PRESENTATION ON BANKING REGULATION

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Topics posed by the organisers

Banking regulation: Glass-Steagall vs. Basel norms

- Limiting bank competition
- Wall between banking and non-bank activities
- Exposure limits
- Size and the prevention of systemic risk

Introduction

Financial crises have characterized the evolution of all economies whenever a financial system had been developed.

Contagion from an institution in trouble to the whole system – through reciprocal lending and borrowing - has made the financial system a special case with features that are not necessarily present in other sectors of the economy. And spillovers to the rest of the economy and society, leading to massive government intervention have made those crises – as the present-day one - a matter of particular public concern. In fact, most studies point to the fact that cycles in economic activity associated with financial "booms" and "busts" are particularly acute ones.

Prudential regulations of financial activities - as well as supervisory bodies to ensure their application - have been introduced therefore at times of financial crises in an attempt to eliminate or at least reduce market failures leading to them in what mostly has turned up to being a vain attempt to stop their recurrence.

As crises have kept coming back, governments – or central banks – increasingly have got involved in liquidity support, deposit insurance and eventually provision of capital. Beginning in the 19th. century – maybe earlier - the character, scale and variety of instruments used by authorities to support banks under stress has kept evolving and increasing.

Last resort lending consecrated by Walter Bagehot in the 1870s but already used before in Great Britain was the first line of attack in providing liquidity support a mechanism to protect banks against a creditors' run.

Deposit insurance was a something like a latecomer under the crisis of the 1930s but surprisingly only limited to the U.S. among the industrialised countries for

quite a long-time.
Both lender of last resort actions and deposit insurance were supposed to be limited either in amounts or through restrictions in the position of the bank receiving the support (following Bagehot liquidity support would be granted only to solvent institutions against good-quality paper and at a discouraging rate of interest). However, when actual crises came along most of these limits were left aside (deposit insurance in principle limited to some modest amount, for instance, was frequently extended to cover all deposits, liquidity support expanded in character and the type of assets eligible as collateral, etc.).
Government provision of capital to banks under stress had been a less common phenomenon; the U.S. again took the lead in the 1930s with the Reconstruction Finance Corporation but we have witnessed its extension to Scandinavia, Japan, Latin America and Asia under the 1980s/1990s crises.
In the last quarter of a century as crises have become more frequent and in a few cases more serious not only in the much-maligned crony capitalism underdeveloped countries but also in a few advanced countries official support of the banking sector has become more frequent and multiplied, in amount and variety of instruments. Why was it so?
Liquidity and capital in the banking sector – their self-insurance against crises – have come down in an extraordinary way. Increased leverage – more significantly in Europe than in the U.S. - and the involvement in riskier activities had the consequence that profit rates – and remuneration of officials - have gone through the roof. Additionally, the size – absolute and relative to GDP – of the financial sector has multiplied even in the case of some smaller size economies whose banks grew through internationalization (the outstanding instance being Switzerland). A much larger and riskier financial sector, on the other hand, could not but mean an enormously increased potential burden on governments to rush into support at times of stress.
No doubt the self-interest of banks and other financial intermediaries in increasing significantly their profits and remuneration of their officials was crucial for such a development but the role of governments was essential in allowing it to take place. In Spanish we say "*no es culpable el chancho, sino el que le da de comer*".
A "shadow regulatory system" emerged. Prudential regulations but for a few exceptions were taken away from its discussion and approval by public bodies like Parliaments/Congresses – as had been the case in the 1930s - or even the Executive powers. At national level supervisory agencies and at an international level informal committees of unelected officials from those same agencies became the source of a new era in prudential – in fact *non-prudential* – financial regulations. Curiously enough, and adding to the "shadowiness" of it all, the

framework adopted in those international committees – without any representation whatsoever from either governments or citizen elected public bodies – were punctiliously adopted even in underdeveloped countries that did not participate in those committees even at the level of unelected officials.
The name of the day was to leave “market forces” to do the job of regulation. Additionally, as we will see in a moment, which were the market failures and consequently the origins of the fragilities in the financial sector was poorly understood. Lessons of a rich accumulation of past experiences were put aside.
Reasons for such a vision have been hotly disputed. It might be that the explanation could be attributed to a whole new era of almost unlimited belief in the benefits of a market economy thoroughly liberated from government interference. There are others that have argued with good reason that various forms of “regulatory capture” (revolving doors between public official appointments and high-up positions in private business, electoral campaign contributions, etc.) were behind the new regulatory era that mostly benefited the large institutions.
In a nutshell, the result of financial institutions strategies and the “shadow regulatory system” could be seen in the present-day crisis. Collapse of asset prices and institutions, overspill to the “real economy”, long-drawn unemployment, etc. And if there has been a recovery from the worst – how solid is still under discussion – it is because governments besides some indirect – through automatic stabilizers and social safety nets – and direct fiscal effort at providing support to effective demand have lent support to the financial system which in the U.S., U.K. and Euro Area has reached almost US$14 trillion, somewhat less than a quarter of world GDP. As Lord Turner – head of the British FSA – has put it: “The financial crisis has challenged the intellectual assumptions on which previous regulatory approaches were largely built and in particular the theory of rational and self-correcting markets”.
Worse, as many observers and even some authorities have pointed out the specific way in which the crisis is being handled is seeding the emergence of an even worst one sometime in the future as the most basic questions leading to the present-day one are far from being adequately addressed.

Reform of financial regulation or a government-owned financial system?

If the character of the financial system is such that is ridden with market failures recurrently leading to crises that affect the whole economy and that are somehow sorted out by massive use of public resources, it sounds as perfectly justifiable to advocate for a fully nationalized system or at least for one run as a public utility heavily regulated to the tiniest detail.
The system also could be split between that section providing a payments

system and a store of value for the public at large and what some authors have named as the “casino” system of speculation. Governments would be ready to stand-by for the first section – that anyway would be much less prone to crises because of a restricted range of activities – while the second one would be left to their own devices.

But most specifically in underdeveloped countries there is an essential need for long-run finance that could not be the responsibility of the deposit-taking system and that if run by the “casino” system could not easily provide a source of reliable finance. A powerful argument again arises for a government-run system of long-term finance that if necessary like in my own country could be rebuilt on the ashes of previous institutions but avoiding the “clientelistic” sins of the past that anyway do also dominate private finance and have ended-up in massive need for government resources. The argument, therefore, does not revolve around the need for provision of government resources but for the right vehicle and means to use public funds for the best possible ends, i.e. bailing-out “casino” bankers vis à vis providing development finance.

The present-day debate about reform of financial regulation is avoiding going into such fundamental questions and has remained at the level of suggestions to improve and extend already existing regulations. Besides some issues that at the beginning were vociferously blamed for the crisis have with time almost completely disappeared from the debate let alone from regulatory proposals (rating agencies, the unregulated “shadow banking system”, the need for a macroprudential approach, tax havens and banking secrecy, etc.) Consequently in the following I will restrict myself to aspects of the debate being pursued at the level of governments, financial supervisors and sections of academia about how to improve the regulation of the financial system to at least avoid the most serious crises and their consequences. Most specifically I will survey part of that debate according to some of the demands that have been posed to us by the organizers of this meeting.

Size and the prevention of systemic risk

There are two different problems around this subject. The first one, has to do with the “too-big-to-fail” question. The second one, refers to the micro and macro financial risk problem. Of course, size is connected with the way risks are estimated particularly from a macroprudential perspective and with the fact that Basel II had fully accepted that precisely the big banks with the resources to build up their own models of risk could be, so to speak, liberated from a more traditional supervisory authority imposed coefficients, in the tradition of Basel I, almost only about asset to capital ratios.

Let us first tackle the question of prevention of systemic risk where the problem of size will clearly come up.

The financial risk problem

There are three difficulties connected with financial risk that I would take up in the following order. The first difficulty is related to the limitations to put it diplomatically of the more habitual risk models used by financial institutions and credit rating agencies. The second one, has to do with the fallacy of composition, i.e., to assume that because each and every single institution is behaving according to an individually correct risk model, that the stability of the system is therefore assured. The third and more fundamental question is that of the confusion between risk, events that would happen under estimated probabilities, and those to which no probability could be attached, and the economy is full of these uncertainties rather than just risks.

As to the micro risk problem.

The first and foremost difficulty with the micro risk problem – and with Basel regulations that should be followed at least by big banks – is that risk estimates are supposed to be as close as possible to market developments.

Now, as already mentioned, the world has witnessed a real multiplicity of financial crises. If it is the case that financial crises recur, patently financial markets do not work properly. To build and apply models that estimate risk by closely following market events, financial institutions – and rating agencies – are bound to wrongly estimate them. As nicely put by William Buiter, “We decided to regulate markets because of market failure. Then we let the market regulate the market”.

In addition, although sophistication has made significant advances, the more habitual risk models being in use, are full of heroic simplifications as to their probabilistic assumptions and as to what is their end result (the typical VaR models, besides in many cases assuming a normal distribution of risk events do not result in more than a probability under certain confidence limits of some events going beyond some amount of losses but without letting the user get an idea of how large those losses could reach). The models are wrong – “The Emperor has no clothes” as explained by Jon Danielsson - as vividly depicted by the famous quote from the Chief Financial Officer of JP Morgan that back in 2007 stated that they were witnessing events that were 25 standard deviations moves several days in a row (as explained by Andrew Haldane a 7.26 sigma loss – assuming normal distribution of events – could be expected to happen once every 13.7 billion years, approximately the age of the universe, let alone a 25 sigma loss several days in a row).

The macro risk problem or the endogeneity of risk

A second problem has to do with the fact that risk in the financial system is "endogenous", i.e. that the interaction of institutions within the financial system and with the "real" economy results in that risk estimates that could be correct from an individual institution point of view might be completely wrong from a systemic point of view.

As stated by the BIS in its latest Annual Report (and in an endless stream of papers produced by BIS officials and more recently by other prominent financial economists) there are two dimensions of the endogeneity problem, a cross-sectional and a time dimension one.

The cross-sectional one has to do with the common exposures of individual institutions arising out of similar portfolios – to a great extent as pointed by Avinash Persaud a consequence of the similarity of the risk models in use – or different ones that under normal conditions look uncorrelated to become highly correlated under stress (simulations with empirical data of past crises produced by the Bank of England clearly depict such a process). "Finance became a monoculture",(Haldane) while, in fact, resilience of complex systems depends on diversity. Additionally, linkages through direct or indirect relations in a market in which securitisation has produced an explosion of interconnectedness, also could result in joint failures of significant institutions so as to generate a systemic crisis (see the evolution of the interconnectedness in charts 1, 2 & 3 in "Rethinking the Financial Network", a speech by Andrew Haldane, in which the application of network theory is advocated to understand financial system failures).

Estimates of systemic risk and of the contribution of each individual institution are in their infancy but for instance as stated in the already mentioned BIS Annual Report for 2009, in one exercise it clearly comes out that large institutions do contribute – and more than proportionally to their size – to systemic risk. If such results would be confirmed, regulations should be built around an "un-level playing field" contrary to say Basel I and II practice that emphasised a level-playing-field that precisely encouraged the loss of diversity. For a more resilient system, therefore, large institutions would have to put up with higher capital and other prudential coefficients requirements. In the language of network theory as being explored at the Bank of England, the 80/20 principle originated in epidemiology, is to be applied, i.e. the bigger institutions that are the ones that have to follow stricter regulations – rather than weaker ones under Basel II – as the rule of thumb that has been tested again and again is that 20% of the members of a network are responsible for 80% of the spread of contagion and those are the larger firms, the financial system having become more and more concentrated.

The time dimension of the “endogeneity” of risk in the financial system refers to its procyclicality. Under present-day regulations with their concentration on closeness to market prices their is no dampening of a tendency to assume more risk and to benefit from rising asset prices during booms resulting in an overextension of the institutions involved that becomes more than clear during “busts” when the system works in the opposite direction. This is one principle that has been now adopted by the :”international community” as registered in various pronouncements from the Basel Committee and the Financial Stability Board (Spain has had “dynamic provisioning for quite some time and India – I understand - also applied some moderation to housing finance in the past). The principle having been accepted now it is a question to devise the specific mechanics that would suit different banking structures.

Are we in the land of risk or in that of uncertainty

The whole literature – even that of people I might be in almost full agreement with – is dominated by the concept of risk. How is risk going to be estimated. How is risk going to e distributed. As Jon Danielsson has stated there is a kind of illusion that once a number is placed on a problem – particularly if it comes out of a complicated mathematical model – the question is on the way of it being resolved. Recollections from Keynes: “…it is better to be roughly right, than precisely wrong”.
But in the economy at large and most specifically in the financial system rather than risk what we face is uncertainty. To price an asset under uncertainty rather than a number it would be more appropriate to try to imagine a range and experience is that uncertainty makes it for a pessimistic attitude in economic agents frequently unrelated to the prevailing “fundamentals”. As Keynes would have argued in such situations it is :”rational” to fall into conventions, rules of thumb and not into mythical risk model precisions.

<u>The “too-big-to-fail” problem</u>

At more than one juncture we have seen the kind of system-wide problems arising out of the presence of large institutions. As concentration in the financial sector has kept increasing this issue has become more important.
But additionally to the questions related to micro and macro prudential regulation another issue has come up, i.e. the “too-big-to-fail” one.
It has been argued that large firms cannot be allowed to go under because the repercussions could become unmanageable. Implicitly, then, those large firms can rely – and that has been the vision of the markets – in a government bail-out in case they run into problems.
Andrew Haldane tells a funny story of one of a series of seminars Bank of

England officials held with a wide spectrum of bankers to try to understand how did they ran their stress-tests (one fashionable method – by the way used by the IMF in their FSAPs – of estimating risks). The result of the exercise was that the stress-tests they were running were rather light. Asked why, the true answer came from one member of the group of bankers: “There was absolutely no incentive for individuals or teams to run severe stress tests and show these to management. First, because if there were such a severe shock, they would very likely lose their bonus and possibly their jobs. Second, because in that event the authorities would have to step-in anyway to save a bank and others suffering a similar plight. All of the other assembled bankers began subjecting their shoes to intense scrutiny”. continued Haldane. “The unspoken words had been spoken”. Haldane’s conclusion: “The short answer, I think, is that stress-testing was not being meaningfully used to manage risk. Rather, it was being used to manage regulation. Stress-testing was not so much regulatory arbitrage as regulatory camouflage”.(from “Why banks failed the stress-tests” speech 374, February 13th.2009, BoE).

So regulation was being managed as well as access to vast bail-out facilities not available to small fowl.

I find most fascinating Mr. Thomas Hoenig – President of the Federal Reserve Bank of Kansas City - statement in front of the Joint Economic Committee of the U.S. Congress - and its annexes –coming so to speak “from the horses mouth” in a session at which also Joe Stiglitz and Simon Johnson had to address the same problem. Mr. Hoenig is an old hand at the FED and his statements were crystal clear. “…we have an existing mechanism that can be used for firms of all sizes and allows for their dissolution while controlling damage to the broader financial system”. Mr. Hoenig goes on to explain the principles on which such an experience may be based while at the same time acknowledging that there is never clear way to success and that any winding down of an institution is a sad experience. As an example of a “too-big-to-fail” institution, the case of Continental Illinois among the 10 largest banks in the U.S. and that failed in 1984 is related in detail. Of course, the story revolves around making a “good bank” and a “bad bank” liberating the first one of all the unperforming loans and recapitalising it through direct purchases and warrants that would be exercised up to the point necessary to recover the amounts disbursed by the government agencies. In all circumstances flexibility should be applied so as to avoid bad spillovers to the rest of the system, like waving limits on deposit insurance, etc.

In that same session of the JEC, Joe Stiglitz comes up with a defense of large institutions but only if they are going to provide the services they are supposed to provide, i.e. an efficient payments system and providing various services to depositors and most specially lending to the poorer communities but not abusive

credit card lending.
Of course, we all know that neither Mr. Hoenig's nor Joe Stiglitz's ideas have been put into practice.
The question is still hanging around, however, about the size of the whole system and the advantages of having smaller institutions highly specialised providing other types of finance.

Wall between banking and non-bank activities

As mentioned in the previous section, the accepted approach to cope with future financial crises being discussed mainly at Basel is to introduce reforms in the Basel II framework by, first, imposing some liquidity requirements – absent from previous versions - and, second, introducing more stringent capital requirements, including a "leverage ratio". Additionally, some countercyclical procedures both in terms of larger capital buffers and forward looking provisioning are to be established. Risk exposure arising from derivatives and other operations are to be revised and some incentives to draw derivatives trading to central counterparties would be explored (see the last Consultative Papers produced in December 2009 by the BCBS). Some proposals also have been put up to screen, as it is done in the medicine field, new financial products so that prior approval will be needed to offer them to the public.
But we would still be in the land of reducing microeconomic risk in spite of calls for macroprudential policies to be devised and applied. But, additionally, as mentioned above, in fact, what the financial system faces is uncertainty rather than quantifiable risk. Uncertainty arises out of the unpredictability of shifts in markets sentiment that are amplified by the interconnectedness of the banking system that has been made even worse by the securitization process.
In such a situation calls have come up for a return to a Chinese wall between commercial banking activities and investment banking. Commercial banks would be constrained to the so-called "narrow banking" although of a less stringent character than in its original proposal by Chicago professors back in the 1930s. "Narrow banking" in this sense would eliminate securitisation of their loans – and perhaps of at least short-term non-deposit liabilities - for deposit taking institutions making up the core of the banking system and of course, the payments system of any nation.
Although "liquidity risk" would remain an intractable uncertainty as we have argued above, at least, the amplification of bank interconnectedness will be reduced so that sudden rises in correlation of what previously were considered uncorrelated risks would be dampened.
Recently many voices have advocated the institution of such a system through a

return to “Glass-Steagall” most notably that of Paul Volcker that in fact while Chairman of the Federal Reserve Board of the U.S. did oppose several attempts at weakening or repealing the Banking Act of 1933.
Investment banks would be left free to innovate and securitise but no to fund their activities by deposit taking neither short-term funding. Regulations of course should be imposed on their activities but knowing in advance that regulators would always be behind the curve but with much less danger of spillovers from their riskier activities on the core deposit taking and payments system.
Criticisms of such a proposal have been quite widespread. On the one hand, it is argued that credit expansion will be lowered under the division by the return to “Glass-Steagall”; bearing in mind the catastrophic effects of the surge in credit under the prevailing system such a criticism sounds less than convincing.
A more serous problem would be the cyclical shift between the strictly regulated “narrow banking” section of the financial system and the less regulated one. On the upswing firms and consumers would resort to the facilities of the rest of the system to return to the more solid one under the crisis phase. “Booms” and “busts” still will be a feature of the financial system but under the “narrow banking” proposal such waves would be dampened.

Development banking

In any case, even under the “narrow banking” proposal, and as mentioned before there would be a need for government sponsored or directly owned development banks. Such banks would function under a totally different regulatory framework. This framework would have to make room for the long-term character of their asset portfolio and for the special way in which they would be funded, mostly with initial provision of capital from the government plus additional sources. In Latin America the major and lasting experience is that of the BNDES that is financed by contributions that are made to a special fund built up to protect workers from unemployment. There might be other ways, why not directly from the Treasury, to finance a development bank. Bu the need is there and the private sector could play a minor role in this field.

So to come to an end, we have gone full circle. The question of government ownership of at least crucial sections of the financial system has to e discussed.