

Global Financial Crisis: Background, Prospects, and Its Impacts on Korea

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The global financial system is going through turmoil triggered by the subprime mortgage crisis in the United States. Severe adjustments befell all sorts of financial markets, and financial institutions are very vulnerable to potential shocks from deteriorating economic conditions. This paper briefly recaps the ongoing global financial crisis and its impact it has had on Korean financial markets and economy. It also comments on some issues of crisis management strategies in the short-run, including bailouts and countercyclical macroeconomic policies. Lastly, from a long-term perspective, it proposes an appropriate policy direction for preventing and managing future crises.

Keywords: Financial crisis, Crisis management, Financial regulation

JEL Classification: G01, G18

I. Introduction

A financial crisis is a subject of much academic research and media attention, dominating headlines and commentaries. For example, keying in 'financial crisis' into ECONLIT database, you will get more than four thousand results.

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We are now facing a global financial turmoil that first emerged as a liquidity crisis in August 2007 and peaked in the collapse of major global investment banks in September 2008. The global financial system is going through severe adjustments and very vulnerable to potential shocks from a sharp deterioration of economic conditions triggered by the crisis. It is a historically unprecedented event in many ways and when the storm will end is yet unknown. So it may be too early to draw definitive lessons from current global crisis in financial markets.

But there are also many common features that all financial crises share, along with their more idiosyncratic elements such as their cause, magnitude, impacts, and duration. As they are very complex, we must appropriately recognize relevant factors such as, the underlying cause, the pervasiveness of the problems, or whether the problem poses systemic risks. Doing this allows us to accurately assess the nature of the crisis, formulate corrective measures to handle it, and lay the foundations for the more robust future financial system.

The rest of this paper is divided into three parts. First, we will briefly recap on the ongoing global financial crisis and its impacts on Korea. Second, we will comment on issues of some crisis management strategies. Lastly we have proposed an appropriate policy direction for preventing and managing future crises.

II. Understanding the Current Crisis

The root causes of the current global crisis are well summarized in the recent Declaration of the G20 Summit on Financial Markets and the World Economy.¹ Although the crisis started off as an isolated event in the U.S. subprime mortgage market which represents only about 14 percent of U.S. mortgage market, it quickly escalated and

¹“During a period of strong global growth, growing capital flows, and prolonged stability earlier this decade, market participants sought higher yields without an adequate appreciation of the risks and failed to exercise proper due diligence. At the same time, weak underwriting standards, unsound risk management practices, increasingly complex and opaque financial products, and consequent excessive leverage combined to create vulnerabilities in the system. Policy-makers, regulators and supervisors, in some advanced countries, did not adequately appreciate and address the risks building up in financial markets, keep pace with financial innovation, or take into account the systemic ramifications of domestic regulatory actions.”

engulfed all kinds of financial markets and institutions. This process is described under various names including 'liquidity spiral' (IMF 2008), 'risk amplifier' (Bank of England 2008), and 'financial accelerator' (Bernanke 2007), which made the crisis 'wider, deeper and more damaging than originally thought.'² And it has spread fast to all over the world through, for example, 'an international financial multiplier' (Krugman 2008b).

Here we can identify a number of factors that have caused the current global financial crisis. First very low short-term and long-term real interest rates, intensified competition among financial institutions, and greed to chase higher returns encouraged a pervasive search for yield. Traditional prudent management practices were neglected as financial institutions focused on enhancing short-term performance. Misguided assumptions about the future path of asset prices strengthened investors' risk appetite. And favorable macroeconomic environment with cheap money and sustained economic growth allowed easy refinancing.

Second, financial innovations such as securitization and a shift of business model from the 'originate to hold' towards an 'originate to distribute' made banks and other financial institutions blind to the underlying risks behind higher return, and weakened their incentives to conduct due diligence on borrowers. In the 'originate to hold' model, banks hold the credit originations on their balance sheet until maturity. But in 'originate to distribute,' banks remove the loans from their balance sheet, and securitize and sell them to investors in the market. Along the way, rating agencies failed to recognize and assess correctly the risk exposures hidden in the complexity of the transactions and instruments.

Also the development of derivative products and unwarranted optimism about the continuous availability of borrowed liquidity allowed financial institutions excessive leverage, widespread maturity mismatches, and high risk concentrations, widening the gap between finance and real economy. The whole financial system created more credit than it can support. This excessive leverage and credit growth contributed to the vulnerability of the financial system.

Meanwhile financial sector supervision and regulations lagged behind rapid innovations in the financial market. Regulators were overly confi-

² Federal Reserve Bank Chairman Bernanke testified in July 2007 that credit losses associated with subprime mortgages would probably total \$50 to \$100 billion.

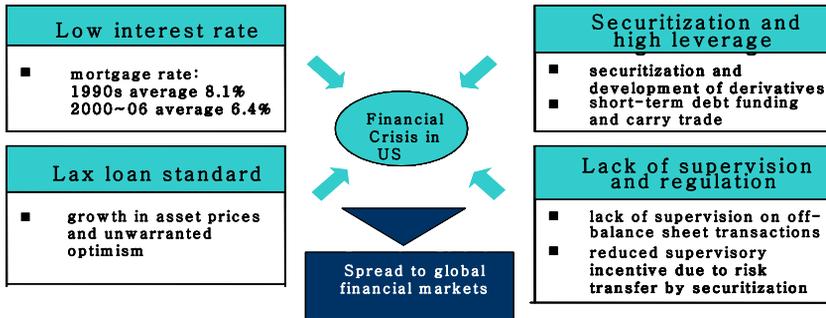


FIGURE 1

CAUSES OF THE CURRENT FINANCIAL CRISIS

dent in the market's self-correcting mechanism, leaving rooms for excessive risk-taking and asset price inflation.

III. Impacts on Korea

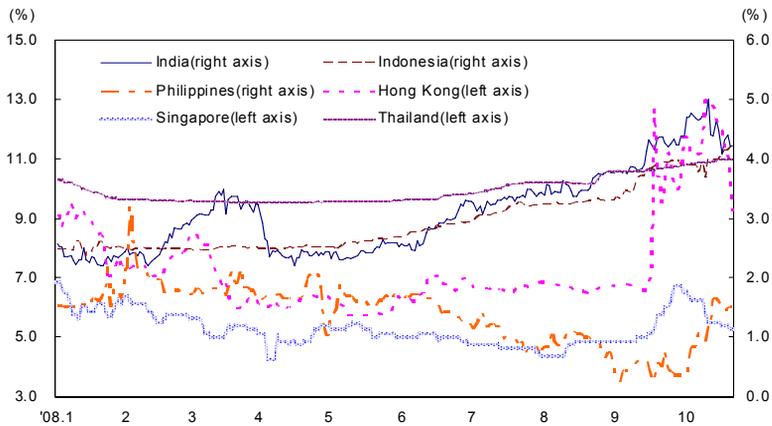
A. Financial Markets

The direct impacts, driven by losses from investments in troubled mortgage-related securities and failed institutions, are not large enough to seriously damage the Korean financial industry and economy although they are not trivial as shown in Table 1. The size of investment of Korean financial institutions in subprime mortgage related products with Lehman and Merrill Lynch is estimated to 720 million dollars. Losses from foreign investment are very unlikely to let major banks and non-bank financial institutions in Korea to go bankrupt or subject to solvency risk. The soundness of the banking sector remains strong as the exposure of Korean financial institutions is relatively small, 450 billion Korean won (KRW). However, the indirect impacts may turn to be detrimental unless they are properly managed. The critical challenge facing the Korean policymakers is to take immediate steps to successfully reduce the indirect impacts arising from the global economic recession and credit squeeze.

As the dollar liquidity dries up due to global financial turmoil, it is very difficult to borrow dollars. Also credit default swap (CDS) premiums for Asian emerging countries have increased significantly since the Lehman Brothers filed bankruptcy protection. Figure 2 and Figure 3

TABLE 1
CDO POSSESSION OF KOREAN BANKS RELATED TO SUB-PRIME

Banks	Subprime CDO (unit: 10K\$)	Loss	Total CDO possession
Woori	49,200	Write off 193B₩ Plan to write off +240B₩	+0.6B\$ CDO
Nong-hyup	11,000	Write Off 8.9B₩	-
KEB	373	Sell 3.17M\$ CDO Plan to write off 0.56M\$	Sell 17M\$ Out of 42M\$
Shinhan	530	Plan to write off 1.5M\$	-
KDB	300	Repay 0.5M\$ Plan to write off 0.45M\$	-

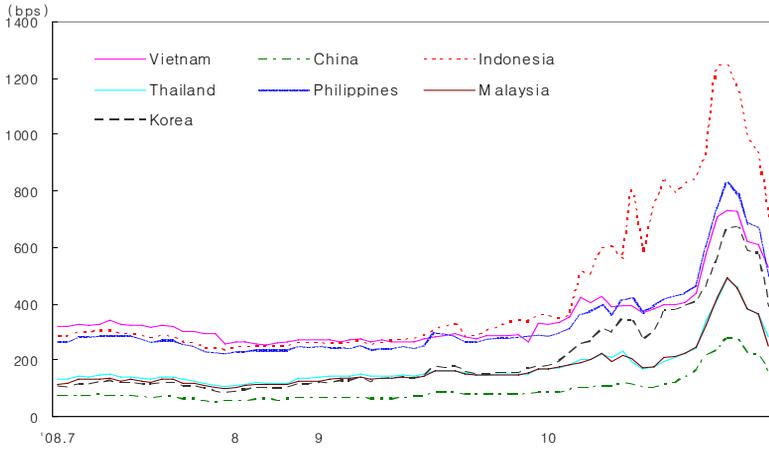


Source: CEIC.

FIGURE 2
INTER BANK OFFER RATE (1 MONTH)

show the trend that the interbank offered rate and CDS premium have been increasing in East Asia countries.

As more and more investors refuse to invest in risky assets with higher counterparty risk, dollar liquidity shortage exacerbated in Korea until the Bank of Korea reached currency swap agreement with Federal Reserve Bank on October 30. Figure 4 shows that the dollar market



Source: Bloomberg.

FIGURE 3
CDS PREMIUMS



Source: FnGuide.

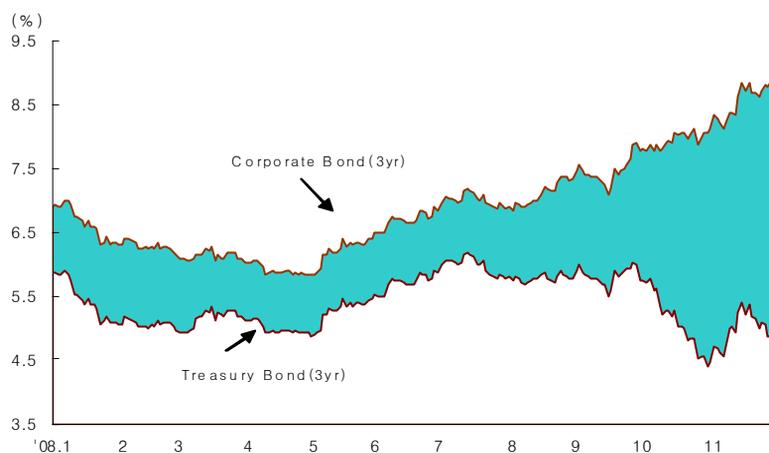
FIGURE 4
CRS

TABLE 2
FOREIGNER'S NET PURCHASE OF STOCK

(Unit: US\$ 100 Mil., %)

	Taiwan	India	Thailand	Indonesia	Philippines	Korea
Market Capitalization (The end of Nov.)	3,689.6	5,538.3	861.1	783.6	481.0	4,032.4
Foreigners' Holding Ratio (The end of Nov.)	30.3 (The end of Nov.)	9.5 (The end of Nov.)	31.0 (The end of Aug.)	21.2 (The end of 2005)	10.9 (The end of 2005)	27.9 (The end of Nov.)
2007 Net Purchase	25.9	172.4	15.7	35.8	12.5	-294.2
2008 Net Purchase (Jan.~Nov.)	-168.6	-135.9	-46.0	17.3	-131.1	-373.5

Source: Bloomberg.



Source: FnGuide.

FIGURE 5
CORPORATE BOND AND TREASURY BOND YIELD

has been very tight since Lehman Brothers collapsed in September. The interest rates on currency rate swap (CRS) plunged to zero percent, implying that domestic dollar liquidity conditions were very poor.

Due to the dollar liquidity pressure, most of major currencies in Asian countries have been weak against dollars. Compared with other East Asian currencies, KRW has depreciated the most. As of the end of November, 2008, KRW depreciated 56.9% from the end of 2007, posting a far larger drop than the other currencies such as Indonesia (30.4%) and India (27.1%).

Besides negative current account balance and expectation of further depreciation of KRW, foreign investors' selling spree of Korean stocks also contributed to the weakening of Korean currency and its high volatility. As of the end of November, foreign investors sold 37.4 billion dollars of Korean stocks in 2008 after selling 29.4 billion dollars in 2007. The shareholding ratio of foreign investors in Korean stock market has been reduced to 27.9% as of the end of November 2008 from 35.2% in 2006.

As the credit risk gets substantial, the loan supply has been reduced sharply and in the bond market the credit spreads between corporate bonds and government bonds have widened, reflecting strong risk aversion of investors and reference for safer assets.

B. Real Economy

The Korean economy can be affected by the global financial crisis *via* various complex channels. The credit crunch in funds market may increase the default risk of household and real estate finance. The weak Korean currency leads to higher prices of imported goods and aggravates profitability of Korean companies. The plunge in stock market can hurt consumption expenditure via negative wealth effect and the resulting low demand will worsen business sentiment. Also decrease in exports due to global recession can slow down the economic growth. As of November, 2008, the IMF forecasted minus economic growth rates for the U.S., Euro areas, and Japan, respectively, -0.7%, -0.5%, and -0.2%. In addition, it expected that China would have 8.5% growth rate in 2009, which is a big drop from 11.9% in 2007 and 9.7% in 2008. Since the economic growth of Korea is highly dependent upon exports, the global recession may trap the Korean economy into a vicious circle where reduced exports setback the domestic economy and make households and SMEs more vulnerable to default risk, which in turn deteriorates the asset qualities of financial institutions. The extent to which the current crisis affects the Korean real economy depends on how serious the global recession and how long they will last.

IV. Issues in Crisis Management Strategies

A. Short-Run Government Intervention

When financial crises are systemic, government intervention is unavoidable. An eventual collapse of the financial system is costlier than the corresponding fiscal and political costs of government intervention.

In this global financial turmoil, the immediate challenges will be how to stabilize the financial markets, restore public confidence, and coordinate macroeconomic policies to avoid spillovers of financial crisis into real economy. All of these must be accomplished while minimizing the taxpayers' burden and moral hazards.

The Declaration of G20 Summit explains that countries affected by the crisis have taken strong and significant actions to provide liquidity by central banks, strengthen the balance sheets of financial institutions by capital injection, protect savings and deposits, address regulatory deficiencies, unfreeze credit markets, stimulate the economies, and reinforce international cooperation. More recently some regulatory forbearances have begun in the areas of accounting and prudential regulations to provide liquidity and support toward weak institutions.

The global economic and financial environments are changing rapidly, along with a significant paradigm shift of economic policies and financial regulations as well.

As for Korea, it is not in the best condition, but domestic problems are within our control and could be contained if the government does the right things at the right time. Korea's primary concern in the short-run is to ease domestic liquidity squeeze and reduce the credit crunch, gearing the economy towards a 'soft-landing,' while avoiding excessive moral hazards. Credit crunches are likely to cause chain reactions of bankruptcies, rapid economic slowdown and further financial hardship due to high indebtedness of households and SME's.

Well-designed intervention, with appropriate timing, scope, and speed, should be implemented in the early stages of crises to contain and resolve it. How the current crisis is resolved could sow the seeds of future crises.

Lessons from previous crises in history suggest that promptness, correct incentive schemes, and comprehensive and credible measures are the general principles that should be observed to contain the spread of fear, restore calm and confidence, and minimize the costs of intervention in the longer run.

As for timing, it is important for authorities to act promptly, after the causes and size of the problem are identified through a complete and systematic evaluation. As for scope, usual responses go in three stages. In early stage, confidence in the system can be restored by a combination of government support and liquidity provision to prevent runs on banks. Next, troubled assets and the recapitalization of the banks need to be addressed. In the long run, measures to improve institutional framework should follow, as well as, including the accounting, disclosure, legal and regulatory environment. The OECD (2008) summarized some lessons drawn from previous financial crises or their resolution:

- A proper identification of the nature of a crisis is necessary if the correct instructions are to be applied.
- Liquidations tend to be costly and are perhaps best used as a last resort or only under specific circumstances.
- Forbearance may be helpful in avoiding severe dislocations, but it is a risky proposition that can prove very costly if used improperly.
- Guarantees may be necessary, but they must be properly structured and be given a finite life to avoid high costs and moral hazard.
- It is important to develop a thorough understanding of the various dimensions of the too-big-to-fail phenomenon and its implications.
- There is a need to properly address interdependencies for institutions operating in or funding themselves across multiple jurisdictions.
- It is important that prudential requirements and other safety and soundness standards are incentive compatible and properly aligned with developments in risk management.
- Runs on market liquidity occur more often than runs on bank deposits.
- An important step in crisis resolutions is the treatment of non-performing assets.
- Weaknesses associated with asymmetric, insufficient, or incorrect information are endemic in modern financial markets and have yet to be successfully addressed.
- Considerable work remains on the consumer awareness front.

a) Bailouts

Here the critical question is, whether bailouts should be at penalty interest rates and only on good collateral, and whether widespread support including insolvent institutions is preferable or should bailouts

focus on helping solvent banks experiencing temporary liquidity shortages to minimize moral hazard problem? Also should we abandon supporting weak institutions and turn to help suffering consumers?

When a crisis is systemic and involves self-fulfilling runs, only sweeping guarantees and extensive support can stop the panic in the market. But when the balance sheets of financial institutions are fundamentally weak and the systemic insolvency is deep, such support may not be able to even halt the spread of crisis but delay healthy adjustments. World Bank (2008) points out that extensive short-term bailout policy seldom actually speeds the recovery of a nation's real economy from a financial crisis or lessens the decline in aggregate output. Instead, providing liquidity support for insolvent institutions often prolongs a crisis and increases the ultimate fiscal cost of resolving crises. Also providing extensive liquidity support and guarantees to insolvent institutions subsidizes risk-taking, undermines market discipline and increases the likelihood of future crises. But on the other hand, there is often not enough information for deciding which financial institutions are sound and in general it is not easy to invoke prompt corrective action for systemic events.

b) Monetary Easing versus Fiscal Expansion

As financial woes spill over to real economy, it is also in desperate need of help. There are widespread fears that there will be a Japanese-style 'lost decade.' What would be the appropriate macroeconomic countercyclical measures to prevent the downturn?

Monetary policy seems to face dilemmas. As we have experienced, during the Asian crisis, sharp monetary contractions are not effective measures to defend domestic financial systems and exchange rates from speculative attacks and sinking currencies. Rising interest rates put heavy burden on debt holders and deepens the real economic downturn, as is what happened in the Great Depression. On the other hand, expansionary monetary policy in times of crisis will not work properly and is correspondingly ineffective as the channels through which it affects the real economy are still clogged. Banks facing high credit risk will simply hoard the money even if the government pumps liquidity into the system.

Then should we turn to fiscal policy to smooth out the output and employment cost of a crisis? Krugman (2008a) and Spilimbergo *et al.* (2008) suggest what we need right now is to not worry about a fiscal deficit but 'getting fiscal' by more government spending, providing

extended benefits to the distressed families, offering emergency aid to local governments and engaging in some serious infrastructure spending. Münchau (2008) even argued that fiscal policy, more than monetary policy, will determine how and when this crisis will be resolved.

B. Long-term Tasks and Issues

The current situation is often called a crisis of credibility for Anglo-Saxon financial capitalism and belief in free markets. It also opened up big questions about the workability of securitized lending, the role of central banks, regulators and rating agencies, and global macroeconomic imbalances (Wolf 2008). So we have also longer term tasks ahead including rethinking financial regulation, central banking and the management of global imbalances.

a) Globalization and Vulnerability to External Shocks

The process of globalization and financial development has been prone to crises. In the long run, financial development is expected to support economic growth and to reduce poverty. But, along the way, even relatively mature financial systems are vulnerable to banking crises, booms and busts and financial volatility (World Bank 2008).

Globalization has probably facilitated contagion of the 2008 financial crisis. This appears to be partly intrinsic and partly due to policy mistakes. It arises as banks expand and capital markets generate various financial products, including derivatives. This entails new and unfamiliar risks for financial intermediaries and regulators. Furthermore, crises are easily transmitted across borders as countries become more open to capital flows. While the long-run relationship between financial development and growth is positive, the short-run relationship between them is negative due to financial fragility.

Developing countries have taken measures to build up buffers and insulate themselves from the external shocks, by accumulating large reserves, switching to long-term and domestic currency borrowing, and reducing fiscal and current account deficits. However hard they try, it is difficult to avoid the tradeoff between the benefits of economic and financial integration and the risk of being susceptible to contagious effects.

Some aspects of the financial integration process, however, can change the terms of the tradeoff. These include how much the country relies on portfolio investment versus foreign direct investment (FDI), the

extent of reliance on short-term debt and simply whether the country is part of the portfolio investment of international investors. Also, a sound legal framework and stable political environment that attracts foreign capital and the influence of a country's history of default on capital flows are important factors.

b) Banks versus Capital Markets

The current bank-oriented financial system in Korea should be shifted to seek a balanced development between the banking sector and the capital market. In the U.S. and Europe, commercial banking is growing while investment banking is shrinking due to the global financial crisis. Top five global investment banks disappeared from the center stage of history. One filed for bankruptcy protection, two merged by commercial banks, and the remaining two turned into commercial banks. However, in Korea, the capital market should be fostered further more. The size of the capital market is only 50~60% to that of advanced countries, not to mention that most of the bonds outstanding are issued by the government and other public sectors while SMEs have hardly access to direct funding. More diverse and stable financial services should be provided through the capital market.

c) Capital Adequacy

In theory and practice, the Basel II bank capital regime is under attack in the sense that it should be reworked in favor of higher minimum capital ratios, making the regime countercyclical, adding a leverage ratio alongside the risk-weighted capital measure, and temporarily dropping use of credit ratings and internal models to calculate risk weights.

The aim of capital adequacy regulation is to align the amount of capital that banks set aside to absorb unexpected losses, with the amount of risk that they are taking. The existing minimum risk-weighted capital ratio, 8 percent of risk-weighted assets, seems to be too low compared to losses and write-downs of the financial institutions during this crisis and even higher capital above minimum would be inadequate to deal with the bad credit decisions that have been made.

The credibility of one of Basel II's main innovations has also been damaged by the crisis. Basel II tries to put much of the responsibility for assessing risks to credit-rating agencies and the banks themselves, allowing banks to use credit ratings as risk weights and internal models to determine their regulatory capital requirements. The per-

formance of credit rating agencies has been dismal and so too with the performance of banks' internal models. There are also concerns that Basel II takes insufficient account of systemic risks (Economist 2008).

The solution of these problems is not to discard risk-weighted capital measures entirely, but to back up the risk-weighted capital measure by something else. We may borrow from other disciplines to capture the network effects between financial institutions. Or we may simply add, as Swiss regulators do, leverage ratio requirement to biggest banks, not allowing for any risk-weighting of assets. There is also the idea of dynamic provisioning adopted by Spanish regulators. Others want to see a systemic capital charge based on overall asset growth, which would help banks to strengthen buffers in good times.

d) Dynamic Provisioning

Dynamic provisioning tries to deal with procyclical bank lending (Kraft 2004). Provisions increase as banks' profits increase ('income-smoothing') and decrease as GDP falls and as loan growth increases (over-optimism), much like Keynes' attitude towards fiscal policies. Provisioning is believed to be a cause of lending procyclicality. Current provisioning practice is backward-looking, based on recognition of events that have already occurred. Accounting standards support this partly because it decreases discretion and gives a good picture of the bank at a moment of time. But economists feel that this approach fails to recognize future losses that are sure to happen but we don't know exactly when.

When a crisis hits, it is harder to raise capital. Lower profits or even losses make it painful to create provisions. Increased provisions are usually seen by markets as a sign of problems and lead to further share price declines. So dynamic provisioning seems attractive as a way to decrease financial instability. But it is easiest to implement in stable markets with long data series and stable provisioning levels. For now, we should either be patient and wait for more data or look at other ways to achieve the same goals.

e) Liquidity Requirement

Over past 50 years or so, banks in many G7 countries have economized unduly in the shares of cash and liquid assets in their total assets. This longer-term trend was exacerbated in the run-up to this crisis. A crisis comes with liquidity shortages. So a liquidity guideline is needed to withstand prolonged interruption of unsecured

financing. The task is to set up clearer picture of what constitutes minimum regulatory liquidity, along with greater incentives for holding it and for sharing it with others.

In regards to this, Goldstein (2008) offers three proposals: (i) regulators would define regulatory liquidity narrowly: would give a dominant role to cash and to treasuries that would retain their unquestioned liquidity in a crisis; would penalize very short-term financing relative to longer-term financing; regulators would set minimum quantitative benchmark for bank liquidity much in the same spirit as Basle I quantitative bank capital requirement was established in late 1980s; (ii) need to establish private-sector liquidity pools among systemically-important players; each member of pool deposits with pool an agreed quota of treasuries that it could draw instantaneously when needed and without challenge; each member would be able to overdraft by several times if needed to meet unusually large liquidity strains; all pool members would agree as a condition of membership to allow their deposits to be lent to other members; since pool members would include some banks with insured deposits, unlikely that all pool members would be short liquidity at same time; market and default risks would be borne exclusively by members of the pool; (iii) when liquidity needs went beyond the capabilities of the pool, members would turn to their national central bank to act as lender of last resort. Access to central bank liquidity facilities would carry a higher cost of borrowing than in the pool and there would be a strong presumption that official liquidity assistance could come only after private sources had been exhausted.

f) Compensation Scheme

Compensation schemes are an integral part of risk management. But drawing up sensible pay schemes is far more complex. Rajan (2008) argues that Wall Street managers understand that they can't get paid much for taking on the general risk of the market (so called beta risk). On the other hand they can get paid handsomely for beating the market return regularly, that is, you will get well rewarded for 'alpha' risk, generating excess returns. The problem is that managers have an incentive to take on false alpha exposing them to hidden tail risk as he can get paid more for it.

The rub, as Rajan (2008) explains it, is that true alpha can be measured only in the long run with the benefit of hindsight. As such, if you pay top managers bonuses based on annual profits but you don't claw back the losses when the tail risk materializes, then you create

large incentives for those managers to create false alpha.

The antidote for false alpha is to have a deferred compensation plan where the manager can only get part of his bonus upfront and the rest only when superior performance is confirmed over a period of years. Also annual bonuses payment can be linked to more rigorous measure of risk-adjusted profits. But applying these measures to people below management level is no small task and poses practical difficulties as there are thousands of positions, some of them hedges. It is an art not a science (Economist 2008).

Another way to handle the inappropriate pay scheme is to offer complying firms an incentive in the form of a lower regulatory capital charge for implementing sensible deferred compensation plans. The current Basel II bank capital regime addresses many factors that affect the risk-taking behavior of banks but omits this very important one, namely, how you get paid for taking risk. That should be changed.

One example of a very creative compensation scheme was the one imposed by Credit Suisse. The investment banking arm, who has accumulated the largest amount of write-downs and losses for the bank, has been given their own toxic assets as bonuses. This self-reward system with the products they are selling forces them to not only know more about their product, but also makes sure no moral mistakes are made.

V. Closing Remarks

If there is one lesson that stands out, it is that effective responses to a crisis require sound data and that they must take into account market players' incentives and behavior. The short-term responses to a crisis must take into account the longer term implications for development and vulnerability to future crises. There will be difficult choices that are brought up against the inevitable tradeoffs between rapid crisis responses and longer-term goals.

We shouldn't forget the fundamental principles that 'high returns come with high risks' and 'fast growth comes with the risk of rapid collapse.' We should always be careful not to be 'over-confident' about the role of risk management as it is always prone to loopholes no matter how advanced it is.

The financial industry, which is remotely dislocated from the real economy, is on shaky ground. Financial industry is a service industry,

and the service industry that does not serve those that should be served is a house of cards or a sand castle (Lee 2008). But it appears that the financial industry tends to dislocate itself from the real economy as it grows at a rapid pace. It should be reminded that the financial sector becomes worthless if it fails to interact with the real economy.

Major regulatory reform will not be achieved for free. When tougher capital and liquidity requirements are put into effect for banks, along with reform of the over-the-counter derivative markets, one can expect lower leverage, slower asset growth and probably, a lower average profit rate in the financial service industry vis-à-vis what had come to be expected in the run-up to this crisis. Of course, the other side of the coin is that these regulatory reforms will contribute to fewer severe financial crises that we wind-up paying for either in the form of lower interest rates on savings deposits or in the form of taxpayer financed bailouts of troubled financial institutions. For over a hundred year, financial market regulation has improved mostly when crisis has shown up its shortcomings. This current crisis will be just another opportunity of making current financial system more fairly and more efficiently.

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