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Enhancements in EU Financial Regulation: Have We Done Enough?

Nous entrons dans l'avenir à reculons.
Paul Valéry (1962).

1 Where Do We Come From?[1]

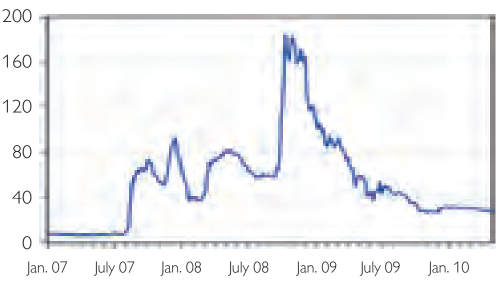
There had been carefully laid-out plans on how to organize the institutional infrastructure of European financial markets. In fact, the Financial Services Action Plan, a key plank in the Lisbon Program of the early 2000s, was nothing less than a *Grand Design*. It followed a principled philosophy, the modern one: the perimeter of capital markets should be enlarged. Direct intermediation (between ultimate savers and final users of funds) was to be fostered. Regulators should content with providing the institutional infrastructure for this ever more integrating financial landscape. Supervision, also in the intra-European cross-border dimension, could be delivered effectively in a decentralized mode. This was deemed to be on purpose since rule books were largely harmonized. All of this was, in fact, a process which began with the European Banking Directives and culminated in the Capital Adequacy Directive III.

But then, almost out of blue skies, this story fell apart. In late summer 2008, after a wrenching year of mounting tensions – in officialese, one did not speak of a financial crisis until well into the summer of 2008 – interbank money markets almost ground to a halt. The increased roll-over risk – funding liquidity – had shown up in significantly widening spreads between unsecured versus secured funds (chart 1). This reduced confidence also translated into drastically falling trading volumes.

Chart 1

Interbank Money Market – Unsecured versus Secured Funds

Spread in basis points



Source: ECB.

Concurrently, market liquidity evaporated in all but the most transparent assets – which therefore, being held on the trading book, took the largest hits. While Basel II was barely operative – and in some jurisdictions not implemented at all – this, of course, should not have happened, never.

Ever since August of 2007, liquidity demand was rising substantially in the aggregate. This reflected, firstly, a heightened perceived counterparty risk. Write-downs, indicating mounting default probabilities in particular of structured products, were increasing with an accelerating pace (chart 2). Therefore, possible repercussions through the tightly knit net of connections within the banking system made market participants suspicious. Trust was especially undermined as the relation to the off-balance sheet (so-called structured investment vehicles, conduits) and non-bank sphere was opaque. This suggested substantial caution to participants in interbank markets – or less trust. Adding to this, banks also

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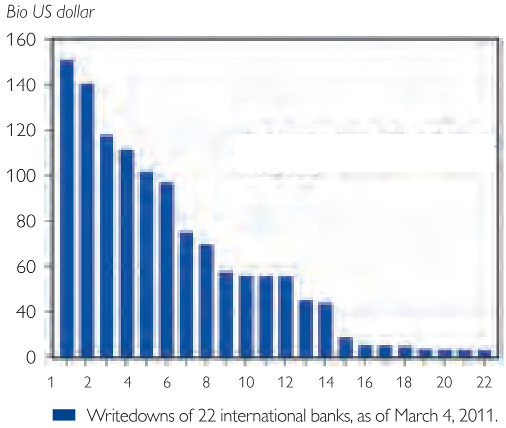
Chart 2

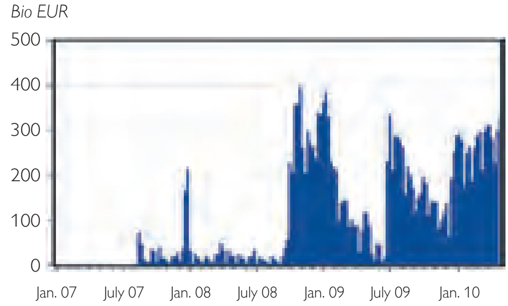
Writedowns of International Banks



Source: Bloomberg.

Chart 3

Allotment over Benchmark



Source: ECB.

maintained higher precautionary balances, in order to be prepared, secondly, to honor the back-up lines they had offered to off-balance sheet entities (in fact, puts they had written, or liquidity insurance they had provided, which ex post had proven hugely underpriced).

It is here, in money markets, where Central Banks in the North-Atlantic region where first forced to intervene in their financial market stability function (see for an excellent overview Turner, 2010). The ECB responded rapidly and forcefully, somehow in a first-mover fashion. Diagnosing things as they evolved early on as a run – in this case, obviously, not of the retail but the wholesale variety – the ECB allotted base money beyond the system's needs under standard conditions (chart 3, see also Kotz, 2008). Initially, in the first phase of the crisis, in order to keep interbank rates in close vicinity of its policy rate, the ECB only frontloaded liquidity supply – but only temporarily, absorbing surplus liquidity over the course of the reserve maintenance period. In the course of the crisis, the dysfunctionality became more pertinent along the yield curve. In response to that funds with longer duration were also made available.

Ultimately, with trading volumes going down strongly, again, in particular in the longer maturities, as well as spreads between secured and unsecured funds widening out to unprecedented levels, the ECB launched in mid October 2008 its policy of satisfying all and any liquidity demand at a fixed rate (*full allotment at a fixed rate*), given appropriate collateral could be posted. Moreover, the ECB also broadened its – already large – list of eligible collateral and it also reduced the minimum required credit quality from. Essentially, the ECB was accepting an intermediary role using its enlarged balance sheet to underwrite financial market stability. It was somehow substituting a "missing market", missing for reasons of lack of trust or confidence. These "enhanced credit support measures", as the ECB came to call them, were of course *extraordinary* – which implies, as a logical corollary, that the ECB would like get back to normal (ordinary) operational procedures as soon as possible.

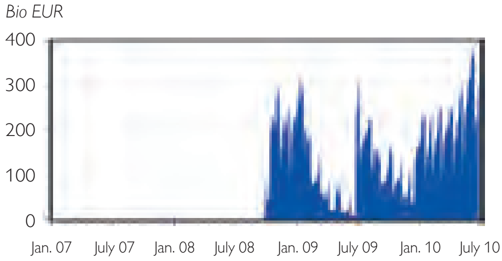
Evolutions in money markets are of interest in our case, since it is here, in a stressed and ultimately dysfunctional environment, where the urge for re-considering the regulatory landscape forcefully emerged. There was therefore a certain Naipaulian *Enigma of Arrival* in evidence in the fall of 2008 – which led to a fundamental reassessment of rules as well as their institutional delivery. In providing liquidity, the "social function" of which, according to John Hicks, is "to provide time for thinking", central banks gave room of maneuver – to profoundly rethink the prevailing rule-set. It is thus very practical and appropriate to take stock and address, as this panel does, the question of whether we have done enough. This question obviously begs a number of nagging sub-questions, some of which we will try to address, admittedly, in a rather broad-brush way.

Focusing in the following on the re-regulation of banking markets, we will first very briefly outline the Basel II philosophy in order to understand why there is now the universally shared view that this needs a reappraisal. Quite directly, this also leads to the second question, namely, what lessons can we draw or what have we learned? Or, in the same vein: Where do we want to get to? How should a robust, cost-effective financial system look like? Thirdly, given the strong integration of financial markets, being most evident in the European domain, the new rules of the game call for a forceful international cooperation – in rule-making as well as rule-implementation.

Chart 4

Deposit Facility

Bio EUR



Source: ECB.

And results are already on display: Basel III is up for deployment, though with a long phasing-in period. Moreover, in Europe a new institutional infrastructure to control the application of the new rules of the game is in place. This, finally, begs the concluding (as well as the starting) question: Does it all suffice – or is it too much?

2 Basel II – Why Such an Early Reappraisal?

In response to a rule-set being seen as too simplistic and also vulnerable to gaming, Basel II, evolving over a long development period, was more complex and more sophisticated. (Almost by construction this opened arbitrage opportunities, as any set of regulations does.) In short, Basel II was understood

as state of the art and up to the task of delivering stability. It rested solidly on three pillars. The first of them were capital requirements, for the advanced banks finely attuned to the supposed riskiness of assets. In addition, in order to cope with specifics, a structured and disciplined supervisory process was conceived. Then, finally, based on transparent information disclosure, market agents were also enlisted as supervisors. In total, this structure should support a fundamentally sound set of banking institutions. As an immediate corollary Basel II should simultaneously underwrite systemic stability – which thus was seen as a derived product.

The most important building block was the one detailing capital requirements. This emphasis also testified to the underlying philosophy: The objective was to achieve a close alignment between economic (or bank-individual) with regulatory capital. The system was, as industry associations had always called-for, almost on an auto-pilot. This was also very much in line with the prevailing zeitgeist: Supervision was delegated by design. Self-regulation was seen as most effective since, in its most advanced version, it built from sophisticated bank internal

models. Supervisors had but a certifier's role. And how could they be assumed to know better than those highly incentivized to take care of their own fate? What concerned institutions with not as advanced risk-modeling capacities, the second tier banks, they had a robust fall-back option: Rating agencies, mindful of their reputational capital being on the line, would provide them with reliable risk assessments.

While it is true, that Basel II was just barely in force when the crisis broke, banks of course had been implementing the machinery long before. In fact, they had been advising these approaches for a good decade. And the foundation models were in the public domain, very literally: downloadable. Therefore, with this structure in place, what we have seen simply should not have happened. But it did. And it did not happen completely inadvertently. Indeed, most of the issues which are now to be mended with Basel III had been raised before – ever since the debate on Basel II was launched. In particular four points bear repeating since they also come up with Basel III.

The purportedly sophisticated models to compute risk weightings (ultimately, risk-weighted assets) were not only challenged with very significant data limitations. Defaults for most instruments are rather rare events hence the need for data covering at number of credit cycles (de Servigny and Zelko, 2001). But they were simply not available. For this small sample bias, Monte Carlo simulations are no substitute. These risk-assessment models were in particular conceptually fragile. Here, uncertainty referred especially to the flaws of the value at risk approach. By construction, such a perspective implies and underestimation of low probability events (which were in reality of course not as unexpected as the normal assumption would make us believe; Herring, 1999). More importantly, the systemic dimension, arising from the interaction of the joint application of these models, was left unattended. This meant a complete disregard of common downside risks. In the same vein and more generally, the endogeneity of risk was not acknowledged (Brunnermeier et al., 2009).

Moreover, while the criticism concerning pro-cyclicality was accepted early on – it was never addressed in earnest. One reason for this possibly was that dealing with the issue would have also implied, as far as cycles are not correlated, that the playing field would have been un-leveled along national or regional dimensions. Then, there is quite obviously a very nagging diagnosis problem: How does one conclude on the amount of the cyclical deviation from trend and how does one deploy an instrument to deal with that? Nonetheless, in reality the issue did not remain moot.

Thirdly, and most puzzlingly, liquidity problems were largely ignored in the Basel II environment. Or, to put it more benignly, they were deemed to be sufficiently dealt with indirectly, through sophisticated capital requirements. This argument is of course not completely beside the point. After all, the distinction between liquidity and solvency is somehow elusive, especially in turbulent times. The financial crisis has however palpably shown that capital requirements alone do not suffice. But it was also never expected to be that way.

This reads very much like "We told you so". And, in fact, there is a substantial literature on all points mentioned above, detailing the critique – as it was raised during the consultation phase of Basel II, in the early 2000s, or even before (Danielson et al., 2001; Hellwig, 1996; Gehrig, 1996; Kotz, 2001 etc.). This begs questions about the political economics of rule making which we here only highlight in a very cursory fashion:[2] Who has a say and an impact on rules beyond the very diligent and public-minded civil servants? How does one deal with the – not exclusively public-spirited – but completely legitimate influence of industry groups? Their involvement is, of course, legitimate in a pluralistic society and, in light of their comprehensive knowledge about instruments, indispensable. But, given recent experience, one also might think about having more of an involvement of disinterested academics – were it only as a countervailing factor, challenging received wisdom.

3 What Lessons Have We Learned by Now?

Or, before, where do we want to get to? While it appears more than obvious, the financial sector does not find its purpose in itself. Rather, it is quite literally a service industry. Essentially, financial institutions should perform two functions – the allocation of scarce savings and the management of the attendant risk, at acceptable cost. This implies a pertinent question: "…how well is our financial system serving us, and at what cost" (Friedman 2010, p. 9). What is most puzzling: we do not really have a good idea about this indeed fundamental issue: Are society's resources used justifiably? It goes without saying that here a substantial effort has to be made in order to achieve a necessary understanding of the balance of costs and benefits of finance (Haldane et al., 2009).

At a minimum, we have however an idea about the possible destructive potential of dysfunctional financial institutions. These potential side-effects were of course always palpable, in developing as well as developed countries, for too long to ignore (Kindleberger, 1986). Meanwhile it is undeniable: Such a calamity can also happen in the North-Atlantic area. The losses of today's ongoing crisis are inadequately captured if one only looks at write-downs in banking books (chart 2), though they are very substantial. The massive destabilization of numerous public sector budgets, subsequent to the crisis, belongs on the list also. In addition,

[2] *For a significantly more critical view see Claessens and Underhill (2010).*

opportunity cost, of course, also include the gigantic mis-allocation of resources, their wealth-reducing deployment. This is important to recall because against this background and for obvious reasons, rule makers and supervisors have become more conservative.

Now, what lessons have been drawn? Early on, in the fall of 2009, the Financial Stability Board (FSB) has produced a comprehensive list of steps to be taken to make the financial system more safe and effective in delivering on its ultimate purpose, supporting welfare creation (Vinals, 2010). This ambitious program has, most importantly, been endorsed by G-20 leaders. With regard to the banking sector, on which we focus here, rather reassuringly, the agenda list concerning Basel III included all of the above-mentioned critical points. Thus, capital requirements will be reinforced. More specifically, this holds in particular for the quality of capital. Funds last in line, with a claim on the residual only, hence those with the first obligation to take losses, will have to be increased substantially. While it might appear that this is about common equity only, it would not be justifiable if funds equally capable of absorbing losses were not treated identically. Function or substance dominates form. Otherwise, rule makers would be prescribing the institutional set-up of banking systems, determining "the" model: which would then be a private, purely shareholder based one. This, very clearly, would impede the development of public sector savings banks or cooperative banks which, for sure, not only have not been major actors in the crisis but, on the contrary, have been, as a result of their business models, very much a stabilizing force – at least in the German and Austrian case (OeNB, 2009; Deutsche Bundesbank, 2009).

In addition to more conservative capital requirements and cautious risk-weighting coefficients, Basel III also adds an overall leverage constraint. This obviously throws all assets indiscriminately into one risk bucket, hence is avowedly simplistic. However, this *garde fou* is an honest way of accepting our state of knowledge, given the substantial model uncertainty the purportedly sophisticated bank internal rating models come with.

At least with hindsight, the lack of an appropriate regulatory treatment of liquidity was a glaring flaw. In the run-up to the crisis, numerous international banks increased the gap between the duration of their assets and liabilities to unprecedented levels (Shin, 2010). Relying moreover on wholesale markets, what was in former times called: "bought deposits", made these institutions especially vulnerable. Northern Rock, funding almost half of its assets, with a duration above 4 years, in overnight, wholesale money markets was an exemplary case (Shin, 2009). Now, two new ratios should, going forward, contain or limit such threats: The short-term liquidity coverage ratio calls for a stock of high-quality, liquid assets to be larger than the projected net cash-outflow over a 30 day period. With regard to longer-term maturity transformation the net stable funding ratio requires available reliable funding to be greater than cash-flow requirements.

Then, at the interface between the micro-prudential and the macro or systemic dimension, Basel III also copes with problems of pro-cyclicality. Capital adequacy requirements, by necessity based on backward-looking time series of default probabilities and historic market prices, produce positive, self-amplifying feed-back effects. This is also an issue with marked-to market or fair-value accounting, with margin requirements and haircuts – all of them endogenously and as a rule abruptly creating potentially systemic problems (CGFS, 2010).

The most important innovation however is that the macro- or systemic dimension now has been acknowledged. For almost a decade, in particular economists from the BIS had argued this case (Borio, 2003). If need be, the crisis has forcefully made clear that it was a non-negligible fallacy of composition to assume that by underwriting the (apparent) safety of individual institutions problems arising from interaction would fade away. Claudio Borio put this in an enlightening econometric metaphor: Systemic issues arise from cross-sectional as well as time-series interdependencies. Macro problems might, for example, develop when too many institution – the crosses – are engaged in the same activities. Trouble frequently also builds and accumulates over time (CGFS, 2010; Hanson et al., 2010).

4 Why International – Especially European – Cooperation?

Most explicitly, Basel II was – like its predecessor – the result of negotiations amongst the members of the Basel Committee on Banking Supervison (Claessens and Underhill, 2010). The safety and soundness of financial institutions, the bigger one of which are predominantly active in a cross-border dimension, can only be underwritten internationally. Rule-setting as well as rule implementation therefore has to acknowledge "structural interdependence", a phenomenon already diagnosed for macroeconomic policies by Richard Cooper in the 1970s. There are significant and unavoidable spillovers. These externalities arise inexorably from financial institutions responding to rules and their implementation.

In our case, the regulation of cross-border (in particular: intra-European) financial activities, cooperation goes

substantially beyond the exchange of information. It entails the formulation of common policies – against the background of the typical problems of converging on a joint approach: participants pursue objectives, not always completely in line. For example, some would accept a higher risk of financial market instability if it comes, on average, with stronger expected growth of GDP. Then there is uncertainty about the robustness of risk-control models to be applied. And all official negotiators involved, while interacting in a supranational environment, of course have to transport results to a national context. This two-level game aspect is a decisive reason for why the U.S. – though very much part of the negotiation process – never implemented Basel II. But it has promised to apply Basel III.

In the case of the most recent redesign of international rules two institutional aspects deserve an emphasis. There is, first, the new, very much enhanced role of the already mentioned Financial Stability Board (FSB). Its mission is to "coordinate at the international level the work of national financial authorities and international standard setting bodies" (FSB Charter, Art. 1).

This is of course an ambitious objective – in scope, since it goes in the institutional dimension for very good reasons beyond banking, encompassing all standard setting bodies, as well as in the encompassing task, going much beyond coordination. The FSB had an impressive start.

In fact, looking back at its diagnosis from the fall of 2009, also outlining the blueprint for actions to be taken, the FSB has very much delivered on its targets. But then, quite rapidly, a debate about the "closing window of opportunities" developed. Unsurprisingly, with the immediacy of the crisis fading, there was quite some push-back, for obvious reasons in particular from members of the industry to be regulated. While in public debates the slow process of international rule making was often criticized as almost bordering on inactivity, voices from industry became ever more critical. It was claimed that regulations pondered would be too rigorous and ultimately too costly, implying lost opportunities for growth and employment. We will come back to that.

The second important international as well as institutional innovation is of course what we now have as a new supervisory landscape in Europe. In principle, whilst acknowledging the decentralized set-up of European financial markets, the European dimension gained in importance. Proximity and efficiency strongly argue in favor of the subsidiarity principle, if applied on the basis of a common rule book. To be sure, up to the crisis this decentralized set-up – a mixed-form home-host country control with memorandums of understanding and colleges of supervisors – was deemed to be appropriate for Europe's specific context, for reasons of supervisory proximity and effectiveness of information processing but also because Europe's banking markets are still dominantly nationally oriented (Houben et al., 2008). However, in particular the home-host relation was seen as problematic in the case of branches (as opposed to subsidiaries) with a systemic (financial stability) relevance in the host country. But before the crisis this was perceived as an only remote problem, to be dealt with best if and when it arises. Recent events now have however forcefully shown that, reflecting the ever deeper integration of European financial markets, the prevailing set-up of loosely coordinated supervisory institutions was not up to the problems (Bini Smaghi, 2007; Schoenmaker, 2010).

This structural flaw has been convincingly diagnosed in the de Larosière report. And, possibly reflecting the dramatic background, the suggestions of this report have been largely taken on board. Thus, the three European Supervisory Authorities now have a substantially increased influence in the case of conflict between national supervisors. Given the dense network of intra-European repercussions this is a strong positive. Otherwise we would have remained stuck in a situation where the best response of participants, given the expected reaction of others, would on average have generated subpar outcomes. In fact, this is also an improvement for supervisees who now have a dedicated point of reference. Most importantly, however, the creation of a new European Systemic Risk Board (ESRB), charged with the macro-prudential dimension, is a significant step in the right direction (Grande, 2011). The ESRB has an ambitious objective, namely to diagnose possible systemic problems as they arise, and, most importantly, to suggest ways and means how to correct them. This is an important improvement relative to what we had before – when even the problem was not acknowledged. Given that financial stability is inextricably linked to monetary policy (e.g., CGFS 2010), being joint-products, it is also of the essence that the ECB and national central banks are involved in a decisive way.

5 Does It All Suffice – is It too Much?

Putting an overall judgment on the current state of financial rule-making, as we are asked to do, can only be ventured with reference to a yardstick. To reiterate: The financial system should be resilient, efficient and provide its intermediating services in a cost-effective way.

This impact assessment is still quite contentious. There is, on the one hand, the industry evaluation (IIF 2011) which concludes on very high macroeconomic costs: lost opportunities for growth and employment as a result of a reduced systemic capacity to manage risk. The work done by the BIS-organized Macroeconomic Assessment Group does, on the contrary, conclude that macroeconomic costs will be comparatively low – and hence that, set against the opportunity costs from financial market calamities (measured in large underperformance relative to potential), net benefits are significant (Cecchetti, 2011). A number of academics hold that in particular capital requirements are not demanding enough – by far. More specifically they posit, with reference to the Modigliani-Miller capital-structure indifference argument, almost the foundation stone of modern finance, that a higher capital cushion would not come with the asserted negative *social* consequences (Admati et al., 2010; Miles et al., 2010). While high operating leverage (in particular as a result of the differential tax treatment of debt and equity) might interesting from an individual rationale (allegedly boosting RoE), as a result of the inexorably implied externalities this could go beyond a collectively rational level – what calls for higher capital requirements (Hanson et al., 2010). This argument is also buttressing a position which, for example, the Swiss National Bank made early on, forcefully arguing for more self-insurance of banks.

There are a number of open issues. They are, on the one hand, micro-prudential in origin and have in particular to do with the level and structure of capital (convertible debt?) and liquidity requirements (sovereign debt?). They also concern their interaction with ongoing regulatory developments in closely related further fields (insurance, accounting), not touched upon here. But the major challenges are systemic. They concern systemically important institutions (too-big/too-interconnected to fail), cross-border bank resolution schemes (living wills, functional subsidiarization). This is, first of all, an analytical problem, for example concerning tractable indicators of systemic importance (where simple indicators of size seem to perform rather well, e.g. Drehmann and Tarashev, 2011). But then it also entails very difficult issues of implementation. Cycles, in particular such in asset prices, as a rule have a significant regional dimension. They are difficult to diagnose, ex ante. Then, it takes often very long to build a consensus. Which leads, as seen from ex post, to the too-less-too-little-too-late syndrome. This speaks in favor of simple, automatic rule (not unlike the Spanish statistical provisioning concept). Responding to this a-synchronicity with differentiated capital requirements would moreover imply cost of doing business differentiated along a regional dimension, of course, also within Europe's single market. This would obviously not be an unintended consequence but engineered on purpose, as an appropriate response to divergent regional economic background conditions.

While this would, for sure, complicate things for banks, we do have such regionally differentiated effects in many other dimensions, most obviously in the tax field. With monetary policy "Europeanized", a well working EMU always required that functional substitutes to the nominal exchange rate to adapt to regional imbalances would gain in importance. National fiscal policies were explicitly seen in this capacity. We now acknowledge, given that monetary policy can only deliver one policy rate, that banking policies might serve such a purpose also. With a second objective this obviously calls for a second instrument also. It is unfortunately too easy to imagine the difficulties of a highly political decision-taking process. But, given the experience we made, taking this direction appears to be unavoidable.

As a general upshot, going forward the international financial playing field will probably be less level. The national or regional dimension will again increase in importance – possibly even in Europe and even in EMU, just think of the liquidity ring-fencing which is deemed to be called for in order to cope with challenges arising from emergency bank stabilization measures in the home-host relation. In a way, we are advancing in retreating – to pick-up the *aphorism* of Paul Valéry, which we used as motto.

Be that as it may, one can conclude that innovations in rules, rule-making as well as in institutional implementation, acknowledging previously disregarded externalities (in particular those with a systemic impact), are heading in the right direction. At least when compared to where we are coming from.

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