

A Scenario of Inter-bank Call Money Arrangement and Its Affiliation with Twofold Variables: Empirical Evidences from Banking Industry of Bangladesh

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Abstract

Inter-bank call money transactions make the stream of funds convenient and affordable for financial intermediaries. Consequently commercial banks get involved in the investment in and borrowing from call money market. This arrangement plays a significantly vital role to strengthen the liquidity base of a bank and also provides ample avenue of investment of fresh funds. But sometimes repeated variations may distort the anticipated constancy of both money market and banking industry. The study is instigated to highlight the most recent past scenario of inter-bank call money arrangement and its association with twofold variables such as bank credit and excess liquidity. The basis is empirical as this investigation revolves around historical evidences.

Keywords: Money at call and short notices, Bank credit, SLR, Excess liquidity.

1. Introduction

Inter-bank call money transaction is a very common practice in the modern banking business. No bank alone can survive or even run effectively in the complex financial system of the present age. Within the banking arena mutual reliance is a must. For this interdependency; commercial banks very often involve in short term transactions among themselves or with the other financial institutions. These transactions usually take the form of inter-bank call money, inter-bank advances and inter-bank deposits and borrowings. Among all the inter-bank transactions, the inter-bank call money, popularly known as money at call and short notice is predominantly important to the policy makers due to its significant impact on the monetary and credit situation of the country. This market is technically termed as call money market. The call market is essentially an institutional arrangement; its fund is immediately available and it constitutes the normal non-central bank place for making marginal adjustment in the composition of commercial banks' asset and liabilities.

1.1 Objectives underlying the study

To put in place a contemporary study on banking industry of Bangladesh in light with inter-bank call money arrangement is the main objective of the study. This paper is practically tailored to derive the prevailing degree of relationship among manifold major variables concerning inter-bank call money arrangement within the years under study.

2. Methodology

The information used to develop the report is historical. Most of them are from secondary sources. Multiple regressions are used herewith the paper to measure relevant inferences. Hence Ordinary least square method is taken into account to design and view a completely understandable picture. Assumptions have been made based on past experience under a representative scenario that may differ from any upcoming platform.

3. Scope of the interbank arrangement

Persistently small banks preserve their funds as deposits with large banks for their safety. Non-bank financial institutions also participate in this market by way of lending their fund to the deficit banks.

It may be stated that the activities of the call market are limited within the Head Offices of the banks and therefore, this market is virtually based on Dhaka city, the capital of Bangladesh. Surpluses or deficits of the branch offices are routed through Dhaka to other places at the direction of Head Offices. This sometimes produces a lot of complications for the branch offices, particularly, for fund management surplus or deficit branches in the remote area have narrow scope to partake in this market. This might be one of the grounds of limited lending activities in the rest of the country other than the big cities.

4. Review of Literature

In the words of **R.C. Porter (1963)** 'Inter-bank call market' exists only in figurative sense. Brokers no longer try to operate, and prices are nowhere posted; buyers and sellers meet over the telephone and price changes are rippled out by rumors." Transactions in this market involve the rate of interest which is called inter-bank call money rate. The rate varies among banks on the same date of transaction. Moreover it has a tendency to fluctuate very frequently. The rates of interest recorded in this market reflect the financial activity in the money market without regard to the involvement of the central bank. Therefore, the volume of transactions and the rate of interest in this market and their movement are particularly important for monetary policy.

Md. Abdus Samad (2009) endeavored to assess the impact of various factors on the transactions in the call money market. An attempt has been made to estimate regression equation using ordinary least squares method. In estimating the equation, it has been assumed that Discount Rate (DR) negatively affects the transactions in the Call Market (CM) since it raises the cost of borrowing. The Excess Liquidity (EXL) of the banking system representing the availability of fund in this market and Bank Credit (BC), a proxy for the demand for money and credit, are assumed to affect inter-bank transactions positively.

Lori et al. (2008) used graph theoretic measures to analyze the structure of the Italian inter-bank market. They show that the structure of the market is characterized by the existence of large 'hub' banks with which many of the market participants interact. The market is also found to be relatively efficient, there being few opportunities to borrow from one institution and lend to another profitably. The structure is shown to vary over time. Towards the end of the month the density of connections increases as banks increase their borrowing and lending to meet their monthly capital requirements.

Neyer and Wiemers (2003) explained that besides for balancing daily liquidity fluctuations banks participate in the inter-bank market because they have different marginal costs of obtaining funds from the central bank.

Abhijit Barua (2000) examined liquidity scenario in commercial banks of Bangladesh before and after the shortage occurred in late 1995-96. Call money rates was in a regular rise and became volatile due to deficit liquidity extensively noticed in commercial banks.

According to data compiled in 2004 by the Bank for International Settlements, approximately 50% of all forex transactions are strictly interbank trades. Interbank transactions are strongly focused on short term maturities.

5. Existent picture of banking industry of Bangladesh:

Banks and other financial institutions (OFIs) have been playing key role in boosting economic activities in the economy of Bangladesh. Today, there are 47 banks with 7712 branches. With increased privatization, there was a spurt in the growth of private banks. There are now 30 private commercial banks and 4 state owned commercial banks. In addition, there are 4 Development Financial Institutes popularly known as specialized banks currently operating in our country.

Advancement of banking industry (1975 to 2011)

Details	1975	1980	1985	1990	1995	2000	2005	2011
Number of Banks	12	14	21	24	31	49	49	47
Nationalized Banks	6	6	4	4	4	4	4	4
Specialized banks	2	2	2	3	5	5	5	4
Private Banks			8	10	13	27	30	30
Foreign banks	4	6	7	7	9	13	10	9

Table (1): Expansion of banking business in Bangladesh

6. Reserve requirements prescribed by Bangladesh Bank

The Statutory Liquidity Requirement (SLR) for the scheduled banks, except banks operating under the Islamic Shariah and the specialized banks is 19% of their demand and time liabilities, excluding inter-bank items since December 15, 2010. The SLR for the Islamic banks is 11.5% the specialized banks except BASIC bank are exempted from maintaining SLR. The Cash Reserve Requirement (CRR) for the scheduled banks with the Bangladesh Bank is 6% of their total demand and time liabilities. It may be noted that banks are required to maintain CRR daily at the rate of 6% on average on biweekly basis provided that the CRR would not be less than 5.5% in any day with effect from December 15, 2010.

7. Banking sector's Investment in & borrowing from call money

Amount of aggregate borrowing and investment with percentage changes

Items (in billion taka)	CY2009	CY2010	% of change
Borrowings	121.98	159.75	30.96%
Investment in Call money	49.70	43.93	-11.61%

Table (2): **borrowings from & investment in call money from CY2009 to CY2010**

Investment in call money market was decreased by 11.61 percent while, borrowings increased by 30.96 percent in CY10 compared with CY09. This excess of borrowing growth over lending growth in the banking sector evinces the misuse of excess liquidity by banks that were heavily engaged in the capital market in 2010.

8. Defenses favoring the increase in call money rates in the recent past years

The gradual increase in the level of call money rates manifold several reasons.

Those are portrayed below:

1. A substantial inflationary pressure: Regular rise in inflationary pressure really degrades the purchasing power and its indirect impact has attacked the call money rates and is responsible for continuous volatility.
2. Continual growth of demanders: Growth of current and marginal demanders is worth mentioning nowadays. This factor plays a vibrant role for consistent escalation.
3. An ongoing increase in the composition and volume of transactions: Due to the aforesaid matters, the composition and overall volume of transactions are ever on increase. Hence the rapidity in the inter-bank call market gets the pace.

9. Analysis & Appraisal

Explained Variable: money at call and short notices

Explanatory Variable: Bank credit (X_1) and excess liquidity (X_2)

The least square equation is

$$\hat{Y} = a + b_1X_1 + b_2X_2 + e_i$$

$$\hat{Y} = -279.765 + .013X_1 + .315X_2 + e_i$$

$$R^2 = .778 \quad (1.502) \quad (.739) \quad (\text{The numbers in the parentheses show t-values})$$

R^2 (77.8 %) indicates 77.8% of the variability in total call money participation is explained by both the explanatory variables as quoted above (excess liquidity and bank credit).

In this multiple regression equation, the relationship between money at call and short notices (Dependent variable, Y) along with bank credit and excess liquidity is examined.

Here Y intercept is -279.765 million taka. This indicates the average effect on explained variable Y in absence of both the explanatory variables taken for granted herewith the examination.

Again whenever aggregate bank credit increased by 1 million taka then call money investment also increased by .013 million taka on average. From the viewpoint of another explanatory variable it can be inferred that when excess liquidity increased by 1 million taka, total liquidity likewise rose by .315 million taka on average.

The Excess Liquidity of the banking system representing the availability of fund in this market and Bank Credit (BC), a proxy for the demand for money and credit, are assumed to affect inter-bank call money transactions positively. Excess liquidity has a definitive positive relation with call money participation/practice by the scheduled commercial banks.

10. Conclusion

The excessive charge on rates of call money can better be given a bar more or less identical to bank rate and brought under the realistic surveillance of Bangladesh Bank to restrict volatility. DIBOR must be put in perfect place for better adjustment and less volatility. Exercise and reliance on DIBOR should be reinforced at an early date. Moreover, insurance companies also mobilize plenty of funds that can be utilized effectively if they are allowed to operate in the call market. Therefore, to broaden area of call market such institutions may be allowed to participate in the country's call money market. The banks whose transactions fluctuate abnormally as well as those who borrow at a very high rate of interest however, should be looked into separately to identify their problems. To stop constant volatility and ensure market discipline all-out rigorous efforts should be put forth for the greater interest of our money market and for the smooth operational framework of financial system as well.

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Appendix

Configuration of Bank Credit

Source: Statistics Department, Bangladesh Bank

Bank Credit	(Taka in Millions)				
Items	October, 2011	September, 2011	October, 2010	Percentage Changes of October, 2011 over	
				September, 2011	October, 2010
Advances including money at call & balances	3404730	3355933	2832840	1.45	20.19
Bills	211221	209184	164486	0.97	28.41
Investments	820081	777732	577803	5.45	41.93
Total	4436032	4342849	3575129	2.15	24.08

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