for macroprudential surveillance appears to be bewildering
- At the level of the G20 there is the Financial Stability Board under the guidance of the BIS
- In the EU there is the European Systemic Risk Board, or the Bank of England's Financial Policy Committee
- And there are national bodies such as the German Financial Stability Committee
- **Common to all: they are “soft institutions” as they issue only non-binding warnings and recommendations**

# “Soft” institutions

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- An interesting study<sup>\*)</sup> on the role of “soft” institutions concludes that “soft laws and institutions can exert considerable power and that it is misconceived to dismiss them as simply symbolic“
- Obviously their effectiveness „depends to a large part on their ability to develop a strong reputation for technical competence and good judgment“
- One may wonder how reputation can be achieved for a set of rivaling bodies, especially when recommendations diverge
- However: “Paradoxically, either success or failure could eventually lead to the ESRB gaining more direct power”

<sup>\*)</sup> Eilis Ferran & Kern Alexander, Legal Studies Research Paper Series, No. 36/2011 (Cambridge)

# The ESRB

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- We shall hear more about the role of the European Systemic Risk Board in Mr. Mazzaferro's presentation

**09.40 - 10.30** **The (new) Role of the ESRB in a Banking Union**  
Francesco Mazzaferro  
Head of ESRB Secretariat, ECB

# System of European supervision

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- However the “system” of European supervisory bodies, including those responsible for microprudential activities at the European and national levels, still needs a clear vision and wider political support
- In particular the UK’s worries that those under the new Banking Union will form an unassailable voting bloc in the European Banking Authority have to be addressed

# Macroprudential topics

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# Macroprudential and monetary policy objectives

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- There could be a conflict between monetary and macroprudential policy objectives:
  - ▣ „On the one hand, sustained low interest rate levels can accommodate the build-up of leverage and systemic risk.
  - ▣ On the other hand, an increase in rates may not dampen credit demand to the desired extent...
  - ▣ However, risk perception may change suddenly if rates are raised, possibly triggering an asset price meltdown and deterioration in credit quality.“  
(DB Research, May 24, 2012)

# Interactions: the Euro crisis (1)

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- The latter points to a worrisome type of risk: “event risk”, which may result from sudden policy changes
- Policy interference is not the only type of event risk:
  - ▣ Events changing risks could be the unexpected failure of an important counterparty, or the abrupt downgrading of large assets and collaterals
  - ▣ While there is some recognition of the problem, the interactions between regulation and policies are often overlooked



# Interactions: the Euro crisis (1)

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- The event risk in Basel III:  
“Banks will be subject to a capital charge for potential mark-to-market losses (i.e. credit valuation adjustment – CVA – risk) associated with a deterioration in the credit worthiness of a counterparty.”
- The question remains how to evaluate this risk and what provisions are to be taken without creating anticompetitive barriers

# Interactions: the Euro crisis (2)

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- The Euro crisis has raised the specter of some important European countries failing on their debts (Greece, Ireland, Portugal, Spain, Italy)
- Let's look at sovereign debt from the CDS market:
  - ▣ A claim on a sovereign CDS depends on a “credit event” (failure to pay) – an all-or-nothing incident
  - ▣ It would trigger a full write-off of the underlying asset
  - ▣ Provisioning against such risk is difficult
  - ▣ Regulation would force financial firms to replenish capital
  - ▣ This instigates political pressure to avert the “event”

# Interactions: the Euro crisis (3)

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- The dilemma explains the reluctance of creditors and politicians to accept “debt restructuring”
- By succumbing to this pressure politicians become political “hostages” of regulatory constraints
- But the bailing-out of sovereign debtors creates yet another problem: “moral hazard”
- It could trigger a “band-wagon” effect whereby other frail sovereign debtors expect similar bail-outs
- Moreover rescue actions are often wrongly motivated as shielding the common currency: the Euro

# Interactions: the Euro crisis (4)

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- Basel III's promotion of stronger forward-looking provisioning practices attempts to contain such risks
- Also the use of “reverse convertibles” through collective action clauses (CAC) may help in the future
- An immediate solution could be a debt restructuring on a *voluntary basis* using a “Brady Bond” model, successfully used to solve the Latin American crises
- Such guaranteed bond allow creditors to reduce their exposure to debtor countries, albeit at a discount
- However it requires the acceptance of Eurobonds

# A final word of caution

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- Regulatory action has met fundamental criticism:
  - ▣ Markets would treat capital surcharges and other restrictions like any other price information, and shift business to where it can be relatively more profitable
  - ▣ As a result, any targeted metric becomes ineffective, as it loses the relationship with the market that made it useful in the first place („Goodhart’s law“)
  - ▣ Another problem is to know when and how to act, whether the economy faces a crisis or not, and what the pros and cons of action – or inaction – might be

“No single set of indicators can ever provide a perfect guide to systemic risks or the appropriate policy responses, and judgement will play a material role in all FPC decisions.”

(Bank of England, *Financial Policy Committee, Draft Policy Statement, January 2013*)

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Thank you for your attention