Financial Crisis in Emerging Markets: Balancing the Roles of Prudential Supervision and Market Discipline

By: Keren Lipnowski

Lawrence H. Summers, former Deputy Secretary of the U.S. Treasury, has a favourite analogy when educating other nations about financial globalization. "Global capital markets pose the same kinds of problems that jet planes do. They are faster, more comfortable, and they get you where you are going better. But the crashes are much more spectacular".[22] These crises result from a new global financial system whose speedy evolution has outpaced the adaptation of institutions and regulatory devices.

In order to contain this virulent disease and prevent further contagion, policy makers must not abrogate their responsibilities in striking a balance between the use of prudential supervision to maintain market discipline and allowing anarchy free reign. Identifying the impediments to reaching this balance is the foundation upon which prevention and solutions to financial crises can be fabricated. The Argentine reforms are representative of this appropriate balance and will be discussed to tie together what conclusions have been made.

The financial system is critical to the health of the economy because it performs the essential function of channelling funds from savings to those that have productive investment opportunities. Financial liberalization is regarded as a prerequisite to carry out these transactions in the most efficient way. Thus, economic policy-makers in emerging economies are leaning toward freer markets, a smaller role for the state and reduction in border controls. Many of these countries, however, do not foster an environment that promotes market discipline, as they are deficient in their governance and prudential supervision of financial institutions, particularly regarding risk management mechanisms.[23]

Most emerging market countries freed their capital account transactions and lifted a large part of administration controls on domestic financial intermediation without establishing a solid institutional framework that would enable them to absorb large-scale capital imports in an orderly way.[24] During periods of inflows, a weak domestic regulatory framework and distorted incentives allow lenders to build up poor quality loan portfolios and channel investments to low yielding, speculative projects. When inflows are reversed, the resulting credit contraction causes widespread defaults in the banking, corporate and real estate sectors.[25]

---

[22] Ramo, Joshua Cooper. The Three Marketeers. Time. Pg. 40-41. February 15, 1999.

[23] Looking Beyond Today's Financial Crisis: Moving forward with international financial reform Michel Camdessus: Managing Director of the International Monetary Fund to the Foreign Policy Association New York, February 24, 1999. http://www.imf.org/external/np/speeches/1999/022499.htm.

[24] Lamfalussy, Alexandre. Financial Crises in Emerging Markets: An Essay on Financial Globalization and Fragility. Yale University Press, New Haven & London. 2000.

[25] Kletzer, Kenneth. Will Self-Protection Policies Safeguard Emerging Markets from Crisis? The World Bank. February, 2000.

It is clear that in this environment, economies in transition need to induce market discipline and adapt regulation and supervisory procedures to these new realities. Thus the goal will not be to eliminate financial crises for they are an inevitable outcome of the new efficient global system. Rather, the goal is to limit their impact and develop principles and procedures for their orderly resolution.

Market discipline is a key ingredient in controlling the threat of a financial crisis. Prior to the Asian crisis, government borrowing had been responsible for financial crises. As a result, policy makers have emphasized financial stability by relying solely on regulation and prudential supervision as the goal of public policy, rather than market discipline.[26] In the past decade however, it is private flows that have far outpaced official flows and borrowing by governments. For instance, the Asian crisis involved corporations and banks as the creditors and debtors for the most part. Creditors failed to 'know the client' and implicit guarantees encouraged reckless borrowing.[27] Thus market discipline did not develop quickly enough to contain the risk-taking of institutions, which were less constrained by traditional regulatory and supervisory frameworks.

The problem in developing market discipline lies in two areas of reform that accompany financial liberalization. First is the increased availability of public safety nets such as deposit insurance, and second are "too big to fail" policies which keep large banks in business despite the nature of their operations.[28]

All countries in the world have some sort of financial safety net in place. These include deposit insurance, the central bank as a "lender of last resort", bank insolvency resolution procedures and bank regulation and supervision.[29] In many cases, the financial safety net, structured to reduce the vulnerability of the financial system, appears to have had the opposite result. If these safety net mechanisms were created to offer protection from financial crises situations, then it is ironic that they increase rather than reduce excessive bank risk-taking.

This is due to the inevitable trade-off between increased depositor safety and reduced market discipline. The availability of a bailout system causes moral hazard behaviour. This occurs when safety nets encourage risky behavior by leading financial risk takers to believe that they will reap the benefits of unsound investments while being protected from the losses.[30] This in turn causes banks to take on greater risk, as they know that depositors will not retract their funds. Although these safety nets prevent people from pulling out their money in the event of a crisis, it is this very protection that entices people to engage in moral hazard behaviour, which contributes to the cause of the financial crisis in the first place. For example, the U.S. Federal Deposit Insurance Corporation was said to be the most important contribution to the infamous Savings and Loans crisis of the 1980's.[31]

---

[26] Hoenig, Thomas M. Financial Regulation, Prudential Supervision and Market Discipline: Striking a Balance. Presented to Federal Reserve Bank of Chicago. October 1, 1999.

[27] Dobson, Wendy. Fallout from the global financial crisis: should capitalism be curbed? International Journal. 54 (3), 375-385. 1999.

[28] Hoenig, Thomas M. Financial Regulation, Prudential Supervision and Market Discipline: Striking a Balance. Presented to Federal Reserve Bank of Chicago. October 1, 1999.

[29] Demirgüç-Kunt, Asli and Huizinga, Harry. Financial Discipline and Financial Safety Net Design. World Bank Conference. June 8-9 2000. http://www.worldbank.org/research/interest/confs/upcoming/deposit_insurance/papers.htm.

[30] Mickerson, David, Sawers, Larry and Schydlowsky, Daniel. Emerging Financial Markets in the Global Economy. World Scientific Publishing Co. Singapore, 2000.

[31] Mishkin, Frederic S. Prudential Supervision: Why is it Important and What are the Issues? March 2000.

Similar evidence has found that the existence of deposit insurance schemes do contribute to banking system fragility.

To counter this impediment to market discipline one could eliminate the existence of public safety nets completely to ensure the market has a vested interest in the risk-taking tolerance of the banks. The market thus determines the most productive allocation of funds. The problem with this extreme is that investors would have no hedge against a financial crisis and would be reluctant to inject capital into an emerging market. The markets would be extremely efficient but there would be many losers.

The second extreme would suggest that market discipline cannot be rationally applied in this new financial paradigm. Some economic thinkers, notably Canada's Paul Martin, lobby for more dramatic controls. For example, at a "Group of Seven" meeting in early February 2001, Martin stressed the imperative involvement of the public sector in enforcing private sector responsibility to prevent the collapse of a country's financial system in the form of a standstill.[32] A standstill is a temporary suspension of debt repayments (including freezing domestic bank deposits) that allow countries to prevent capital flights while they work through the crisis.[33] Just like the uncontrolled regime of no protection, this recommendation also increases the vulnerability of investors to the markets. A standstill defies the essence of financial globalization, returning to the highly regulated financial model of the past. In addition, the new U.S. Treasury Secretary, Paul O'Neill, warns that locking capital in place can often become a substitute for much needed reform, delaying the inevitable correction.[34]

These two extremes would surely cure the moral hazard problem, however investors would be hesitant to transfer capital to a market where their funds may be frozen at any time or where no protection is offered at all.

The second problem in the application of market discipline involves the protection of big banks. The failure of a very large bank makes it more likely that a major financial disruption will occur. Governments are therefore inclined to protect the bank rationalizing that they are "too big to fail". Once again the issue of moral hazard is a problem since these banks and depositors know that the possibility of a shut down is unlikely.

Continued reliance on these safety nets and "too big to fail" policies will limit the use of market discipline. It has been determined that greater market discipline is needed so the goal is to make it more effective within the context of needed public safety nets and inevitable "too big to fail" policies.

Information is the necessary ingredient to make market discipline more effective. A major impediment to the efficient functioning of market discipline is asymmetric information, a situation in which one party in a financial contract has much less information than the other party.[35] This lack of information about the quality of bank assets can lead to bank panics, which can have serious consequences as past crises has shown. The problem was evident in Indonesia, where sixteen Indonesian banks were closed in 1997, upon the advise of the International Monetary Fund (IMF).

---

http://www.nber.org/books/mishkin/introduction.pdf.

[32] Scoffield, Heather. Martin Confident of U.S. Backing: Global Financial Crisis Strategy will Win Over U.S. Counterpart, Minister Says. Globe and Mail, B7. February 28, 2001.

[33] Checki Terrence J. and Stern Ernest. Financial Crises in the Emerging Markets: The Roles of the Public and Private Sectors. Current Issues in Economics and Finance. V. 6 (13). November 2000.

[34] Ramo, Joshua Cooper. The Three Marketeers. Time. Pg. 42. February 15, 1999.

[35] ibid.

However, Indonesia resisted closing all banks that were deemed insolvent on the basis that depositors would leave deposits in the remaining open banks, strengthening their capital position. The hypothesis was a failure because they misjudged the requirements for reinstating confidence by failing to take asymmetrical information into account. Leaving a few insolvent banks open fuelled the panic further; for fear that the previous closings were only the beginning of a domino effect of bank failure.[36] This is an example of how asymmetrical information deepened the financial crisis through the inconsistent and random shutdown of a few banks to appease the IMF leaving investors without any rational explanation on the viability of the remaining banks.

Therefore, the most important step toward improving the use of market discipline is to encourage more accurate and detailed disclosure of financial information. Information is a key tool used by bank stockholders, debt-holders, depositors and other customers in making decisions. It has been suggested that more detailed disclosure on asset quality, either in the form of estimated market values, internal and external credit ratings and assessments of loan loss reserve adequacy to the public is a necessary improvement.[37] As well, the asset mix holding of banks and the concentration percentages of holdings within particular industries should be made readily available to determine the risk adverseness of the banks. Other steps may include descriptions of a bank's risk management policies, oversight of the resulting activities and implications of internal risk models and management's confidence in such information.[38]

Although the existence of safety nets and "too big to fail" policies limit the effect of increased disclosure, better information decreases the need for excessive use of these policies as investors can judge appropriate risk/return tradeoffs. Therefore by improving the problem of asymmetric information, banks and customers are placed on a level playing field, thereby decreasing the need of elaborate safety nets and protective policies.

Although the increase of market discipline is important, supervision must also be rebalanced in light of this new environment of financial liberalization. Regulatory instruments which traditionally governed the way institutions were allowed to operate are now more relaxed allowing institutions to compete in a less structured system. Therefore, this new financial regime forces supervision and regulatory instruments to adapt to its new environment.

An important distinction to make is that prudential supervision should not be used in the form of bailouts. Therefore more supervision in any form is not necessarily better than no supervision. It is the type of supervision that is key in preventing financial crises and contagion. For instance, the Basle Committee on Banking Supervision has developed guidelines called Core Principles for Effective Banking Supervision that can be used by countries as a model for establishing an effective system of prudential supervision.[39]

There are many forms of prudential supervision, but not all suggestions are to be used in their most restrictive form. The key issue is using a combination of regulatory solutions that works best for the unique needs of the financial crisis at hand and to

[36] Boughton, James M. Different Strokes? Common and Uncommon Responses to Financial Crises. Jan. 1, 2001. http://www.imf.org/external/pubs/cat/longres.cfm ?sk=3971.0.

[37] Hoenig, Thomas M. Financial Regulation, Prudential Supervision and Market Discipline: Striking a Balance. Presented to Federal Reserve Bank of Chicago. October 1, 1999.

[38] Ibid.

[39] Helfer, Ricki Tigert. What Deposit Insurance Can and Cannot Do. V 36 (1). March 1999.

determine how restrictive should they be. Although each crisis clearly has unique, county-specific features, it would appear that there are two common elements of prudential supervision applicable to most crises; supervisory versus a regulatory approach regarding capital requirements and prompt corrective action.[40]

The supervisory approach involves focusing on the adequacy of banks' risk management and internal models to determine whether the bank complies with capital requirements. The traditional regulatory approach was only concerned with banks' balance sheets and loans at a point in time.[41] This is important since in today's environment a bank may appear quite healthy at a point in time and can be driven to insolvency by engaging in a few risky ventures. For example, the U.S. has successfully adopted this type of approach giving banks separate "sensitivity to risk" ratings that are included in the CAMELS (capital, assets, management, earnings, and liabilities) system. It is recognized however that coming up with a one size fits all model for all banks is difficult, thus regulatory agencies could consider interest rate risk in deciding capital requirements as the U.S. does.[42] Bank regulations however should still serve as the first line of defence to determine the financial health of a bank.

The second use of prudential supervision as a means of preventing financial crises is to enforce prompt and corrective action to close down institutions that do not have sufficient capital. The financial sector will be less willing to take on excessive risk knowing that they will be punished if they do. Funds supplied to weak or insolvent banking institutions will not restore the balance sheets because there are strong moral hazard incentives to take on big risks with taxpayers' dollars. A provision in the U.S. Federal Deposit Insurance Corporation Improvement Act (1991) is a good example of corrective action in which regulators deal with undercapitalized financial institutions with discretionary power..[43]

It is recognized that in practice, strict prudential supervision of large, politically connected financial institutions is difficult. One can conclude then that large public institutions must be scrutinized even more rigorously to decrease moral hazard, yet regulatory agencies are reluctant to do this. This is due to the lack of sufficient incentives and statutory authority to properly supervise financial institution in emerging economies. In addition to low salaries, supervisors are subject to lawsuits and may be personably liable for their actions.[44]

It is difficult to engage in prompt corrective actions when there is the possibility of personal liability. Revisions to the personal liability factor must be implemented to provide some protection for supervisors for taking harsh actions against large financial institutions. All efforts must be made to ensure that supervisors are also protected from political pressure. As mentioned, the shutdown of a major financial institution may destabilize the financial system. It is often politically desirable to artificially correct financial problems by protecting these institutions rather then causing temporary financial adjustment. After all, political leaders tend to place the short run state of the economy at the forefront of issues. This is especially difficult in economies in transition where politics and financial institutional ownership were previously inseparable.

---

[40] Mishkin, Frederic S. Prudential Supervision: Why is it Important and What are the Issues? March 2000. http://www.nber.org/books/mishkin/introduction.pdf.
[41] Ibid.
[42] Ibid.

[43] Mishkin, Frederic S. Financial Policies and the Prevention of Financial Crises in Emerging Market. National Bureau of Economic Research (NBER) Conference, Woodstock, Vermont. October 19-21, 2000.
[44] Ibid.

Mishkin believes supervisory autonomy from political influence may be achieved by assigning the supervisory roles to an independent central bank or establishing their role as bank regulatory authority independent from government. Moreover, funds from the IMF should not only be available for corrective purposes but should take on a more proactive role aiding emerging economies in their transition to financial liberalization. These funds should be directed toward helping countries establish the resources and incentives needed such as technology to appropriately audit financial institutions and higher salaries to supervisors so that temptation of bribery acceptance can be eliminated. These reforms are essential to properly adapt the regulatory regime in a world of financial globalization.

Argentina's reforms are regarded as among the most radical attempts to overhaul a banking system by attacking supervisory processes. The Argentina bank regulatory reforms that took place after the Tequila crisis in early 1995 (following Mexico's devaluation of its currency at the end of 1994) are among the most successful of emerging market economies implementing a system of bank regulation that achieved credible market discipline.[45]

Argentina adopted the BASIC (Bonds, Auditing, Supervision, Information and Credit Rating) system of banking oversight. The program is administered by the central bank, which has been shown to be an accepted way to separate supervisory autonomy from political influence. The BASIC program is also structured solve the problem of asymmetrical information. As information is prerequisite to conduct market discipline, the system requires increased disclosure of information including the development of a credit bureau where information regarding loans are made publicly available. The supervisory authority adopted a version of the CAMELS system used in the U.S. using the rating system to set capital requirements. Lastly, each bank must obtain a credit rating from an internationally active authorized rating agency.[46]

Beginning in September 1991, capital requirements were implemented with an initial rate of 3% and were gradually increased until they reached 11.5% in January 1995 which is substantially above the 8% Basle Committee on Banking Supervision's recommendation for industrial countries. Reserve requirements were set high at around 43% on checking and savings deposits. Deposit insurance was eliminated, and the currency board restrictions on monetary policy stipulated in the Central Bank Charter and the Convertibility Law curtailed the role of the central bank as a lender of last resort.[47] These measures strongly limited the safety net available to banks, reducing moral hazard in the financial system.

As a result of this new system, bank profitability remains low, partly due to the adapted regulations which creates incentives for banks to limit their risk. At the price of some decreased efficiency and profit, investors have responded positively to financial reforms in Argentina. From 1996 to 1998, the financial system grew very strongly with deposits growing at roughly 30% annually.[48] Comparing the Tequila crisis with that of the more recent Asian and Russian crisis, it is evident that these financial reforms have successfully reduced the blow of contagion. Not only has deposit growth and international reserves growth remained strong

[45] Pou, Pedro. Argentina's Structural Reforms of the 1990's. V. 37 (1). March 2000.

[46] Ibid.

[47] Calomiris, Charles W. and Powell, Andrew. Can Emerging Market Bank Regulators Establish Credible Discipline? A Case of Argentina, 1992-1999. May 2000. http://www.worldbank.org/research/interest/confs/upcoming/deposit_insurance/powell2000.pdf

[48] Ibid.

during the Asian and Russian crisis, but interest rates did not rise by nearly as much as they had done during the Tequila crisis.[49] Thus the reforms have been able to adapt supervisory mechanisms in such a way that market discipline is maintained.

These new reforms offer an excellent set of blueprints for emerging countries to emulate. However, the challenges for reformers in emerging market economies include more than just the technical problem of how to design an effective supervisory system. The more difficult problem is how to create the political conditions that make such a system credible. The ability to apply the Argentine approach successfully to other countries depends on the existence of similar political will backing real reform and limiting bailouts.

Financial crises occur partly because of policy-makers' struggle to adapt the regulatory system to the new financial environment and government's failure to provide the necessary conditions to encourage market discipline. The role of increased disclosure of information should develop market discipline by minimizing the moral hazard distortions that occur as a result of government safety nets and "too big to fail" protection policies. Using a supervisory as opposed to a regulatory approach regarding capital requirements and issuing prompt corrective action are necessary tools of prudential supervision. Despite the suggestions made, some crises will occur but the goal of these recommendations is to keep the costs of crises as low as possible. The Argentine case has illustrated that these recommendations are only useful when a country adheres to these procedures even in periods of financial stress. The regulators, by passing and enforcing appropriate legislation, held fast to the difficult task of fostering an environment where market discipline is not threatened. Otherwise, neither market discipline nor regulatory restrictions are likely to be effective in controlling risk-taking.

[49] Ibid.

Bibliography

Boughton, James M. Different Strokes? Common and Uncommon Responses to Financial Crises. International Monetary Fund. Jan. 1, 2001. http://www.imf.org/external/pubs/cat/longres.cfm?sk=3971.0.

Camdessus, Michel. Looking Beyond Today's Financial Crisis: Moving forward with international financial reform. International Monetary Fund. February 24, 1999. http://www.imf.org/external/np/speeches/1999/022499.htm.

Checki Terrence J. and Stern Ernest. Financial Crises in the Emerging Markets: The Roles of the Public and Private Sectors. Current Issues in Economics and Finance. V. 6 (13). November 2000.

Demirgüç-Kunt, Asli and Huizinga, Harry. Financial Discipline and Financial Safety Net Design. World Bank Conference. June 8-9 2000. http://www.worldbank.org/research/interest/confs/upcoming/deposit_insurance/papers.htm.

Dobson, Wendy. Fallout from the global financial crisis: should capitalism be curbed? International Journal. V 54 (3), 375-385. 1999.

Garrido, Celso and Motamen-Samadian, Sima. Emerging Markets: Past and Present Experiences, and Future Prospects. St. Martin's Pess Inc. New York, N.Y., 2000.

Helfer, Ricki Tigert. What Deposit Insurance Can and Cannot Do. V 36 (1). March 1999.

Hoenig, Thomas M. Financial Regulation, Prudential Supervision and Market Discipline: Striking a Balance. Presented to Federal Reserve Bank of Chicago. October 1, 1999.

Kamin, Steven B. The Current International Financial Crisis: How Much Is New? The Journal of International Money and Finance. V 18 (4), 501-14.August 1999.

Kletzer, Kenneth and Ashoka, Mody. Will Self Protection Policies Safeguard Emerging Market from Crises? World Bank. February 2000. http://econ.ucsc.edu/~kkletzer/kmwb.pdf.

Lamfalussy, Alexandre. Financial Crises in Emerging Markets: An Essay on Financial Globalization and Fragility. Yale University Press. Syracuse, N.Y., 2000.

Lipworth, Gabrielle and Nystedt, Jens. Crisis Resolution and Private Sector Adaption.

Makin, Tony. Global Finance and the Macroeconomy. St. Martin's Press Inc. New York, N.Y., 2000.

Martin, Paul. Reforming finance to meet needs of all the world. Canadian Speeches. V 14 (2), 22-28. May 2000.

Mickerson, David, Sawers, Larry and Schydlowsky, Daniel. Emerging Financial Markets in the Global Economy. World Scientific Publishing Co. Singapore, 2000.

Mishkin, Frederic S. Financial Policies and the Prevention of Financial Crises in Emerging Market. National Bureau of Economic Research (NBER) Conference, Woodstock, Vermont. October 19-21, 2000.

Mishkin, Frederic S. Prudential Supervision: Why is it Important and What are the Issues? March 2000. http://www.nber.org/books/mishkin/introduction.pdf.

Nankivell, Neville. Don't blame globalization when a crisis erupts. Financial Post (NationalPost). 1 (88), C14. February 8, 1999.

Pou, Pedro. Argentina's Structural Reforms of the 1990's. V 37 (1). March 2000.

Ramo, Joshua Cooper. The Three Marketeers. Time. February 15, 1999.

Scoffield, Heather. Martin Confident of U.S. Backing: Global Financial Crisis Strategy will Win Over U.S. Counterpart, Minister Says. Globe and Mail, B7. February 28, 2001.

Stronger financial systems goal of G20: Martin. Canadian-Press-Newswire. December 14, 1999.