

Past and future regulation to prevent a systemic financial crisis

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1. An invitation to keep silent

Economists were invited by Italy's Minister of the Economy and Finance to stay silent for not having foreseen the crisis until it was already upon us. Indeed, they did not foresee it: they found themselves, however, in good company. Volcanologists are not able to foresee eruptions, even if according to history they know that one day the Vesuvius will wake up with dramatic consequences for the hundreds of thousands of people that occupy its slopes. Seismologists know where fault lines pass and thanks to statistics are able to determine the interval in which an earthquake will take place, for example, in California. Meteorologists are in a position to announce the arrival of tornadoes, tropical storms, hurricanes and so forth with short notice, but rarely are they able to calculate if a phenomenon will maintain its direction and destructive force without being altered. Should they all stay silent? Human knowledge would not make any progress, and freedom would indeed be hampered.

For this reason, when preparing to illustrate the work in progress "to secure" the global financial system, I did not resist the temptation to retrace the development of my reflections on the theme of stability and oversight of the financial system, subject indeed to massive doses of transparency. Not being a prophet, nor a messiah I did not foresee the crisis, nor the trigger mechanism or the moment of explosion; all aside, I had glimpsed several weak points of the configuration that the financial system was gradually acquiring as a result of an uncontrolled globalisation

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(but at the micro-prudential level), in a way not always homogenous and with measures destined to worsen the pro-cyclicality of credit. Like many, I imagined that hedge funds could provoke a crisis, probably because they had remained, due to American influence, outside the scope of any direct regulation, subject only to the surveillance of the banks that provided them credit, or because the system had run a serious risk in 1998 when a sudden liquidity crisis forced the creditor banks, prodded by the New York Fed, to bailout LTCM in extremis and in the middle of the night. There have been many financial crises in recent centuries; as with wars we tend to think that the horror of the last will prevent the next, and so for financial crises we believe the errors that provoked the most recent one will not be repeated in the one to follow. Supposing that the same errors will be avoided, others will be committed... The unstoppable push for innovation, the change of generations and the fading of historical memory will determine the conditions of a new crisis. We can only try, through the institutional structure of control, to make them less frequent, less disruptive, and more manageable.¹

2. Past doubts and fears

In a paper published in 2003, that Alessandro Roncaglia (2010, p. 50) was kind enough to recall, I concluded an analytical, maybe slavish, examination of the thesis sustained by Robert J. Shiller (2003) with the following words (Sarcinelli, 2003):

“Regarding the stabilization of the economy due to individual contracts for risk management and most importantly to swap between countries with unexpected changes of GDP, it is permissible to be more than doubtful; nor is this skepticism tempered by the hope that the substitution of nominal account units with indexed ones will result in the reduction of inflation risks deriving from the fall of the debt burden due to the cumulative rise in prices, or the deflation risks due to the increase of their burden arising from a systematic fall of prices (debt deflation). [...] This does not appear to be the path to reduce the

¹ On the factors that made for the current crisis in the United States, see Ferguson and Johnson (2009).

frequency of international financial crises... Alas, all we can do is continue to put faith in the ability of central bankers to avoid, as much as possible, the formation of bubbles in financial markets and in the ability of governments to reduce the vulnerability of their economies to crises through appropriate reforms and regulation [...] Unless you believe, as Shiller (2000, p. 233) does, that ‘most of the thrust of our national policies to deal with speculative bubbles should take the form of facilitating more free trade, as well as greater opportunities for people to take positions in more and freer markets’. This can reveal itself to be a recipe for even larger bubbles, with even more disruptive effects...”, pp. 418-419.

Even according to an author who is attentive to behavioural finance, to the inclusion of psychology and of other social sciences in the explanation of the investment decisions of human beings, financial markets would become more stable with increases in their degree of freedom and in the number and variety of “bets” placed on them. Still in 2000, the conviction that financial markets are self-equilibrating was strong, even in a bright economist that did not ignore information asymmetries nor the psychology behind herd behaviour. A retraction of this view appears to be found in the latest book by Shiller and Akerlof (2009), in which they foresee a general revision of the economic models based on rational behaviour, to give way to those in which bubbles may be generated, owing to a cumulative process arising from agents’ interaction. Nevertheless, Shiller, along with Krugman and Roubini, is among the very few that foresaw the current crisis.

In addition to the rationalist prejudice of academic economists was Greenspan’s (1996) declared “impossibility” to distinguish whether a sustained movement towards the rise in asset prices is due to irrational exuberance or to a genuine rise in productivity. Even more, according to the former Chairman of the Fed, since a bubble becomes noticeable only in the very moment that it bursts, to alleviate its consequences on markets it is sufficient to overflow them with liquidity. This Greenspan put ended up with the generation of chained bubbles, the last of which caused the Great Recession that we are still living through, notwithstanding an ultra-permissive monetary policy and a fiscal policy that injected around 11 trillion dollars at the global level, of which 8-10 trillion into banks. Thanks to privatisations, since the 1990s public Treasuries raised only around two trillion...

In another, long essay on the oversight of the financial system I examined objectives, structures and approaches, also hinting at their consequences, already studied by the researchers of the BIS, of the substitution of the principle of historical cost, dominant until a few years ago, with the current value that, if not available, is reconstructed as fair value. “These innovations risk weakening bank’s ability to stabilize the financial system” (Sarcinelli, 2004, p. 242, republished online 2009). In that paper I did not deal with the greater pro-cyclicality that the Basel II agreement was introducing to the regulation system. I tackled them (Sarcinelli, 2005) in a seminar as a discussant of a presentation by Rainer Masera. The rating systems – I underlined – at a micro and meso-economic level exert pressure on the credit valuation methods to resemble, if not align with, those of capital markets. At the macroeconomic level, due to the positive effects arising from greater homogeneity and transparency of the relationships between banks and businesses, one could expect an improvement in the prospective and in the stability of both lenders and borrowers.

Can the same be said about macroeconomic stability? The initial response tends to be negative since these rules entail a strong correlation between capital requirements and credit risk, not to mention market risk... In the negative phases of the cycle, banks face a rise in the riskiness of their clients; if they do not have a surplus of capital and they are not willing to acquire it in the market at a high cost, they must reduce their lending (credit crunch). In the positive phases, vice versa, the probability of default and the loss in a case of default is lowered, the availability of credit increases and its cost decreases. This results in the cyclical path of the economy being reinforced.

In 2005 I felt rather reassured by two stress-risk simulation exercises, one conducted with reference to Italy (Fabi *et al.*, 2005) utilizing data from the central assets-and-liabilities register and from the Bank-of-Italy central risk register with regards to the financial ratios and credit relations in 1993, a recession year, to assess the consequences of a sudden deterioration of the probability of default in 2002. The results of the simulation were fairly reassuring, since the buffer of surplus capital available in the system was more than sufficient to satisfy the obligations

deriving from the worsening of the economic conditions. Moreover, the measurement of the risks implicit in the new regulatory system did not seem capable of causing the banks to make their clients pay particularly higher rates of interest owing to the deterioration of the macroeconomic situation, thus with pro-cyclical effects. Concerning Europe, the conclusion of a study by PricewaterhouseCoopers (2004), was as follows: “[...] although we cannot be certain at this stage, we consider it safe to conclude that the pro-cyclical effects of the proposed new capital rules will probably be quite moderate” (p. 131). Even if they were aware of the elements of greater instability that the IAS (fair value) and the prudential regulation (capital ratios) were introducing into the system, I had not realized at all that their joint functioning would bring about an explosive situation. On this point, Rainer Masera, who dedicated various papers to this theme, included in an edited volume (Masera, 2009), repeatedly used the metaphor of nitroglycerine, that is dynamite, as the result of two components (nitric acid and glycerin). Anyway, Basel II came into force in 2008, so the problems that we have recently experienced are more the result of policies (monetary, balance-of-payments and home-ownership) pursued in the United States, than of the new regulation. Still, a role was certainly played by the incentive to exploit the advanced methods of risk assessment to save capital (Sarcinelli, 2009a) and the emergence of a “parallel banking industry” in the United States, subject to inadequate or no oversight (Nersisyan and Wray, 2010).

My concerns in 2005 did not regard the pro-cyclicality as much as the role change of the banking system in regards to capital markets. A competitive collaboration between banks and markets was believed to constitute a factor of mitigation of financial crises and of reduction of systemic risk. In fact, as the ability to raise funds from bond markets decreases, bank loans expand, and as the value of credit guaranties fall bank loans contract, replaced by the recourse to markets. Moreover, given the existence of insurable risks and of non-diversifiable risks, the presence of both banks and markets in the financial system is complementary (Allen and Gale, 2000). A similar concept is that repeatedly expressed with reference to the South-East Asian crisis by Greenspan (1999), recurring to the metaphor of the spare tire, since the

shock absorbers are to be found in multiple intermediation, in redundancy, from a systemic point of view. In fact, the absence of a spare tire does not create problems until the very moment it is needed: it was not present in South-East Asia at the time of the crisis that invested it, but was very useful to the United States who were well equipped in 1990 and 1998.

The paths through which banks became ever more similar to financial market dealers, in my opinion, were substantially three: the securitisation of various kinds of assets, from mortgage credits to consumption credits (asset liquidity), the recourse to the market in substitution or in addition to fund raising from deposits among the public (funding liquidity), and the dealing in derivatives, through which positions were opened or closed with other components of the financial system. This last activity certainly gave each dealer a sense of being freed in full or in part of a certain risk, by transferring it to others. But this risk dispersion, on which Shiller (2003) relied so much on, is not certain at all. On the contrary, often the last counter-parties of derivatives traded over-the-counter end up being a very limited number of international banks, with an inevitable rise in systemic risk. Notwithstanding the appeals of international institutions such as the IMF on the difficulty of knowing where the risks were flowing and concentrating, the transactions were almost always done OTC, instead of in regulated markets. Furthermore, with the help of mathematicians derivatives were developed that were evermore complex, in conformity to complex models that are not easily comprehensible and are absolutely necessary for their evaluation, with the assistance of some market parameters. This caused OTC transactions to further increase.

In addition, the dependence of banks on funding through the market subjected them not only to the prevalent rate conditions and credit worthiness defined by the rating agencies and by CDSs, but more than anything it exposed them to a risk of insolvency if a tightening of the market does not allow the refinancing in the presence of high mismatch in the term structure of assets and liabilities. Besides, securitisation constituted the principal channel for the communication between the banking sector and financial markets. It was an important innovation to

make the banks' assets liquid before their natural maturity, that however induced a shake-up in the traditional banking business model, from originate-to-hold to originate-to-distribute, not only in Anglo-Saxon countries but also elsewhere, in order to expand the activity without increasing the dimension of the balance sheet. Moreover, it manifested itself as a means to reduce (maybe to not comply with) capital ratios, but it made many bankers more likely to lend to clients of doubtful solvability (for example with subprime loans, for which see Sarcinelli, 2009b), knowing that these were not destined to remain in their own portfolio, but would end up being packaged and sold on the market. The old model, however, took revenge as the crisis found some 30% of this lending segment in banks' portfolios.

From all this followed a dilution of the banks' fundamental role as credit providers and payment handlers, a transformation of banks into financial brokers, and above all an exponential growth of the relations within the financial sector; not only did the typical instability of markets infect banks, but it also notably aggravated systemic risk. "These innovations risk weakening the banks' capability to stabilise the financial system" (Sarcinelli, 2004, pp. 242, paper republished on line 2009).

Obviously, within the limits in which the principal monetary policy instrument, that is the short-term interest rate, were unable to achieve at the same time the double objective (price stability and financial stability), it were not politically acceptable to give preference to the financial one in a given context, and above all it were socially beneficial to continue to keep financial innovation free (Sarcinelli, 2009c), as has been influentially suggested (Volcker, 2009) banks need to be restored to their proper role (Sarcinelli, 2009d) and it is necessary to reintroduce some segmentations with respect to categories of intermediaries, types of operations, and classes of clients.²

² With reference to the legal underpinnings of the American financial system, Kregel (2010) maintains that in 1999 the abolition of the Glass-Steagall Act allowed all financial institutions to engage in liquidity creation through securitisation and structured derivatives. An alternative would have been to identify banking as liquidity creation through the acceptance of customer liabilities. In such a way, banking in a proper sense would try to reduce charge-offs on borrowers by improving risk assessment. All the other forms of liquidity creation (market making, derivatives, structured lending, credit

3. Proposals and initiatives to reform the financial system

It is certainly not easy to orientate oneself within the numerous fields (macroeconomic, prudential, etc.) and among the various bodies (FSB, BCBS, etc.) that time and again are called upon to give their contribution to redesigning the architecture of the financial system. A summary table, listing ninety-two actions, of which thirty-five concerning international economic governance and its institutional framework³ and the majority dealing with financial regulation,⁴ is very helpful (G20 FMCBG, 2009c), as it shows the progress made up to September 5th, 2009 on the action plans of the G20 summits of Washington (November 16th, 2008) and London (April 2nd, 2009). The further decisions taken that same day by the finance ministers and the governors of the central banks of the G20 may be found in the press release of the summit and in the attached declaration (G20 FMCBG, 2009a and 2009b).

The declaration of the finance ministers and of the governors of the G20 of September 5th (G20 FMCBG, 2009b) on the subsequent steps to strengthen the financial system claims that a few conditions are necessary: 1) clear and identifiable progress in 2009 on the themes of corporate governance and CEO remuneration standards, with an invitation to the FSB, headed by Mario Draghi, to offer specific proposals to the Pittsburgh Summit; 2) intensified regulation and supervision on the

enhanced SPV) would fall on the hands of investment banks. This division of labour is certainly rational, but rather unacceptable by commercial banks as credit granting is rather falling as a share of total financing and does not provide the profit-and-loss account with handsome fees. As competitive pressure was the main reason for repealing the Glass-Steagall Act, its simple restoration is *de facto* impossible, but this does not mean that structural constraints and fire-doors are not needed in a very unstable financial sector.

³ Actions regard macroeconomics (seven), restoration of credit granting to firms (one), financing of international trade (two), reform of international financial institutions (twenty-five), including additional resources to IMF and WB, revision of debt sustainability criteria, IMF and WB governance, improvements in IFI effectiveness and governance.

⁴ To be specific, actions concern financial regulation (one), FSB establishment (two), international cooperation (six), prudential regulation (sixteen), scope of regulation (nine), transparency of regulatory-regime assessment (one), aspects of compensation (three), tax heavens and non-cooperative jurisdictions (eight), accounting standards (eight), rating agencies (three).

corporations of systemic relevance; 3) rapid progress in the development of a stronger prudential regulation (more capital and of better quality, anti-cyclical buffers, leverage ratios, etc.); 4) tackling of un-cooperative jurisdictions (peers' review, countermeasures, etc.); 5) consistent and coordinated application of international standards, including those of Basel II, to prevent new risks, regulation arbitrage, etc.; 6) convergence towards a single set of high quality, global, and independent accounting standards (concerning financial instruments, loan-loss provisions, out-of-balance exposures, impairment and evaluation of financial assets).

The great number and variety of actions, as well as the reiteration of some of these (possibly with over-detailed specifications) allow for the easy comprehension of the general direction that the regulation is desired to move towards. It is not clear, however, what scope it will assume in the intricate sector of regulation and financial supervision. At the Pittsburgh Summit the FSB, which became the "secular arm" of the G20 that also approved its statute, presented a twenty-one page report on the actions in progress to fulfill the recommendations of the London declaration (FSB, 2009),⁵ *in primis* it proceeded to the constitution of its own internal structures with a steering committee and three permanent committees for the evaluation of vulnerabilities, the cooperation in the field of regulation and supervision and for the implementation of standards. Moreover, a work group was created for the management of cross-border crises and an expert group on non-cooperative jurisdictions. Even a brief glance at the prose of the report demonstrates that this is the beginning of a gigantic redefinition and systemisation effort, for which research, studies and proposals on the part of the many bodies concerned are necessary. Eventually, a great diplomatic ability will be necessary to have them accepted without being twisted or watered down too much at high political levels.⁶ Even the Early Warning Exercise (EWE) to which

⁵ Minister Tremonti, however, insists time and again on the need to have the new rules defined at the political level and enshrined in a legal standard, that is, if I understand correctly, in a treaty on the lines of the one agreed at Bretton Woods, since the experience of a regulation laid down by technicians has been unsuccessful.

⁶ The *De Larosière Report*, already rated too cautious by some, was watered down further when its recommendations came for approval before the legislative bodies of the European Union.

the IMF and the FSB were jointly appointed will need many iterations before being able to provide trustworthy indications. In the past, similar exercises conducted by the IMF revealed themselves to be of little use.

Of greater help in outlining the framework of the future regulation and financial supervision is the other report by the FSB presented at the G20 in Pittsburgh under the title *Improving Financial Regulation*: “Our objective is to create a more disciplined and less pro-cyclical financial system that better supports balanced sustainable economic growth” (p. 1). To this end, there will be constraints to the financial leverage that will not be allowed to rise to the levels reached in the past and to the undertaking of risks, if we want to avoid that profits remain private and the final losses are borne by the taxpayer. The instruments will include higher minimum requirements, both quantitative and qualitative, for capital and liquidity; reforms of accounting standards; more transparent regimes of remunerations to limit the incentive to undertake risks; improvements in the market infrastructure and a rise of capital ratios for trading activities. Obviously, the reform plans will have reasonable enforcement periods, to avoid aggravating the crisis in course. On the moral hazard posed by institutions that are too big to fail or that, due to their interconnections, are too complex to be liquidated the only real commitment is to study solutions in the next twelve months.

Also indicated in the report are fifteen actions already completed or at a good point, among which the elimination of the negative consequences of the Basel discipline on capital that generated incentives for out-of-balance securitisation, the integration in the same framework of the principles worked out by the FSB for sound compensation procedures, the establishment of supervisors’ colleges for the most important global financial corporations, and the development within each firm of contingency plans or living wills to be applied in conformity to the principles laid down by the FSB for cross-border cooperation in the management of crises. All these are relevant aspects, but they are surely insufficient to outline fully the future architecture of financial regulation, that is now beginning to consider other fields such as the expansion of financial supervision to hedge funds and rating agencies, the reinforced solidity of OTC-derivative market, the revitalisation of securitisation on

sound foundations, and the degree of compliance with international standards. Notwithstanding good intentions, a rapid conclusion of the works in fields so cursed by complexity and conflicting interests remains more of an auspice than a certainty. Furthermore, in time these principles will require maintenance due to the constant push for innovation in order to escape constraints and obstacles (Miller, 1986).

On the other hand, studies to strengthen capital ratios at a global level, to fortify liquidity, reduce the moral hazard posed by institutions of systemic relevance, and to make accounting standards stronger are well under way. Since the definition of instruments is still in progress and entails the intervention of other bodies, it is impossible at this stage to make forecasts on their acceptance or effectiveness. For example, concerning the subject of remuneration practices, prior to the summit in Pittsburgh some governments held opposing views, with France and Germany in favour of strict ceilings for banks' top managers and CEOs on the one hand, and the United Kingdom and the United States taking a more flexible stance on the issue, on the other. However, the FSB developed some implementation standards, fully approved by the summit that in its press release (eighteen pages, of which around three are dedicated to the system of international financial regulation) summarizes them as: a) to not guarantee bonuses over multiple years; b) to defer the supply of a significant amount of variable compensations, to attach them to performance, to make them liable of restitution and to distribute them in the form of stocks or similar instruments so that they allow for incentives to be aligned with the creation of value in the long run and with the same time horizon of risk; c) to make sure that the compensation of high level managers as well as of any employee who can significantly affect risk exposure is correlated with results and the risk itself; d) to strengthen the degree of awareness and transparency of compensations; e) to limit the variable part of compensations as a percentage of total net profits if they undermine the retention of a sound capital base; f) to make sure that the committees in charge of compensations are effectively independent and that supervisors pay attention to the topic, penalizing the enterprises that do not apply these principles.

Judging from the bankers' comments during the annual IMF and WB conference in Istanbul, their application will not be easy..., even if the G20 proclaimed itself, and rightfully so, the principal forum for international economic cooperation.

4. IMF contribution to the debate on financial system reform

Even though it is not officially delegated to it, the IMF (September, 2009) published a series of proposals to redesign the regulatory system. After having noted that the banking system was already highly regulated, a condition that did not prevent it to be fully involved in the crisis, the report claims that it is not a matter of adding more rules or of making them stricter, but of entrusting the supervision to personnel independent of the industry's influence and of politics, and equipped with sufficient budgetary autonomy. As the subprime loan incident fully demonstrates, the failures should be attributed to implicit or explicit decisions of regulators, and not to missing rules. In any case, even the most recent regulations should be revisited to make the financial system or at least the banking industry less pro-cyclical and more resistant to shocks; as well as, I would add, to restore credibility to the regulatory mechanism that has emerged with great reputation damage from this crisis.

To reduce the moral hazard deriving from guaranteed or quasi-guaranteed bailouts for the big banks and for large conglomerates, the IMF recommended an increase in regulatory capital, the improvement of the quality of its composition, a growth in transparency, a more attentive and incisive governance of financial enterprises of systemic relevance, the capability for timely interventions on the part of regulatory authorities, and the definition of a plan to face insolvency in an orderly fashion (Tucker, 2009; Brunnermeier *et al.*, 2008). I have serious doubts with respect to this last aspect since, as the theory of incomplete contracts suggests, it is difficult to foresee the various states of the world that may materialise and consequently to establish n different pathways beforehand. The arrangements for one's own funeral are usually an oddity and are often useless, for example if one dies at sea.

To keep systemic risk under control a strong increase in capital and liquidity ratios is suggested, in order to: a) reduce firms' size since, as the literature revealed some time ago (Berger and Humphrey, 1994), economies of scale within the banking sector wear out beyond a modest threshold and cost efficiency does not suffer; b) to provide incentives for breaking up large corporations, diversifying assets, or simplifying operations; c) to loosen the functional interconnectedness among systemic enterprises; d) to forbid proprietary trading; e) to foresee the application of fees calculated on systemic risk for the participation to a rescue fund or safeguard.

On the whole, systemic risk is often difficult to evaluate, as the marginal increase due to a particular institution at a certain moment entails more of a discretionary appreciation than a measurement... However the subject is being studied (FMI, 2009a; BIS, 2009). Obviously, liquidating procedures need to be in force, capable of managing the dissolution of complex institutions, at times with ramifications in more than one country. To this end, host and home countries are recommended to agree that cross-border operations of groups that are considered to be of systemic relevance by the jurisdiction in which the main holding is incorporated, are established to take place through subsidiaries with adequate ratios of capital and liquidity, since global banks become national (and sometimes nationalized) upon their demise...

Market discipline must be restored in a credible way. To this end, a combination of measures will be necessary and a degree of cooperation between different jurisdictions must be established non only concerning the exchange of information, but also in the definition of mechanisms for the management of crises and for the sharing of their costs, if we want to preserve the benefits deriving from global capital flows. In my opinion, the risk of a return to financial protectionism is rather high, although until now this has had a tendency to manifest itself only on the trade terrain (Onida, 2009).

Since financial oversight, monetary policy, and fiscal policy end up being heavily involved in the case of serious crises, a macro-prudential approach imposes itself in the design of economic policy, but above all a

spirit of cooperation must prevail in its implementation. Not only must the excessive expansion of credit or the emergence of bubbles in asset markets be promptly identified, but also the monetary policy, fiscal policy, and financial oversight responses must be consistent, within institutional contexts that can differ from country to country. A particular aspect of this macro-prudential approach, the development of which is due to the intuition of and the studies promoted by Alexandre Lamfalussy when he was Director General of the BIS (Maes, 2009), is that of procyclicality, which is fought or corrected by reforming the rules that tend to amplify the economic cycle. For banks, it does imply the revision of the accounting framework based on fair value, on which, notwithstanding the problems it has created, noteworthy economists such as Kaplan, Merton and Richard (2009) have forcefully insisted; it also concerns the very rules on regulatory capital, loss provisions, and taxation that binds, like in Italy, the prudent appraisal of bankers in the latter field.

The IMF also provides a synthesis of the various proposals put forth to make banks' balance sheets more robust, without necessarily endorsing all of them. These are: a) higher capital ratios weighted for risk, and of better quality; b) anti-cyclical allowances for credit losses, as the Bank of Spain has already done in the recent past; c) a formally established maximum leverage, already applied in Canada, Switzerland, and the United States, to block the expansion of balance sheets, which unfortunately may also push agents to seek higher risk to increase the ROE; d) the acquisition of an insurance policy that entails the payment of a certain sum, already set aside, to the bank or to the rescuing fund, in the event of a crisis (Acharya *et al.*, 2009; Kashyap, Rajan, Stein, 2008); e) the on-demand issuance of a given amount of subordinate convertible liabilities, of preferred shares or subordinate debt tout court, which up to now has shown to be scarcely efficient, but could improve its performance if employed in a more massive manner (Poole, 2009); f) pre-financing of deposit insurance; g) capital ratios, as already mentioned, correlated to systemic risk.

5. Strengthening banking resilience and liquidity management, as envisaged by the BCBS

On December 17th, 2009 two documents were published and submitted for review (through April 16th, 2010) by the Basel Committee on Banking Supervision that are proposed to strengthen the resistance capacity of the banking sector to shocks (BCBS, 2009a) and the governance of liquidity, regarding risk measurement, regulation standards and monitoring (BCBS, 2009b).

With these provisional suggestions the Committee sought to make the banking regulation and oversight more incisive, learning from what the crisis has highlighted and in addition to the recommendations already advanced concerning risk management, banking governance, transparency and communication requirements (BCBS, 2009c), as well as the dissolution of transnational banks of systemic relevance (BCBS, 2009d). The banks' inability to absorb losses from trading and credit and to take back, on their balance sheets, the liabilities of special purpose entities no longer able to service them, arises from: the excessive leverage for assets both on and off balance sheet, the erosion of the level and quality of capital, and the insufficient liquidity reserves. Obviously, the crisis was aggravated by the pro-cyclicality of the de-leveraging process and of the strong interconnectedness of institutions of systemic relevance.

To address these market failures, the Committee proposes fundamental reform in the framework of international regulation, at both the macro-prudential and micro-prudential level, obviously in line with the guidelines provided by the FSB and the G20. The main characteristics of the proposals put forward for review are the following: a) the quality, coherence and transparency of capital ratios must be increased, which means, for example, that the Tier 1 may only be made up of equity and capital reserves, with the exclusion of all hybrid forms allowed today, and with a public reconciliation of all its components with the balance sheet items; b) risk coverage through capital will have to be strengthened with regards, for example, to the exposure to counter-party risks arising from derivatives, repos and bond financing activities, in order to reduce the

transmission of shocks and, with regards to derivatives, to increase the trading on regulated markets with centralized counter-parties; c) the containment of the leverage will be pursued through the introduction of an ad hoc ratio as a supplemental measure with reference to risk management, to be agreed upon and calibrated at the international level; d) the creation of capital buffers during the favourable phases of the cycle, to be run down in difficult periods, and the recourse to provisioning for foreseen rather than ongoing losses, will make the system less pro-cyclical; e) the system will also be less vulnerable with the provision, additional to those previously suggested (BCBS, 2008), of a global standard on liquidity for internationally active banks, that is composed of two elements: e1) a “coverage ratio” of highly liquid assets, set at a level sufficient to finance cash outflows for a 30-day time frame in a scenario of high tension, as specified by the regulators on the basis of five parameters (namely, a significant downgrading of the credit rating, a partial withdrawal of deposits, a fall of un-guaranteed wholesale funding, a relevant increase in minimum collateral requirements for guaranteed intakes, an increase of collateral deposits to guarantee derivatives and other off-balance-sheet liabilities); e2) a ratio to measure the net stable funding that an institution may rely upon in the long term, as a function of its assets liquidity and of the potential, contingent calls to intervene arising from off-balance-sheet assets. In the latter case, the minimum financing ability must be expected to be stable over a one-year time frame. In order to ensure uniformity of behaviour, specific metrics have been developed for use by both regulators and banks (mismatch of maturities, concentration of funding sources, availability of liquid assets, and monitoring through market instruments).

Owing not only to the aforementioned proposals, but also to the changes brought about in July 2009, it is necessary to have a thorough evaluation, of the impact that global capital requirements and the new standard for liquidity will have. Although the BCBS has already begun to work on this subject, only by the end of 2010 will it be able to publish a consistent set of coherent proposals. As recommended by the G20, its coming into force will depend on improved financial conditions and economic recovery, that is possibly by the end of 2012, and will be

accompanied by appropriate exceptions and transitory provisions. Thus the new rules will only materialise in about three years, but the cost of Basel III, currently estimated by Crédit Suisse at around 139 billion Euros, is already scary....

6. Return of bank profits and bonuses, and the political reaction

The policy of low-cost money and the quantitative easing by central banks allowed banks, especially in the United States but also in Europe, to benefit from an abundant funding capacity at a very low cost. This in turn allowed for the return to trading activities on bonds, as well as on currencies and commodities, that brought prices back to levels much higher than those recorded at the trough of August-September 2008. The value of securities on the balance sheet and bank profits benefited from this trend, at a moment when banks were accused of not lending for productive activities, to medium and small businesses. This criticism is frequently unfair, because the credit demand for investment goes down owing to the grim prospective of economic recovery, while there is an increase in the demand for refinancing commercial credits that defaulted or to reintegrate circulating capital that was reduced for various reasons, which makes for an increase in bank risks that may not be offset with a higher interest rate.

The large profit margins of the big banks were followed by a new explosion of very high bonuses for their managers, a practice not only ethically reprehensible and socially unacceptable in a situation of low growth (if not recession), and in any case of high unemployment, but also economically perverse, since many believe it induces the indiscriminate undertaking of risks and the expansion of financial activity through development of new financial products evermore less useful for the real economy.

The issue of bonuses to managers was among the first to catch the attention of the politicians of the G20, who recommended regulators to put binds in place (see above). For example, in France the job of establishing limits on traders' incomes was entrusted to a notable figure;

in the United Kingdom bonuses are taxed at a rate of 50%; in Italy, procedures for bank compensation policies have already come under regulation, and Parliament has unsuccessfully tried to fix a ceiling on the remuneration of banking managers equal to that of its own Members. In the United States, in spite of the negative impact on public opinion, Wall Street announced that 150 billion dollars are to be paid as bonuses to their employees.

Initially, President Obama proposed taxing liabilities of big financial conglomerates other than deposits at a rate of 0.15%. Indeed, the act that instituted the TARP (Troubled Assets Relief Fund) established that funds allocated for bailouts should be paid back by the beneficiaries. With the proposed taxation, the hope is to take in 90 billion dollars in ten years, as opposed to the 117 billion of losses that the TARP is projected to accumulate. This proposal caused fierce protests in the banking community and even the threat to bring the question of its constitutionality to the Supreme Court. Bankers aside, the principle of recovering what was spent by the tax-payer seems sacrosanct. Nevertheless, economists like Diamond and Kashyap (2010) propose that every bank pays in relation to the amount it received, so that the burden would predominantly fall on the former investment banks. Thus, the tax base would be the difference between the value of banks' assets at the end of August 2008 and their current level of capital. It would be equivalent to an insurance premium paid *ex post*, instead of *ex ante*.

The fall in popularity, and especially the loss of the senate seat in Massachusetts, previously held for almost half a century by Ted Kennedy, pushed President Obama to react strongly to the disaffection of his electoral base and against the efforts by the banking lobby to continue to operate according to the old model, rejecting the attempts to redefine the rules through new policies. On January 21st, accompanied by Paul Volcker, former Chairman of the FRB, and by Bill Donaldson, former head of the SEC, he announced that in the last two years more than seven million Americans lost their jobs and that if bankers wanted a fight, he was ready to face them. After recalling the legislation that the US Congress is examining, which would seek to limit the assumption of risk by large financial corporations, he announced two measures he defined as

“common sense”: a) banks, by virtue of the guarantees they enjoy, would no longer be permitted to hold or sponsor hedge or private equity funds, nor invest in the latter, or engage in operations of proprietary trading, i.e. activities that are not connected to client services; b) the extension of the limit on the amount of deposits that each bank can collect (currently set at 10%) to all the wider forms of funding by large financial firms, in order to prevent the concentration of too much risk in any single bank.

The first measure constitutes a form of segmentation, the second tends to avoid an excessive concentration; they are both worth of careful consideration, even if alone they do not seem to me to be decisive. Protests were abundant on Wall Street and at Davos, as well as in the Financial Times and The Economist; more than anything they concerned the proposed ban on proprietary trading for banks, which would benefit hedge funds, intermediaries up to now not regulated. It is important to remember that Giovannini (2008) some time ago revealed that the growth in the number of portfolio managers evidenced important disequilibria between institutions and functions on financial markets. This means that regulation must seek to prevent and govern the conflicts of interest arising from the mixture or the contiguity of operations done on behalf of clients and those carried out in one's own interest. With “Recommendation 1” of its report, the Group of 30 (2009) had already invoked bans on operations affected by conflict of interest, as well as strong obligations in terms of liquidity and capital to engage in proprietary trading.

In Europe, the position taken by President Obama aroused apprehension and doubts. Chancellor Merkel asked for more international summits in April and May, to be held in Berlin, to address issues and concerns. President Sarkozy, at the Davos Forum, requested that the responsibilities on the subject remain within the G20. Their concern is that once again the Americans, possibly with the support of the British, will decide the measures to be taken and that the other Europeans will be forced to follow, as Basel I *docet*. In the praise of President Obama, governor Mervyn King declared himself to be in favour of breaking up

large and complex banks and setting up fire-doors within financial institutions...⁷

At the time of writing, in the United States both the Senate and the House of Representatives have approved its own financial reform bill. Only the Senate version includes a watered down Volcker rule. The *New York Times* (May 22, 2010) is asking Congress that in reconciling the two texts the Volcker rule be restored in full, regulators be given legal authority on derivatives not cleared through exchanges, stockholders and unsecured creditors, not taxpayers, bear the losses of financial firms no longer too-big-to-fail, consumers and investors be protected by an independent agency with full rule-making and enforcement capabilities.

7. A review of the basic themes, rather than a conclusion

It is difficult, if not impossible, to draw conclusions at this very moment as the economic crisis still heavily affects employment, while the Anglo-Saxon bankers, boldly returning to the high profits stemming from trading activities, refuse the need for reform; the European banks worry that future capital ratios will make it impossible to remunerate the higher levels of equity; political authorities search for a new consensus; and the technicians charged with drawing up the new rules are torn between the force of vested interests and the necessity of not obstructing the formation of a consensus. Thus, it seems more useful to summarize the main themes dealt with or simply mentioned.

A) It must be said that, until Basel II, the regulatory frameworks were internationally defined by a committee of banking supervisors centered in Basel (BCBS) and to some extent also by similar bodies for insurance corporations (IAIS) and for financial markets (IOSCO). Only eventually did the official approval on the part of political authorities intervene. Today, the FSB responds in the first place to the ministers of finance accompanied by the governors of the central banks, and then to the heads of states and governments. Indeed, the FSB statute, that sets its

⁷ The breaking up of large banks did excite the *verve* of humorists like Alford (2010).

objectives and mandate, its participants and their obligations, as well as its organisational structure was released at the Pittsburgh Summit.

B) Globalisation, in a geographic sense but especially in an inter-sectoral meaning produced financial conglomerates and groups too big, too complex, and too affected by conflicts of interest. Their re-dimensioning is necessary, but I doubt that it can be obtained solely through disincentives, for example, with higher capital ratios or more intense oversight. On the one hand, size grants power to those who are in command, on the other hand it makes him or her underestimate the difficulties of managing firms that are evermore large and complex. My partial distrust, then, in the dissuasive force of the disincentives that are being set up justifies the recourse to some absolute threshold or rigid demarcation lines that may be set with respect to various types of intermediaries, assets and clients. This should be done not only to permit supervisors to exercise effective control, but above all to protect customers, shareholders, and the insurer of last resort, that is the State. It is the managers' willpower, along with their desire of exceptional earnings, the most dangerous force towards excessive size and complexity. In my opinion, they cannot be fought with baroque prescriptions on bonuses and variable compensation, however ethically justifiable these may be. Nor does the introduction of a formal ceiling on leverage, already present in the United States and other countries, seem sufficient to this end; it may rather result in an incentive to choose higher risks if there is room within the weighted ratio to increase the ROE.

C) The existence of a systemic risk and the necessity of macro-prudential oversight were finally recognized, but the detection, measurement, and management of the former are yet to be understood, while the latter seems to me to be still in the phase of attributing responsibility to plethoric bodies: certainly in the EU, and possibly shortly in the United States as well, after criticisms of the FRB for its role in the crisis induced Ben Bernanke, reconfirmed Chairman of the American central bank, to declare himself in favour of a council.

D) The pro-cyclicality is an old characteristic of banking systems that can be summed up as "banks close the umbrella in raining days and open it when the sun shines." In truth, not only the new accounting

standards, but also the regulation centered on capital ratios and the tax systems greatly contribute to it. However, risk measurement and the practice of its assessment tend to be highly pro-cyclical; so are the volatility in the short term, correlation between assets and defaults, the probability of default, and the loss in case of default. Moreover, the very incentives within banking activities work in a pro-cyclical way. The credit relationship between lender and borrower is subjected to tensions in case economic conditions worsen, so that the former tends to reduce its exposure and the latter to broaden it; moreover, if there is a connection between the guarantees provided by clients and the credit granted by banks, the pro-cyclicality assumes mechanical aspects through the conservation of margins (FSF, 2009).

E) For many, many decades banks were protected by the lender of last resort and by the deposit insurer, in order to secure their stability and through them that of the overall economy (Freixas and Rochet, 1997). Over the last twenty years transparency in the banking sector has been sought with the objective of knowing possibly at any moment what they are worth or at least the price of their assets, forgetting the value of their function. In this way, the instability of financial markets was transferred to banks. A rapid coming to senses on the issue is necessary, as the convergence of financing and banking activities, instead of generating a greater overall solidity, instilled the volatility of the former to the latter. However, this does not imply a rejection of innovation, in particular of that which consolidated itself in recent years. For example, innovations such as securitisation will have to remain, but only in order to provide flexibility to the model of origination-to-hold; equally, derivatives will have to abandon the opacity of over-the-counter trade to become to the extent possible the object of transactions in regulated markets with centralized counterparts.

F) The greater insistence on the increase of capital ratios, rather than liquidity ratios, induces bypassing constraints, as it has already happened in the past with securitisation and derivatives. Since the appearance of banks on the economic scene, the risk of bankruptcy has been connected in the short term to a shortage of liquidity, like the queues in front of the doors of Northern Rock and its nationalisation reminded us, not to the

scarcity of capital. This is supposed to isolate banks from unexpected losses on credits, not from those foreseen, that must be handled by adequate provisioning. Today an anti-cyclical accumulation of provisioning seems likely to be accepted. Liquidity, so far disregarded to give room to capital, in the illusion that the market is always able to provide it, will be once again a central point of attention for regulators and supervisors.

G) Lastly, whether raising capital externally or accumulating reserve funds from gross profits, which always arise from intermediation margin, inclusive of the surplus on interest account, it will be necessary to obtain the cash flows to cover the costs, compensate shareholders, and protect banks against bad borrowers. To this end, how much will the cost of credit need to be raised? With the aim to reduce its burden are foundations being set for a return to subsidised credit, in terms of interest rate or guarantees? I believe that some segmentation of categories of intermediaries, types of operations, and kinds of customers,⁸ is an option worthy of careful consideration, in order to restore the fundamental role of banks as credit providers and the main handlers of the system of payments. If there is not an adequate desire to proceed along this way, the

⁸ In this article I did not try draw specific lines along which the invoked segmentation could be made, since I feel to be not knowledgeable enough for such a task, particularly if the discipline has to cover all countries. In fact, with reference to the proposals put forward by President Obama and supported by Paul Volcker (2010) I have restrained myself just to the affirmation that some segmentation is necessary to make the banks easier to run and supervise, owing to the weak disincentives they have to grow in size and structural complexity. Paolo Mottura (2010) in a long article recently published is rather critical of prudential regulation and supports the introduction of neo-structural rules, on condition that they are designed and implemented in such a way as to enhance market efficiency. Neo-structural regulation should aim principally to secure a higher level of effectiveness to prudential regulation, set boundaries between types of intermediation in order to limit contagion, reallocate transactions (for instance, derivatives) in favour of the market. My simple call for segmentation is fully in line with Mottura's thinking. Another distinguished scholar, Tonveronachi (2010), is in favour of a radical change in the philosophy of bank regulation. No longer should uncontrolled and uncontrollable risks be regulated, measured, and covered, but they should be contained *ex ante*, for instance by making recourse to disconnections not necessarily limited to the financial sector. How to organise such disconnections is the subject of a forthcoming paper by Montanaro and Tonveronachi.

risk of segmentation on a geographical basis will become greater, with a fall into financial protectionism.

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