

# **The Role of an Explicit Subordinate Debt Policy in the Smooth Transition to Basel II**

## **Policy Note: PN 0709**

**Md. Kabir Ahmed\***

### **Abstract**

*The major concern for the banking sector of Bangladesh is that implementation of Basel II will cause banks to raise capital appreciably and thus undermine their existing capital position. In such a situation subordinated debt can play a complementary role in enhancing bank capital. Pillar II of Basel Accord II emphasizes supervisory review process. To this end, subordinated debt can provide quality market signal which can be used by the supervisors to identify distress in bank management. Pillar III of Basel Accord II argues that financial market would discipline banks. Since investors in subordinated debt face maximum potential financial loss, they have the incentive to closely monitor bank activities and may react promptly through the financial market. Therefore, a policy guideline for subordinate debt seems to be an immediate necessity for smooth transition to Basel II. This is likely to strengthen capital mix of banks, help to develop the bond market and facilitate harmonization of capital regulation in South Asia.*

### **1. Introduction**

One of the challenges facing the banking sector of developing countries is the implementation of Basel Accord II. Though it has not been made compulsory for them, the risk is that it may turn into a contentious issue for international financial transactions. Regulatory authorities are therefore making efforts to design appropriate strategies that would enable the banking sector for smooth transition to Basel II. 'The New Accord' comprises of three pillars. Pillar I sets out the minimum capital requirements. Pillar II defines the process of supervisory review of a financial institution's risk management framework. Pillar III determines market discipline through improved disclosure. It is argued here that implementation of Pillar I is a more critical than the other two. It requires minimum bank capital against three kinds of risk: credit risk, operational risk and market risk. Since existing regulation requires banks to maintain capital against credit risk only, it is plausible to expect that additional capital requirement for two other risks will cause all banks to raise capital appreciably. RBI (2006) also argues that banks would need to raise additional capital to support expansion of their balance sheets. As a regulator, Bangladesh Bank is required to design policies that will facilitate smooth transition to Basel II. This paper sheds light on this issue by emphasizing the role of subordinate debt as an alternative for further expansion of bank capital within the existing regulatory framework.

The rest of the paper is organized as follows. Section 2 discusses scope for expansion of bank capital base and capital raising options within the existing regulatory framework. Section 3 explores the relationship between subordinated debt and three pillars of Basel II. Section 4 emphasizes other factors that are supportive for subordinated debt policy. Section 5 highlights on the factors in designing an explicit subordinate debt policy. Section 6 concludes.

---

\* The author is a Research Economist, Policy Analysis Unit, Research Department, Bangladesh Bank. He would like to thank Professor Syed M. Ahsan, Resident Economic Advisor at the Bangladesh Bank for his helpful comments and suggestions on earlier draft of the Note. The views expressed in this paper, however, are author's own and do not necessarily represent the views of Bangladesh Bank.

## 2. Current Capital Regulation

Existing regulation requires all scheduled banks to maintain minimum paid up capital and reserve fund of BDT 1 billion or 9 percent risk-weighted asset whichever is higher. Banks can maintain their capital in the following constituents:

**Table 1: Constituents of Capital**

<b>Core Capital (Tier I)</b>	<b>Supplementary Capital (Tier II)</b>
A. Paid-up Capital	A. General provision (1-5 percent of Unclassified Loans) <sup>1</sup>
B. Non-repayable Share premium account	B. Assets Revaluation Reserves
C. Statutory Reserve	C. All other Preference Shares
D. General Reserve	D. Perpetual Subordinated Debt
E. Retained Earnings	E. Exchange Equalisation Account
F. Minority interest in Subsidiaries	
G. Non-Cumulative Irredeemable Preference Shares	
H. Dividend Equalisation Account	

### 2.1 Scope for expansion of capital base

Tier I Capital: Banks can maintain their capital in 8 (eight) constituents of Tier I capital as specified in Table 1. Four of them, namely, Statutory Reserve, General Reserve, Retained Earnings and Dividend Equalization Account are greatly dependent on annual income of a bank. A certain percentage of income that is retained as per requirement of the Banking Companies Act (BCA) 1991 is named as Statutory Reserve. General Reserve is made to meet contingencies which are indeterminate at the time of making such reserve. Retained earnings are defined as shareholders' equities in a banking company resulting from earnings in excess of losses and declared dividends. The purpose of Dividend Equalisation Account is to create a fund in those years in which profits are large, so as to enable the bank to pay dividend at normal rate when profits are small. Thus a bank cannot enhance capital immediately in these items to meet any regulatory obligation. A bank can raise capital and non-repayable premium account by issuing right share, bonus share and IPOs. But a bank whose shares have already been floated in the stock market can further expand capital base by issuing either bonus shares or right shares or both. Issue of bonus share again depends on genuine annual profit of a bank. This process does not enhance financial resources of a bank; rather it converts earnings into shares. Whether a bank can issue share at premium depends on each share's existing net worth value which, among other, also depends on its accumulated earnings. The above analysis indicates that if regulation requires banks to raise Tier I capital substantially, the immediate option available for listed banks is to issue right shares. For the state-owned banks government will require to inject capital while branches of foreign banks will require to collect funds from their parent office. In addition, banks can respond to regulator's instruction by issuing non-cumulative irredeemable preference shares. But there is a lack of regulatory guideline regarding issue of such instruments.

Tier II Capital: As mentioned earlier, Tier II capital comprises of General Provision, Asset Revaluation Reserve, Preference Shares, Perpetual Subordinated Debt and Exchange Equalisation Account. Banks maintain general provision out of their business earnings. So they cannot raise general provision immediately in response to enhancement of regulatory capital.

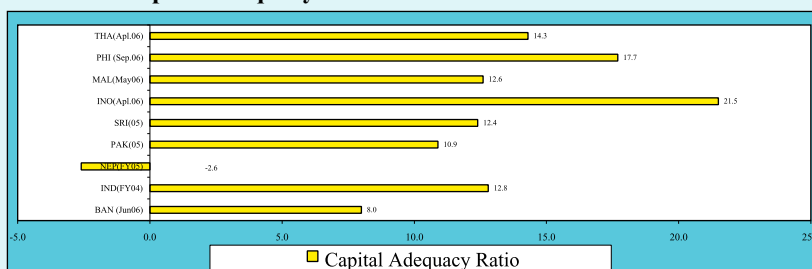
<sup>1</sup> The actual breakdown is as follows: two percent for Small Enterprise Financing, 5 percent for Consumer Financing and Outstanding amount of loans kept in the 'Special Mention Account' after netting off the amount of Interest Suspense and 1 percent for all other unclassified loans. For details, please see BRPD Circular No. 07, dated August 28, 2006.

Similar argument can be applied for asset revaluation reserve and exchange equalisation account. Since Bangladesh is following free floating exchange rate policy since May 2003, exchange equalization account has become ineffective in reality. In these circumstances, the options available for banks to raise Tier II capital are either to issue perpetual subordinated debt or to issue preference share or to issue both. However, there are no regulatory guidelines for the issuance of such instruments.

## 2.2 Basel II and Capital Raising Options

The argument that implementation of Basel II may require higher capital for banks has been supported by several empirical studies. For example, the Fifth Quantitative Impact Study, conducted by the Basel Committee on Banking Supervision (BCBS) in India, found that combined capital adequacy ratio of surveyed banks is expected to come down by about 100 basis points when these banks apply Basel II norms for standardised approach for credit risk and basic indicator approach for operational risk. However, Basel II also requires capital charge against market risk. It is highly likely that banks in Bangladesh may require higher capital than those of Indian banks and implementation of Basel II may substantially undermine capital position of banks in Bangladesh.

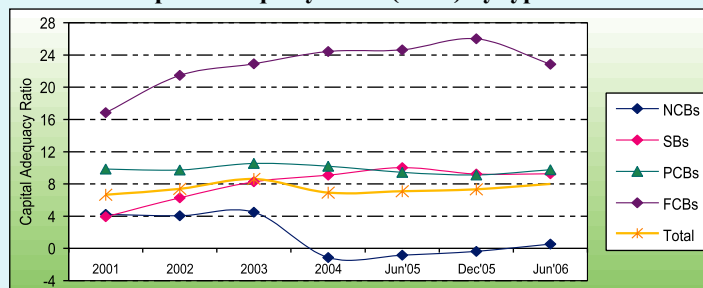
**Chart 1 : Capital Adequacy Ratio of banks in South and South-East Asia**



Source: Asia Economic Monitor (July 2006)

The study also shows that Capital Adequacy Ratio (CAR) of banking sector in Bangladesh is much lower than that of other SAARC countries such as India, Pakistan and Sri Lanka (see Chart 1). CAR for Indian banks in FY04 was 12.8 percent while the same was 8.00 percent for banks in Bangladesh by June 2006. Furthermore, CARs differ significantly among different types of banks. For example, risk-weighted capital adequacy ratio for nationalized commercial banks was 0.53 while the same was 22.9 for foreign commercial banks. Such differences may require more capital raising options and measures for weak banks while addressing the Basel II implementation issue. It may be noted here that despite high CAR, RBI revised its earlier schedule from 31 March 2007 to 31 March 2008 in order to provide more time for banks'

**Chart 2 : Capital Adequacy Ratio (CAR) by types of Banks**



Source: Based on data from Department of Off-site Supervision, Bangladesh Bank

preparedness for implementation of Basel II. At the outset, Basel II will be implemented for the foreign banks operating in India and Indian banks having presence outside India. All other Indian banks will require implementing Basel II by March 2009. In order to provide additional options for raising capital, RBI has also advised banks that they can increase their capital by the following instruments: (i) innovative perpetual debt instruments (IPDI) eligible for inclusion as Tier I capital; (ii) debt capital instruments eligible for inclusion as Upper Tier II capital; (iii) perpetual non-cumulative preference shares eligible for inclusion as Tier I capital; and (iv) redeemable cumulative preference shares eligible for inclusion as Tier II capital. RBI has already issued separate guidelines for instruments at (i) and (ii) above. It is also preparing guidelines for instruments (iii) and (iv). The above analysis indicates that as in India, implementation schedule may be different for different types of banks depending on their existing capital strength. At the same time, it is essential that additional financial instruments as well as specific guidelines for non-cumulative preference share and subordinated debt be drawn up so that banks can enhance additional capital for smooth transition to Basel II. But a policy guideline for the issuance of subordinate debt seems to be an immediate necessity.

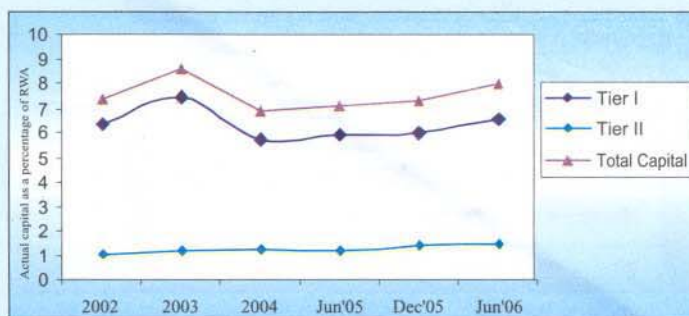
### 3. Link between Basel II and Subordinated Debt

Subordinated debt can be linked with three pillars of Basel II. Pillar I can be linked from capital enhancement point of view and the other two pillars are linked from the supervisory perspective. The details are as follows.

#### 3.1 Subordinated debt for minimum capital requirement (Pillar I)

As mentioned earlier, the major concern for banking sector of developing countries is that implementation of Basel II will require higher capital and may thus undermine the current capital position of banks. Several empirical studies show that in such a situation subordinated debt can play a complementary role in enhancing bank capital. A study conducted by Ashcraft (2006), Federal Reserve Bank of New York, concluded that an increase in the amount of subordinated debt in regulatory capital has an important positive effect in helping banks to recover from financial distress. Horvitz (1983, 1984) shows that higher capitals is needed at the bank level and are simply not feasible through equity alone. Evanoff and Wall (2004) also argue that subordinated debt provides capital cushion, tax benefit and brings market discipline to banks. The study shows that as of June 2006, banking sector of Bangladesh maintained 8.02 percent risk-based capital wherein only 1.45 percent was Tier II Capital (see Chart 3). It indicates that supplementary capital is not contributing much to maintaining the regulatory requirement. Enhancement of Tier II capital can be, among other, one of the good strategies in mitigating capital adequacy problem. Ahmed (2006) has argued that absence of debt capital in banking sector may be due to lack of instruments suitable for inclusion in Tier-II capital.

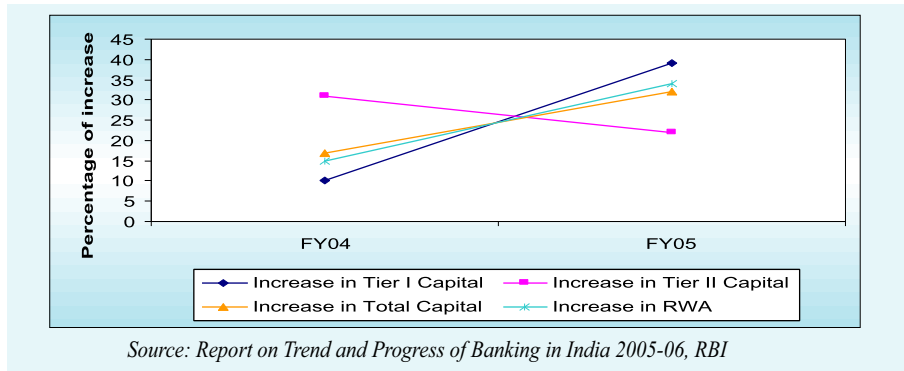
Chart 3: Components of Capital as a percentage of Risk-Weighted Assets in Bangladesh



Source: Based on data from Department of Off-site Supervision, Bangladesh Bank

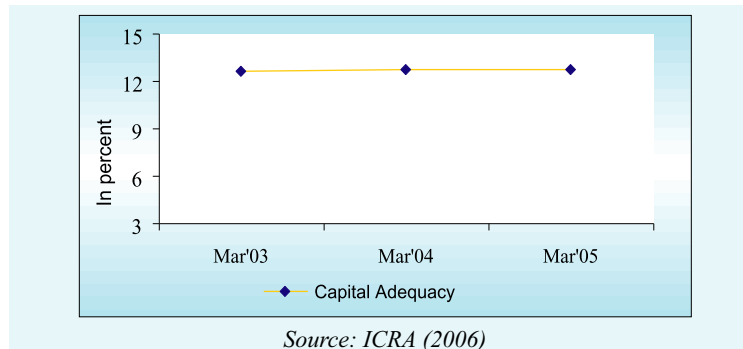
Note that the banking sector of India has already benefited from the issuance of subordinated debt. Risk-weighted-asset in Indian scheduled banks increased by about 34 percent in FY05. Despite such an increase, Indian banks could maintain high standard of Capital Adequacy Ratio (about 12.8 percent by March 2005). Two factors mainly contributed to this stability: (a) substantial expansion in Tier I capital and (b) substantial rise in Tier II capital due to significant increase in subordinated debt. In fact, increase in Tier II capital in FY05 was facilitated by a rise of 30 percent in subordinated debt and of 15 percent in their Investment Fluctuation Reserve (IFR). The foregoing analysis indicates that subordinated debt can significantly mitigate the problem of minimum capital requirement under Pillar I of Basel II.

Chart 4: Increase in Capital and risk-weighted assets of Indian Scheduled Commercial Banks



Bangladesh economy has been experiencing moderate level of growth, i.e., 6 percent and above over the last couple of years. It is expected that this trend will continue in the coming years. In a robust growth scenario, banks will require expansion of their credit to support growth of the real economy. It is unlikely that banks will experience less credit risk. This, along with Basel II requirement may substantially raise capital requirements of banks. Like RBI, introduction and diversification of new capital instruments such as various types of subordinated debt within the existing legal framework may provide banks more flexibility to meet such requirements.

Chart 5: Movement in Capital Adequacy of Indian Scheduled Commercial Banks



### 3.2 Subordinated debt for market-based supervision (Pillar II)

Pillar II of Basel Accord II emphasizes supervisory review process. Empirical studies (such as Evanoff and Jagtiani, 2004) show that bank risk could be more effectively managed if market information and market discipline were more fully incorporated into the supervisory and monitoring process. To this end, subordinated debt can provide quality market signal. This signal can be used by the supervisors for on-site and off-site monitoring to identify bank problems. Several empirical studies find that spreads of subordinated debt reflect an issuing bank's financial condition [Flannery and Sorescu (1996), DeYoung, Flannery, Lang and Sorescu (1998), Jagtiani, Kaufman and Lemieux (2000), Jagtiani and Lemieux (2001), Allen, Jagtiani and Moser (2000), and Morgan and Stiroh (2000a and 2000b)]. On the other hand, some other studies [Greenspan (2000), Ferguson (1999), Meyer (1999), Moskow (1998)] support the idea of reliance on market forces by supervisors for monitoring purposes.

### **3.3 Subordinated debt for market discipline (Pillar III)**

Financial market that would discipline banks against taking excessive risk is known as market discipline in the new financial literature. It is argued that market can play an active role in monitoring the banking industry. For this, regulators can create a class of investors who would face financial loss if a bank fails. Unlike depositors, their investment will not be protected by Deposit Insurance Fund. This scope for potential loss will provide an incentive to monitor the activities of banks. If a bank becomes insolvent, their claim will be settled after settlement of depositors and other debt holders' claims but will get priority to shareholders' claims. Some economists and policy makers argue that subordinated debt can play such a significant role. They also emphasize the need to make compulsion for banks to issue a fixed percentage of their capital as subordinated debt. A study conducted by the Federal Reserve Board and Treasury (2000) supports the role of using subordinated debt as a means of encouraging market discipline.

## **4. Necessity of subordinated debt for others reasons**

### **4.1 Subordinated debt to mitigate depositors' risk and burden on Deposit Insurance Fund**

Subordinated debt is an unsecured instrument which is neither backed by the government nor supported by Deposit Insurance Fund. Its claim is junior to claims of depositors and other creditors of a bank. Enhancing capital through the issuance of subordinated debt increases asset size of a bank. During insolvency, asset will be liquidated and depositors' claim will be settled before settlement of subordinated debt holders' claims. This shows that raising capital through subordinated debt would indeed mitigate depositors' risk. On the other hand, depositors' loss will be compensated by Deposit Insurance Fund. Lower risk of deposits indicates less involvement of Deposit Insurance Fund in the event of bank insolvency.

### **4.2 Subordinated debt to expand bond market**

Financial market of the country is continuously making efforts to develop the secondary bond market. It is argued that bond market in Bangladesh has not developed due to the lack of appropriate legal and regulatory framework, inadequate market infrastructure, limitation of the Trust Act and deficiency in diversified products. But quality of the security is also an important factor for healthy growth of bond market. Ahmed (2004) mentioned that default in coupon payment undermined investor confidence for further investment in bonds. To this end, subordinated bond can provide high quality security. Since banks are under close supervision of the central bank, it is unlikely that they will default in coupon payment. They are also running similar program such as the deposit pension scheme.

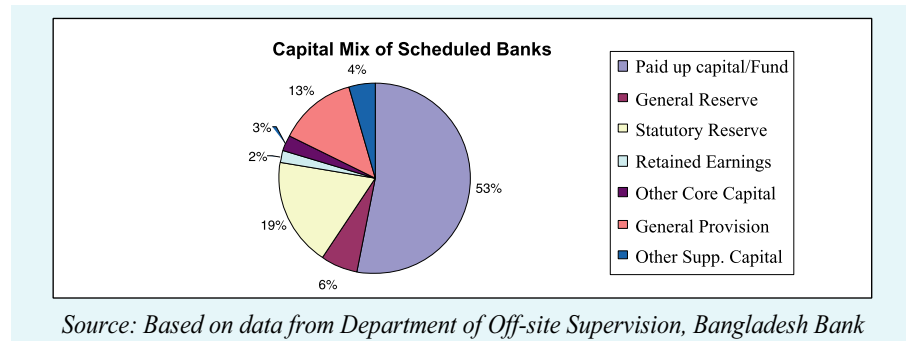
### **4.3 Subordinated debt to harmonize financial regulation in South Asia**

The General Agreement on Trade in Services (GATS) negotiated during the Uruguay Round allows commercial presence of a service enterprise under mode four. South Asia is gradually moving towards creating a free trade economic zone. Intra-regional trade among the SAARC countries is likely to increase where commercial presence of financial institutions will play a supportive role. Besides, issue of cross-border lending and financial integration is likely to play an important role in regional integration. This may require convergence of bank capital regulation where subordinated debt policy will contribute to ease the matter.

### **4.4 Subordinated debt to strengthen Capital Mix of banks**

Presently capital in Bangladesh is highly concentrated on equity, statutory reserve and general provision (see Chart 6). It is argued that interest on subordinated debt is tax-deductible. This will incur a lower cost of capital, facilitate banks to raise capital from financial market and strengthen their capital mix.

**Chart 6: Capital Mix of Scheduled Banks**



## 5. Factors in designing an explicit subordinate debt policy

The important question that arises next is: what should be the features of subordinated debt? Indeed, there is no uniform consensus over this issue. Some of the important factors that need to be considered are as follows:

- The status of debt that is junior to all other debt claims including depositors and other creditors' claims needs to be mentioned in the bond's covenants. Furthermore, it should be clearly mentioned that if subordinated debt holders incur any losses, they would not enjoy the benefit of the deposit insurance scheme and regulators will not stand behind any such losses.
- Subordinated debts should be issued to independent third parties who are neither affiliated nor involved with the issuing bank's business activities. Credit enhancement support should not be provided to the debt holders which should be explicitly understood.
- The instruments should be 'plain vanilla' with no special features like option of converting into equity.
- The debts may be non-callable having maturity of minimum 5(five) years. They should be subjected to progressive discount for capital treatment as they approach maturity at the rates shown below:
- Size of denomination should be large so that institutional investors become interested to buy.

Remaining Maturity of Instruments	Rate of Discount (%)
Less than one year	100
More than one year and less than two	80
More than two years and less than three	60
More than three years and less than four	40
More than four years and less than five	20

- The issuing bank or any individual or organization related with the issuing bank should not be allowed to buy or hold the subordinated debt instruments to avoid any correlation of risks. The same restriction will also apply to the employees' retirement benefit funds of the issuing bank to avoid insider trading or any other manipulation.
- The issuing banks should comply with the terms and conditions, if any, set by the Securities and Exchange Commission/other regulatory authorities with regard to the issuance of the instruments. They should indicate the amount/details of subordinated debt raised as supplementary capital by way of explanatory notes in their annual audited accounts and Half Yearly Statement on Minimum Capital Requirements, submitted to the Department of Off-site Supervision.
- Banks should not be allowed to grant advances against the security of their own subordinated debt issue. In addition, they will not be permitted to provide any accommodation to finance purchase of their subordinated debt instruments.

(i) The total amount of Subordinated Debt raised by the bank has to be reckoned as liability for the calculation of net demand and time liabilities for the purpose of reserve requirements and, as such, will attract CRR/SLR requirements.

## 6. Conclusion

A policy guideline for the issuance of subordinate debt seems to be an immediate necessity for smooth transition to Basel II, which is likely to strengthen capital mix of banks, help to develop bond market, facilitate harmonization of capital regulation in South Asia.

## References

Ahmed, F. (2004), Speech by Governor of Bangladesh Bank on a International Workshop on the Development of Bond Market in Bangladesh, Brac Centre, Rajendrapur, Dhaka.

Ahmed, M. K.(2006), Capital Base Adequacy, Financial Sector Review, Vol. 1, No. 1, Bangladesh Bank, Dhaka, pp. 1-202.

Allen, L., Jagtiani, J. and J. Moser (2000), Do Markets React to Regulatory Information? *Federal Reserve Bank of Chicago Working paper (Emerging Issue Series): S and R-2000-9R*.

Ashcraft, A.B. (2006), Does the Market Discipline Banks? New Evidences from the Regulatory Capital Mix, *Federal Reserve Bank of New York, Staff Report No. 244*, pp. 1-39.

Asia Economic Monitor (2006), Regional Economic Monitoring Unit, Asian Development Bank.

DeYoung, R, Flannery, M.J., Lang, W. W. and Sorescu, S. (1998, "The informational advantage of specialized monitors: The case of bank examiners," *Federal Reserve Bank of Chicago Working Paper Series*, 1998:4.

Evanoff, D. D. and Wall, L. D., (2000), Subordinated Debt and Bank Capital Reform, *Working paper*, 2000:24, Federal Reserve Bank of Atlanta, Georgia, USA, pp. 1-78.

Evanoff, D. D. and Jagtiani, J. (2004), "Use of subordinated debt in the supervisory and monitoring process and to enhance market discipline," *Economic Perspective*, Federal Reserve Bank of Chicago and Federal Reserve Bank of Kansas City, USA.

Flannery, M.J. and Sorescu, S.M. (1996), "Evidence of bank market discipline in subordinated debenture yields: 1983-1991," *The Journal of Finance*, Volume 51, Issue 4, pp. 1347-1377.

Ferguson, R.W. Jr. (1999), "Evolution of Financial Institutions and Markets: Private and Policy Implications", Speech presented at New York University, February 25.

Greenspan , Alan (2000), "Banking Supervision, speech before the American Bankers Association, Washington, D.C. September 18.

Horvitz, P.M. (1983), Market discipline is best provided by subordinated creditors, *American Banker*, July 15.

Horvitz, P.M. (1984), Subordinated debt is key to new bank capital requirements, *American Banker*, Dec. 31.

ICRA (2006), *Introduction of New Capital Instruments by RBI*, New Delhi.

Jagtiani, J., Kaufman, G. and Lemieux, C. (2002), The Impact of Credit Risk on Bank and Bank Holding Company Bond Yields: Evidence from the Post-FDICIA Period, *Journal of Financial Research*, Volume 25, No. 4, pp. 559-575.



Jagtiani, J. and Lemieux, C. (2001), Market Discipline Prior to Bank Failure, *Journal of Economics and Business*, Volume 53, No. 2 and 3, pp. 313-324.

Morgan, D.P., and Stiroh, K.J. (2000a), Bond market discipline of banks: Is the market tough enough? In *Proceedings of a Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago.

Morgan, D.P., and Stiroh, K.J. (2000b), "In Market discipline of Banks: The Asset Test", Presented at a working conference cosponsored by *Journal of Financial Services Research and the Federal Deposit Insurance Corporation: Incorporating market Information into Financial Supervision*, November 9.

Meyer, L.H. (1999), "Market discipline as a complement to bank supervision and regulation", Speech before the Conference on Reforming Bank Capital Standards, Council on Foreign Relations, New York, June 14.

Moskow, M.H. (1998), "Regulatory Efforts to Prevent Banking Crises", in *Preventing Bank Crises: Lessons from Recent Global Bank Failures*, Caprio, G., W.C. Hunter, G.G. Kaufman and D.M. Leipziger, editors. World Bank: Washington D.C.

RBI (2006), Report on Trend and Progress of Banking in India 2005-06, Reserve Bank of India, Mumbai, pp.1-348.