Dilemmata of macro-prudential surveillance and the euro crisis

Paul Bernd Spahn

The quest for macro-prudential supervision

Micro-prudential regulations are deficient as they take a partial-equilibrium view considering an institution's risks as given. They disregard externalities a bank can inflict on other players in the market, including non-financial firms. So the individual response to regulation during a crisis will usually exacerbate financial risks collectively and is likely to entail affecting real sector outcomes.

For instance current regulations support a sound relation between capital and risk-weighted assets of a bank. And a bank is to take immediate action to restore its capital adequacy rate when incurring losses. Yet rather than raising fresh capital in a crisis, a bank is usually inclined to sell risky assets to restore its capital adequacy ratio. 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.

Other dilemmata of micro-prudential regulation concern additional "systemic risks" as it overrides diversified risk aversions, which strengthens systemic linkages among financial intermediaries. And it ignores the systemic relevance of a firm's size, leverage, interconnectivity, expected government bail-outs, etc.

By contrast 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 a whole. One may distringuish 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); and
- Boom and bust cycles linking financial and economic activities (pro-cyclicality).

In a first instance macro-prudential objectives can be achieved by improving micro-prudential tools. But this implies that micro-prudential rules must vary over time reflecting the business cycle, and the systemic relevance of firms. For instance

- To limit cyclical risks, a regulatory capital surcharge would create buffers in the boom, and allow slack in a bust;

- To limit systemic risks, a regulatory capital surcharge would rise with a firm's systemic risk contribution.

So a uniform capital adequacy ratio is inefficient from a micro-financial point of view, and distortive from a macro-financial perspective.

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. central counterparts or CCPs);
3. Counteracting cyclical developments;
4. Respecting global aspects, the international harmoni-zation of regulatory principles, coordination of regulatory actions, and the cross- border sharing of information; and
5. Examining the interactions between regulatory provisions and monetary and fiscal policy (re-)actions (e.g. bail-outs).

Global aspects as under point 4 are not dealt with in this note because they deserve separate treatment.

Correcting micro-prudential rules

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 hence the destruction of "wealth", and credit crunch, entailing lower real investments, output and employment. This raises the question: Why do banks adjust their assets in crises rather than raising fresh capital to meet capital adequacy?

The answer is briskness in adjusting, reluctance to curtail the distribution of earnings, and high leverage exposure, which makes new capital expensive.

Basel III sponsors rapid re-capitalization by emphasizing quality aspects of capital, introducing a backward-oriented stressed value-at-risk (VaR) capital requirement based on a past 12-month period, promoting stronger forward-looking provisioning practices. Moreover it "promotes the conservation of capital and the build-up of adequate buffers above the minimum".

Of course re-capitalization could also be achieved by propping up contingent capital such as "reverse convertibles" (debt security that converts into equity) or require banks to buy catastrophe insurance. 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.

For the first time Basel III introduces provisions constraining leverage to mitigate the risk of a destabilizing de-leveraging; and internationally harmonized global liquidity standards to create a level-playing field for increasing short-term resilience liquidity risk profiles and strengthening resilience over a longer time horizon.

"Systemic institutions"

"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 automatically as systemically important, which creates negative threshold incentives. But the concentration on banks is insufficient. Dodd-Frank requires that nonbank financial companies, financial market utilities and payment, clearing, and settlement services would be explicitly designated "systemic", which is intransparent and will produce lobbying.

Preferable is to apply similar capital standards for a given type of asset irrespective of who holds it. For instance a non-discriminatory regulation could be the application of uniform minimum margin requirements for ABS. This could counter the migration of highly leveraged financial instruments toward the shadow-banking system and reduce, for ABS in shadow-banks, externalities of potential market pressures through forced-selling.

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 and 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.

In particular Basel III promotes the establishment of strong standards for financial market infrastructures, and lowers risk weights for collateral and mark-to-market exposures to CCPs that meet high standards, providing an incentive to move OTC trading to such CCPs. They also require banks to perform their own assessments of externally rated securities to alleviate exposure to rating agencies.

Countercyclical provisions

An instinctive 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.

Time-varying capital ratios could, for instance, be linked to

- Asset prices;
- Credit expansion and leverage; or
- A rate consistent with an inflation target.

Liquidity buffers can be built by considering factors reflecting maturity mismatches. 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).

Cyclicality is 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. The Euro crisis provides some typical problems of this kind.

Interactions: the Euro crisis

The sovereign debt crisis has raised the specter of some important European countries failing on their debts. One may consider this crisis from the perspective of 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, which instigates political pressure to avert the “event”. This 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 bailouts and hence eschew the costs of structural adjustments. Moreover European rescue actions are often – improperly – motivated as shielding the common currency.

Basel III’s promotion of stronger forward-looking provisioning practices attempts to contain such risks. Moreover the use of “reverse convertibles” through collective action clauses (CAC) may mitigate the problem in the future, albeit pointless at present.

An immediate solution could be a debt restructuring on a *voluntary basis* using a “Brady Bond” model. Voluntary action would avoid the “credit event” and the guaranteed bonds would allow creditors to reduce their exposure to debtor countries, albeit at a discount, according to their individual requisites. This is how the Latin American crisis of the 1980s was finally overcome.

The problem of the Euro itself has to be seen distinct from resolving the sovereign debt crisis in Europe. It is deeply rooted in some countries making incomplete institutional adjustments to a common financial “culture” including sound macroeconomic – particularly fiscal, wage and employment – policies.

The euro zone countries’ adoption of a common currency implies the renouncement of the simple escape via devaluation; hence a common economic and financial “culture” implying structural adjustments is unavoidable. For instance wage policies that go beyond productivity growth and average inflation rates will deteriorate the relative competitiveness of a member country and hence be unsustainable. If these structural problems remain unresolved, some countries may indeed have to consider leaving the Euro zone.