Dilemmata of macro-prudential surveillance and the euro crisis

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The quest for macro-prudential supervision

- The recent crisis has indeed revealed many flaws of present financial supervisory standards
- At the core of the crisis there were highly regulated institutions such as Citygroup, Fortis, IKB, RBS, UBS
- Micro-prudential regulations are deficient because
  - they take a partial-equilibrium view considering an institution's risks as exogenous and hence given, and they disregard externalities a bank can inflict on other players
  - the individual response to regulation during a crisis will usually exacerbate financial risks collectively, and it is likely to entail contracting real sector outcomes

Example: Loss making during crisis

- Current supervision supports a sound relation between capital and risk-weighted assets of a bank
- A bank is to take immediate action to restore its capital adequacy rate when incurring losses
- Rather than raising fresh capital, a bank is usually more inclined to sell risky assets to restore adequacy
- If the financial industry is in trouble as a whole, this response will collectively lower asset prices, collapse liquidity, undermine trust in the financial system, entail a credit crunch, and affect the real economy

Micro-prudential vs. macro-prudential provisions

- Other dilemmata of micro-prudential regulation:
  - it causes additional “systemic risks” as it overrides diversified risk aversions, which strengthens systemic linkages among financial intermediaries
  - it ignores the systemic relevance of a firm’s size, leverage, interconnectivity, expected government bail-outs, etc.
- Macro-prudential regulation takes a general-equilibrium view integrating the *endogeneity of risks* and other *externalities* into individual balance sheets of banks, seeking to preserve financial stability as one

Externalities

- There are three types of externalities entailing "systemic risks" that require regulatory action
  - common exposure to frail financial institutions (Lehman), unsustainable government debt (Greece), or collapsing markets (ABS, CDOs, repos)
  - expectations of government interventions to support "systemic institutions" (too big to fail)
  - boom and bust cycles linking financial and economic activities (pro-cyclicality)

Macro-prudential themes

- One can classify the topics surrounding macro-prudential supervision according to
  1. correcting distorting micro-prudential rules
  2. considering the special role of "systemic institutions" and agency problems (e.g. CCPs)
  3. counteracting cyclical developments
  4. respecting global aspects, the international harmonization of regulatory principles, coordination of regulatory actions, and the cross- border sharing of information
  5. examining the interactions between regulatory provisions and monetary and fiscal policy (re-)actions (e.g. bail-outs)

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Correcting micro-prudential rules (1)

- The macro-prudential approach seeks to internalize potential social costs resulting from a collective shrinkage of bank balance sheets
- These costs may result from
  - fire sales, leading to a sharp drop in asset prices and the destruction of “wealth”
  - credit crunch, entailing lower real investments, output and employment
- Why do banks adjust their assets in crises rather than raising fresh capital to meet capital adequacy?

Correcting micro-prudential rules (2)

- The answer is briskness, reluctance to curtail the distribution of earnings, and high leverage exposure, which makes new capital expensive
- Basel III promotes rapid re-capitalization by
  - emphasizing quality aspects of capital
  - introducing a stressed value-at-risk (VaR) capital requirement based on a past 12-month period
  - promoting stronger forward-looking provisioning practices

Correcting micro-prudential rules (3)

- Re-capitalization could be strengthened by direct incentives to raise incremental capital, not just to boost the capital adequacy ratio
- This could be achieved by linking the capital-ratio requirement to the *maximum*, not simply the current, value of assets of lagged past periods
- Since reducing past assets is not possible, any adjustment *must be made* by re-capitalization
- Basel III "promotes the conservation of capital and the build-up of adequate buffers above the minimum"

Correcting micro-prudential rules (4)

- Of course re-capitalization could also be achieved by sponsoring contingent capital
  - such as “reverse convertibles” (debt security that converts into equity when a certain trigger is reached)
  - require banks to buy catastrophe insurance
- This is what Basel III sponsors. In both instances
  - intermediaries pay in advance for the potential cost of recapitalization, and
  - the price of contingent capital or insurance increases with an institution’s perceived contribution to systemic risk

Correcting micro-prudential rules (5)

- Basel III supplements capital adequacy rules
  - with provisions constraining leverage to mitigate the risk of a destabilizing de-leveraging
  - with internationally harmonized global liquidity standards to create a level-playing field for
    - increasing short-term resilience liquidity risk profiles via the so-called „Liquidity Coverage Ratio“ (LCR)
    - strengthening resilience over a longer time horizon via the „Net Stable Funding Ratio“ (NSFR) to provide a sustainable maturity structure of assets and liabilities

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“Systemic institutions” (1)

- “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
- Dodd-Frank 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)

- 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)

- The Basel Committee and the Financial Stability Board (FSB)
  - 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)

- 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 trading to such CCPs
  - requires banks to perform their own internal assessments of externally rated securitization exposures to alleviate exposure to rating agencies

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Countercyclical provisions (1)

- A response to the dilemma of balance sheet shrinkage is a regime of time-varying capital requirements, with higher ratios of capital to assets in good times than in bad times
- It maximizes a welfare function that weights
  - the micro-prudential objective of protecting the deposit insurance fund and taxpayers; and
  - the macro-prudential objective of maintaining credit creation during recessions

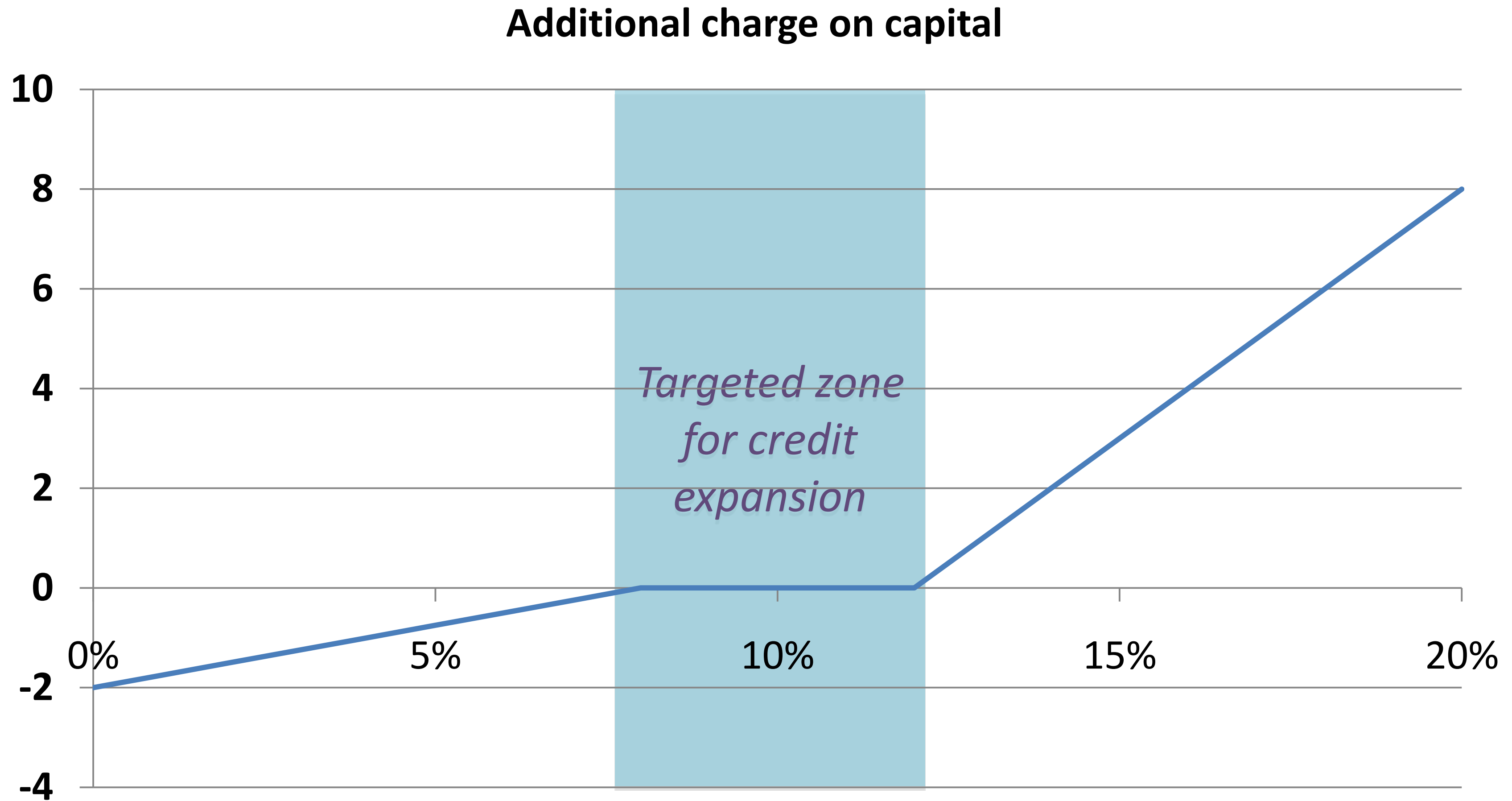
Countercyclical provisions (1)

- 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 reflecting maturity mismatches
- Some authors suggest that multipliers be greater in a boom than during de-leveraging

Example of a capital surcharge (1)

- Assuming that a Financial Stability Committee decides that the targeted zone for the expansion of credit compatible with price stability was between 8% and 12%
- Then the capital adequacy rate of 8% would be adjusted by adding a capital surcharge equivalent to the "excess growth rate"
  - 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)



Countercyclical provisions (2)

- On liquidity the G-20 leaders have agreed to „implement fully the Basel III new standards for banks within the agreed timelines while taking due account of the agreed observation periods and review clauses in respect of the liquidity standards.“ (Paris Meeting on 18-19 February 2011)
- Liquidity buffers reflecting maturity mismatches could provide such standards
- Some considerations for liquidity buffers are given, for instance, in the 11th Geneva Report of 2009 (Brunnermeier et alii)

Countercyclical provisions (3)

- Cyclicality and other risk biases are however not only of regulatory concern
- For instance fair value and mark-to-market accounting have 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 have contributed to creating perverse incentives

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  5. **examining the interactions between regulatory provisions and monetary and fiscal policy**

Interactions: the Euro crisis (2)

- 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)

- 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 also trigger a “band wagon” effect whereby other frail sovereign debtors expect similar bail-outs
- Moreover rescue actions are often wrongly moti-vated as shielding the common currency: the Euro

Interactions: the Euro crisis (4)

- 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

A final word

- The problem of the Euro has to be seen distinct from resolving the sovereign debt crises in Europe
- It is deeply rooted in some countries making incomplete institutional adjustments to a common financial “culture” based on sound macroeconomic – particularly fiscal, wage and employment – policies
- A common “culture” is imposed by the euro zone countries’ renouncement of exchange rate policy
- If these structural problems remain unresolved, some countries may indeed have to consider exiting

THANK YOU FOR YOUR ATTENTION