The role of financial regulation and supervision in the global crisis

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Abstract

The recent global financial crisis has exposed the weaknesses and limits of the present financial regulatory and supervisory framework. While the financial markets have become global, regulation and supervision remained at national and regional level and could not manage the risks posed by more and more complex financial products and innovations. It was unable to fulfill its principal task of preventing crisis and mitigating its effects; on the contrary, it has contributed to the deepening of the crisis. The major objective of the revitalized international regulating efforts is to avoid such a severe distress like today's, without stifling financial innovation, by modifying and tightening the regulatory system and supervision.

Key words

financial regulation and supervision, financial innovations, securitisation, rating agencies, capital requirements, risk management

1. The way to the global financial crisis

The global financial and economic crisis of 2007 and 2008 has been the worst one since the World War II. The crisis of confidence undermining the fundaments of cooperation among financial intermediaries led to deep recession in the vast majority of the world economy, except for some emerging countries. Production suffered a serious setback and employment issues grew in prominence[1]. The entire international financial system got into a highly miserable state. The degree of synchronicity between the global downturn and the recession of national economies has been unprecedented over the past 50 years[2].

The crisis closed a growth period of exceptionally favourable conditions in the global economy. Behind this growth, however, there had been increasing global macroeconomic imbalances. The liquidity glut provided by the savings of emerging countries was used to finance overspending in developed countries where capital inflow kept interest rates low. Dynamic economic growth combined with the permanent rise of asset prices resulted in a fast growing demand for corporate and retail loans. To satisfy this demand and to meet their investors' yield requirements, financial institutions launched increasingly complex financial products and innovations paying little or no attention to the identification and management of risks.

In the area of financial innovation, securitisation has grown to a dominant form of fund raising. Under the securitisation process, banks pooled their cash-flow producing assets into single bonds and sold them to a target company often established by them specifically for this purpose[3]. After this, the target company unbundled the assets and transformed the cash flows into tranches based on risk exposure and expiry. These tranche securities were then sold to institutional investors, investment banks and hedge funds. This financial instrument aimed at converting hard-to-sell individual loans and bonds into marketable securities. Although the innovative method of securitisation was one of the key causes of the crisis, its destructiveness was due more to the lack of regulation rather than the nature of the process itself.

2. Risk and regulatory aspects of securitisation

Securitisation removed – albeit temporarily – the loans and the underlying risks from the balance sheet of the initial financial institution. After multiple repackaging and resale, these risks were spread in international markets. In reality, however, neither investors purchasing asset-backed or

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[1] Quinlan, J. [2008]: Hard lessons on confidence and global connectedness. Financial Times, December 30., p. 21

[2] Kose, M. A. – Loungani, P.– Terrones, M. E. [2009]: Out of the Ballpark. Finance and Development, June, Volume 46., Number 2.

[3] SPV: Special Purpose Vehicle

debt securities and derivatives, nor even intermediaries performing repackaging and resale were aware of the risks inherent in these complex products.

2.1. The responsibility of rating agencies

The risk assessment and rating of securitised assets was performed by international rating agencies that were methodologically unprepared for this task. In evaluating such financial innovations, rating agencies focused on credit risk and failed to pay adequate attention to liquidity and market risks.

The unfolding and the deepening of the crisis made it clear that excellent agency ratings failed to reflect actual risks. Nevertheless, investors increasingly relied on the evaluations provided by rating agencies considered to be independent third-party experts. In response to market events, rating agencies were forced to perform a mass revision of their ratings. Standard and Poor's, for example, downgraded 8,000 such assets as of 30 January 2008,[4] which largely eroded confidence in the banking sector and increased money market tensions further. With the stringent reassessment of assets feeding investors' insecurity and fears, credit rating agencies aggravated the crisis.

Market players lost confidence in rating agencies whose reputation was marred. They no longer provided guidance for investment decisions. The *Economist*[5] cited the risk management officer of a major global bank who said that his bank's management had much more confidence in the judgement of third-party rating agencies than in the more stringent evaluations of their own in-house risk management department ("*rating agencies know it better"*). The reason was that reliance on rating agencies required less capital to lock up and less reserves to be created, which enabled them to realize higher yields.

2.2. The "too big to fail" phenomenon

Banking activities are regulated to specify the limits of risk banks are allowed to run to promote their profitability and to identify the actions they need to take to manage their wide range of actual and potential risks and safeguard the security of their operation.

Globalization affected financial markets and their players in the first place. Deregulation in the 1990s created large and complex financial institutions and universal banking giants. Besides

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[4] Banking Supervision and Regulation. Volume I. Report, House of Lords, Select Committee on Economic Affairs, 2nd Report of Session 2008-09, June 2. Published by the Authority of the House of Lords, London.

[5] Economist [2008]: Confessions of a risk manager. The Economist, August 9–15., pp. 68–69.

traditional commercial banking products and services, these banks offered also higher-risk investment banking, asset management and insurance facilities[6]. They wanted to grow big driven by the perception that in a potential crisis situation governments will save banks too big or too interconnected to fail. This perception led to a moral hazard, namely, that financial institutions were prone to take excessive risks not commensurate with their capital strength and adopt lenient risk management practices. Many banks, however, grew too big to manage by their management[7], too big to monitor for prudence by financial regulators and too big to bail out by the government.

2.3. Key components of Basel I and Basel II regulations

Banks need an appropriate amount of capital to operate safely. BCBS[8] published its recommendations on banks' capital requirements in 1988. These recommendations were then adopted by the different countries and integrated into their own national regulatory framework. To facilitate prudent banking operations, the Basel Capital Accord specified a mandatory minimum capital adequacy ratio of 8%. The capital adequacy ratio is the sum of Tier 1 and Tier 2 capital divided by risk-weighted assets. Basel regulations focused mostly on credit risk management but they also considered banks' off-balance-sheet receivables.

Globalization changed international financial markets out of recognition. These changes have created risks that could not be appropriately managed by Basel I regulations. To resolve this issue, the initial capital requirements had to be reworked. The revised regulations were published by the Basel Committee on Banking Supervision in 2004. The regulations known as Basel II have been integrated into the acquis communautaire of the European Union[9].

Basel II regulations establish a closer link between capital requirements and various banking risks and focus not only on credit risk, but also on market and operational risks. The Basel Committee on Banking Supervision established three pillars to regulate minimum capital requirements, the supervisory review process and market discipline.

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[6] Saunders, A. – Smith, R. C. – Walter, I. [2008]: Enhanced Regulation of Large, Complex Financial Institutions. In: Restoring Financial Stability: How to Repair a Failed System. An Independent View from New York University Stern School of Business. Edited by Viral Acharya and Matthew Richardson, New York University Stern School of Business.

[7] Tett, G. [2009]: When it comes to global banks, size certainly does matter. Financial Times, June 19., p. 28.

[8] BCBS: Basel Committee on Banking Supervision

[9] Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions http://eur-lex.europa.eu/LexUriServ/site/hu/oj/2006/l_177/l_17720060630hu00010200.pdf

2.4. Basel II regulations – procyclical effects

Capital requirements rules failed to prevent the worst financial crisis of the past 60 years threatening the global financial system as a whole and the internal financial stability of many countries. This indicates that banking regulation and supervision were not efficient tools to ward off the crisis and could only slightly alleviate its consequences. The global financial crisis coincided with the implementation of Basel II rules. Those days, the new capital requirements were not yet in place in all parts of the world, and even if they were, implementation was only partially completed and only the simplest methods were in use[10].

Still, it is a valid question why capital requirements failed to reduce the negative effects of the crisis. In principle, Basel II sets more stringent capital requirements for banks with a more risk-sensitive portfolio and operations and, at the same time, it encourages institutions to develop a risk management and monitoring system.

Experts claim that capital requirement regulations sometimes inevitably reinforce the impact of economic fluctuations on banks' capital adequacy. Their dilemma is whether Basel II rules are not too lax in "good times" that is, not too lenient in managing crisis risk, and whether they are not too stringent in "bad times" when their application may further aggravate the crisis[11].

During an economic upswing, banks tend to underestimate expected losses, which mean they may not have sufficient provisions available to cover them. They also tend to underestimate unexpected losses together with the capital requirements for assets. As a result, banks may have too many risky assets in their balance sheets generating a high leverage and increasing the amount of potential losses in the event of a slump. During a recession, banks expect the quality of their loan portfolio to deteriorate due to the poor financial position of their debtors, which results in higher capital requirements. In a harsh market environment, however, they may find it more difficult to access to additional capital resources. To meet capital adequacy requirements, banks are forced to restrain their business activity and lending[12] when economic players need them the most. "Procyclicality is also embedded in credit risk management systems and guidelines, because the inputs (default probabilities, loss severities, default correlations, and credit ratings) tend to vary positively with economic cycles"[13].

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[10] Caruana, J. – Narain, A. [2008]: Banking on More Capital – The subprime crisis has made Basel II implementation more important – and challenging. Finance and Development, June, Volume 45., Number 2. http://www.imf.org/external/pubs/ft/fandd/2008/06/caruana.htm

[11] Saurina, J.– Persaud, A. D. [2008]: Will Basel II Help Prevent Crises or Worsen Them? Finance and Development, June, Volume 45., Number 2.

[12] Jackson, T. [2009]: Maybe the banks are in worse trouble that we realise. Financial Times, September 21., p. 18.

[13] Andritzky, J. – Kiff, J. – Kodres, L – Madrid, P. – Maechler, A. – Narain, A. – Sacasa, N. – Scarlata, J. [2009]: Policies … p. 4.

3. Baking regulation – development directions

3.1. Basic leverage ratio

Experts have mixed opinions about the past results and future transformation of Basel II rules. Several experts, including *Philipp Hildebrand*, Governor of the Swiss National Bank since 1 January 2010, propose to replace the risk weighting of assets with the use of a basic leverage ratio[14] to help monitor bank capital levels.

To remove anomalies due to accounting differences, accounting principles need to be standardised, which is an independent development direction for banking regulation. The magnitude of the problem is demonstrated by the example of Deutsche Bank that had EUR 448 billion in trading assets on the balance sheet using US GAAP but EUR 1,010 billion in assets under IFRS as of 1 January 2006[15].

3.2. Liquidity risk

The global financial crisis emerging in mid-2007 highlighted the importance of market liquidity and that of liquidity risk management by banks[16]. When ample liquidity disappeared from the interbank market, major problems were encountered in the financing of various structured products.

In recent years, banks have tended to use more risky capital market products rather than traditional retail deposits to raise funds. Reliance on the market of securitized products both in terms of fund raising and profit enhancement increased their exposure to interbanking financing and access to various money market assets. Financial market innovations enabled banks to obtain continuous liquidity by securitizing their illiquid assets (loans), but using this technique required stable financial markets.

In September 2008, the Basel Committee on Banking Supervision published its Principles for Sound Liquidity Risk Management and Supervision[17] that required banks to maintain substantial liquidity reserves to survive protracted periods of liquidity stress and illiquidity.

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[14] Tett, G. [2009]: When it comes to global banks, size certainly does matter. Financial Times, June 19., p. 28.

[15] de Longevialle, B. [2008]: Credit turmoil shows how Basel II must be improved. Financial Times, May 8., p. 30.

[16] Liquidity Risk: Management and Supervisory Challenges. Basel Committee on Banking Supervision, 2008 February, Bank for International Settlements. http://www.bis.org/Publ/Bcbs136.Pdf?Noframes=1

[17] Principles for Sound Liquidity Risk Management and Supervision. Basel Committee on Banking Supervision, September, Bank for International Settlements. http://www.bis.org/publ/bcbs144.pdf?noframes=1

3.3. Regulatory efforts in the European Union

In a highly fragmented regulatory landscape, the Commission is uniquely positioned to take a European view on a bank's viability and competitive position in all markets where it operates, claims *Neelie Kroes*[18], European Commissioner for Competition. With the crisis unfolding, there was an increasing demand for stronger unified international regulations, but this demand seems to have weakened recently with national efforts getting more in focus. *Josef Ackermann,* CEO of Deutsche Bank, says that there is a danger that changes in the regulatory environment will lead to a refragmentation of global markets, while an HSBC executive maintains the view that *"the regulators are putting an anchor on globalisation"*[19].

The recommendations made by the European Commission on how to develop further Basel II regulations[20] include the introduction of higher capital requirements on propriety trade and on complex products such as CDS and CDO[21]. With these recommendations, the EC wants to put an end to the controversial regulatory practice, which specifies lower capital requirements for the same products if they are posted in a bank's trading books than if they are posted in the banking books. The EC suggests that a weight of 1.250% be applied[22] when calculating capital requirements for highly complex resecuritized products to enable banks to fully cover their potential losses.

Some experts believe that a centralised clearing system should be established to manage threats posed by credit derivates on the stability of the global financial system[23].

3.4. Incentive systems

The reasons of the current global financial crisis include incentive and remuneration policies and structures that encouraged the decision-makers of banks, and especially those of investment banks, to take excessive risks to obtain performance bonuses. In line with the principles

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[18] Kroes, N. [2009]: European banks cannot set aside the rules. Financial Times, April 28., p. 11.

[19] Sender, H. [2009]: Regulators are having to readjust to age of globalisation. Financial Times, August 27., p. 24.

[20] Commission Directive 2009/83/EC of 27 July 2009 amending certain Annexes to Directive 2006/48/EC of the European Parliament and of the Council as regards technical provisions concerning risk management

[21] CDS: Credit Default Swaps; CDO: Collateralised Debt Obligations

[22] Capital ideas for Europe's banks – Brussels' latest proposals for regulation are welcome. Financial Times, 2009 July 15.

[23] Acharya, V. V. – Engle, R – Figlewski, S. – Lynch, A. – Subrahmanyam, M. [2008]: Centralized Clearing for Credit Derivatives. In: Restoring Financial Stability: How to Repair a Failed System. An Independent View from New York University Stern School of Business. Edited by Viral Acharya and Matthew Richardson. New York University Stern School of Business.

developed by the Committee of European Banking Supervisors[24], financial institutions should adopt an overall remuneration policy that is in line with their business strategy and risk appetite, objectives, values and long-term interests, and they should not encourage excessive risk-taking.

3.5. New institutions of European financial supervision

The European Commission has proposed the establishment of two major supervisory bodies [25] to promote financial stability in Europe. These two closely cooperating bodies will have different responsibilities. One of them will manage macro-level stability risks threatening the financial system as a whole, whereas the other one will address micro-level threats. The European Systemic Risk Council (ESRC) will monitor and assess potential threats to financial stability that arise from macro-economic developments and from developments within the financial system as a whole and issue recommendations to deal with these risks.

The other pillar of the new European regulatory framework responsible for micro-prudential supervision will be the European System of Financial Supervisors (ESFS). This body will safeguard the stability of member states' financial institutions and protect the consumers of financial services.

Some conclusions

The shortcomings of the international financial regulatory framework were a key factor contributing both to the eruption of the crisis and its major consequences. The regulatory framework and supervisory systems failed to appropriately manage the new types of risks presented by global banking operations and financial innovation (securitisation).

The crisis provided evidence that the risks of specific financial markets may threaten the stability of the global financial system as a whole. It is a major challenge for financial regulation and supervision to enforce prudent management at banks without undermining financial innovation efforts undertaken to increase profitability and enhance customer service.

The scoring methods used by credit rating agencies proved inappropriate to assess fully the actual risks inherent in complex structured products. Rating agencies lost the confidence of

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[24] High-level principles for Remuneration Policies. Committee of European Banking Supervisors, 2009 April 20. http://www.c-ebs.org/getdoc/34beb2e0-bdff-4b8e-979a-5115a482a7ba/High-level-principles-for-remuneration-policies.aspx

[25] Communication from the Commission – European Financial Supervision. European Commission, Brussels, 27.5.2009 COM (2009) 252., final. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0252:FIN:HU:PDF

market actors. To regain this confidence, rating agencies need to revise their risk assessment methods and give up the "investor-pays model".

The causes of the crisis include widespread securitization that was highly popular with banks in their quest for profit – ignoring or severely underestimating risk. The reliable assessment of risks inherent in securitised products is a highly complex regulatory and supervisory task.

The regulatory recommendations made by the Basel Committee on Banking Supervision are a major step forward in (credit, market, operational and liquidity) risk management. A major lesson learnt from the crisis is that further measures need to be developed to mitigate the impact of the procyclical components of Basel II regulations.

The crisis made it clear that regulation and supervision failed to follow the globalisation of financial markets over recent decades. The crisis increased demand for a uniform international regulatory framework, but regulatory efforts at national level have also become increasingly apparent in crisis management.

The regulatory framework needs to be further developed to prevent similar crises in the future and at the same time it should maintain the financial system's capability and willingness to innovate. Banking decision-makers can be kept motivated by long-term performance-based incentive policies observing the long-term interests of financial institutions and preventing excessive risk-taking.

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