a₹tha

A NEWSLETTER OF THE FINANCE LAB

January 2015, Volume 2, Issue 9

INDIAN INSTITUTE OF MANAGEMENT CALCUTTA

INDIAN INSTITUTE OF MANAGEMENT CALCUTTA

Financial Research & Trading Laboratory

Financial Research & Trading Laboratory

a₹tha

A NEWSLETTER OF THE FINANCE LAB

INDIAN INSTITUTE OF MANAGEMENT CALCUTTA

Indian Institute of Management Calcutta

Diamond Harbour Road,
Joka, Kolkata - 700104
West Bengal
033 2467 8300

Contents

Editorial

The budget is about a month away. There is a mood of high expectation from the Finance Minister. It is believed that our economy is in a stage of take-off and such a flight can only be accentuated by appropriate incentives and stronger macroeconomic positions. The Union Budget of 2015 is expected to announce some bold decisions on economic reforms - mainly in the financial and retail sectors. In view of massive investment requirements in the infrastructure sector, a vibrant bond market is necessary to garner such a large capital. Also a portion of the pension funds can be channelized to finance infrastructure. The time is right for Indi now to act fast as the economic indicators in China are taking some rest!

This issue presents three articles. The first article looks at the stock market reaction to clean audit reports. Even though the stock market is indifferent to audit reports, the author analyses that 'audit-period' has short term influence on the market.

The second article is on the necessity of banking consolidation in India. The extent of consolidation in Indian public sector banking has been very limited. The author argues that in spite of the convergence of the views in favour of bank consolidation across all political spectrum, there has been ambivalence in Indian policy thinking.

The third article deals with Overnight Money Market. The author shows that the overnight nature of the market may bring higher level of volatility in times of stress as Banks will be exposed to roll over risk.

You may send your comments and feedback on this issue to ashok@iimcal.ac.in

Happy reading!

Ashok Banerjee

Auditors! Don’t Rush!

Ashok Banerjee

Ashok Banerjee, Ph.D., is Professor, Finance and Control, Indian Institute of Management Calcutta (IIM-C). He is also the faculty in-charge of the Financial Research and Trading Lab at IIM-C. His primary research interests are in areas of Financial Time Series, News Analytics and Mergers & Acquisitions

Audit reports could be of four types- unqualified (clean), qualified, disclaimer of opinion, and adverse. An Unqualified or clean report is the most coveted one and signifies fairness in financial reporting and disclosures. Audit firms face the risk of losing a client if they issue qualified audit report. On the other hand, failing to qualify would expose auditors to reputation risk and financial damages. A serious audit qualification may cause restatement of financial statements. Auditors, therefore, are generally very careful before issuing a qualified report. The number of qualified reports as a proportion to total audit reports would indicate the overall quality of corporate disclosure practices of firms in a country. Hence, a qualified audit report should, by definition, contain material information about financial statements that may be useful to various stakeholders. The capital market regulator (SEBI) is particularly harsh on firms that possess qualified or other inferior forms of audit reports. A 2012 notification of SEBI proposed to penalise companies saddled with adverse auditor remarks. Listed companies are now required to submit audit report to the stock exchange in separate forms- Form A for firms with unqualified audit reports and Form B for firms with qualified audit reports. Therefore, qualified audit reports should be of particular interest to the investors.

Do audit reports contain meaningful information for the stock market? There have been studies to explore whether auditors’ going concern and internal control reports contain information for the investors. Research results indicate that audit reports have limited informational content for investors and do not form part of their decision making process[1]. Such studies looked at abnormal stock returns and change in volatility of returns around the audit report announcements. It is

[1] Tahinakis, P. Mylonakis, J. and Daskalopoulou, E. 2010. *An Appraisal of the Impact of Audit Qualifications on Firms’ Stock Exchange Price Fluctuations*. Enterprise Risk Management, Vol1, No. 1: E5

generally assumed that signalling effect of auditors report on the going concern status of (distressed) firms should be significant. However, empirical evidences found that auditors' opinion on the going concern qualification provided no additional information to the stock market. A survey based study[2] showed that that qualified audit opinion has no significant effect on share prices and returns. There are studies which found some relationship between qualified audit report and stock market reaction.

The date of release of audit report, particularly those containing adverse comments, should be of immense importance to the investors as these information tend to reduce the information asymmetry between the investors and the firms. However, the empirical results are not encouraging.

It is claimed that audit reports provide an independent assessment on the quality of financial statements and hence should provide valuable information to the users of financial statements. In that sense, audit reports should influence the share price of firms -positively or negatively. However, the reason for empirical evidence about stock market indifference to audit reports may be due to the fact that (a) investors do not understand the language of the audit report; (b) investment decisions are based more on analysts report and less on audit reports; and (c) auditors seldom issue qualified reports.

Earlier the Better?

Though stock markets do not react to clean audit reports as it is believed that these reports do not contain any material information, the market may penalise firms that obtain audit reports faster. In other words, stock markets would want that auditors spend enough time on the books of the firms before issuing audit reports. Hence, a natural query could be whether there is any relationship between the auditing period and stock price reactions. A clean audit report issued too sooner may be accepted by the market with suspicion.

I looked at the audit period (number of days between the balance sheet date and date of audit report) of forty five NIFTY companies over three year periods. While the average audit period

[2] Moradi, M. Salehi, M. Rigi, M. and Moeinizade, M. 2011, *The Effect of Qualified Audit Report on Share Prices and Returns: Evidence from Iran.* African Journal of Business Management Vol.5 (8), pp. 3354-3360

remained same, the minimum and maximum days of audit have declined (Table 1). Hence, in a way, auditors have become more efficient over the years and have completed audit sooner.

Table 1: Audit Period (in days)

Year	Average	Maximum	Minimum
2010-11	42	90	15
2011-12	42	88	13
2012-13	42	82	12

Data Support: Shreyo Mallik, Research Assistant, Finance Lab, IIM Calcutta

Big four audit firms provide audit service to more than 30% of firms under study and during the three year period the auditees have not changed their auditors. Firms with higher profit margins(Table 2) engaged one of the big four audit firms.

Table 2: Audit Period and Profitability

Year	**Avg EBITDA Margin**	Avg Audit Period	Big4 Auditees
2010-11	16.21%	42	13
2011-12	15.06%	42	13
2012-13	17.57%	42	17

Data Support: Shreyo Mallik, Research Assistant, Finance Lab, IIM Calcutta

Is faster audit appreciated by stock market?

I looked at market reaction to faster completion of audit. Does a smaller audit period convey any material information for the market? A clean audit report contains no material information for the market. However, a clean report by an auditor with a short audit period may be looked with suspicion by the market. It is true that auditors nowadays use technology during the audit and hence reply more on systems and software for verifying many transactions. But it is not clear whether a faster completion audit necessarily mean efficiency.

I looked at short-term stock market reaction to the release of audit report. The sample is drawn from NIFTY companies and all audit reports were unqualified or clean. Hence, earlier research has shown that clean reports do not influence market. However, my analysis shows that period of audit has some information for the market - albeit very short term.

I define a short term market reaction as a seven-day excess return reckoned from the date of audit report. The results (Table 3) show that 'audit period' does influence short term market return. It appears that stock market does not like completion of audit too fast. Results show that larger the audit period, more positive is market reaction. This is after controlling for other parameters (e.g., size, and profitability). It is also seen that audits conducted by big four firms have positive influence on the market.

Table 3: Audit Period and Market Reaction

Variables	Excess Return
Audit Period	0.0141*** (0.00418)
Big4 Auditors	0.854*** (0.185)
Size	0.406*** (0.0887)
EBIDTA Margin	0.00799*** (0.00153)
EPS	-0.00130 (0.000816)
Constant	-5.438*** (1.022)
Observations R-squared	1,161 0.033

Robust standard errors in parentheses

***p<0.01, **p<0.05, *p<0.1

Data Support: Shreyo Mallik, Research Assistant, Finance Lab, IIM Calcutta

In India auditors are changed for two reasons-(a) to comply with regulatory requirements and (b) when auditors present reports with adverse comments/observations. Hence, I examined whether change in auditors convey any information for the market in the short run. In my sample for three years of forty five NIFTY companies, six companies have changed auditors once and one company twice. Stock market seems to be indifferent (Table 4) to such change in auditors.

Table 4: Change in Auditors and Market Reaction

Variables	**Excess Return**
Audit Change	0.00601 (0.00308)
Big4 Auditors	0.753** (0.067)
Size	0.508*** (0.0872)
EBIDTA Margin	0.00225** (0.01531)
EPS	0.01891 (0.000564)
Constant	3.87612*** (1.034)
Observations R-squared	1,161 0.056

Robust standard errors in parentheses

***p<0.01, **p<0.05, *p<0.1

Data Support: Shreyo Mallik, Research Assistant, Finance Lab, IIM Calcutta

******

Consolidation in Indian Banking: Is it Still a Far Cry?

Partha Ray

Partha Ray, Ph.D., is Professor, Economics, Indian Institute of Management Calcutta (IIM-C). Prior to joining IIM-C, Prof. Ray, a career central banker, was the adviser to Executive Director, International Monetary Fund, Washington D.C. during 2007-2011.

Among both the supporters and critics of Indian financial sector reform there is near-unanimity that the pace of reform in this sector has not been rash. While a supporter could describe the pace as "calibrated", a critic would perhaps describe it to be "slow". This issue is, however, beyond the hair-splitting semantics as there is a very strong view that it is the slow / calibrated pace of Indian financial sector reform that saved India from the onslaught of the global financial crisis. Is it the right lesson to be drawn? There is an influential view that status quo is not necessarily the right thing in Indian financial sector. Government of India constituted *Financial Sector Legislative Reforms Commission* (FSLRC) in its 2013 Report has mentioned categorically:

> "While India wanted to avoid the path of runaway financial innovation and unmitigated risk-taking that led to the 2008 financial crisis, which continues to threaten the global economy, there was unanimity that the Indian financial structure needs to grow considerably. To enable this, the institutional structure needs to be revamped given that supporting laws are obsolete and organisational structures fragmented. In short, a consolidation of the financial sector laws and organisations was an essential prerequisite for unleashing the potential of the financial sector and in supporting the vaulting ambitions of the real sector" (p. 2).

Curiously, similar sentiment has been echoed in a 2010 Annual Survey of Indian Banking conducted by FICCI, wherein, "almost 62% of the respondents see consolidation as an inevitable process for their banks in the future, while the remainder does not consider it an essential factor for their future progress." Further, "77.78% of public sector respondents were of the opinion that foreign banks should not be allowed to play a greater role in the consolidation process".

Taken together, it emerges that there is reasonable convergence of views on the necessity of banking consolidation in India. Of course, opinions differ regarding the nature of such consolidation. Despite this, it is quite surprising that not much has happened in its front. After all, barring a few, Indian banks are small by international standards and hence considerable efficiency gains could be obtained via consolidation in the banking sector. Presently, in terms of global share State Bank of India (SBI), at the 38th position, and ICICI Bank at 99th position, are the only banks from India appearing in the top 100 banks. [3]

Why do we need consolidation in banking? The gains from consolidation in banking may come both from economies of scale and scope as well as managerial efficiency. Besides, geographical diversification and penetration towards new markets could also come. Finally, in this day and age of globalization, when leading multinationals have shown some acquiring spree globally, why should the aspirations of Indian banks be bound by the national geographical perimeter?

What has been the movement in India in this regard? In not too distant past, HDFC Bank's $2.4 billion purchase of Centurion Bank of Punjab in February 2008 was one of the biggest banking sector take-over. More recently, in November 2014, Kotak Mahindra Bank bought ING Vysya (where the Dutch Bank ING owns roughly a 43 percent stake) in an all-share deal valuing $2.4 billion. As far as the public sector banks are concerned, the instance of the 2007 merger of State Bank of India (SBI) and State Bank of Saurashtra (SBS) is perhaps unique and one of its kind. Thus, extent of consolidation in Indian public sector banking has been rather limited.

Has there been some change in the thinking of economic policy makers in this regard? In his inaugural address on the annual day of the Competition Commission of India on May 20, 2013, the then Finance Minister, P. Chidambaram, categorically mentioned, " ... some banks, including some public sector banks among the 26 public sector banks that we have, may be better off merging. The need for two or three world-size banks in an economy that is poised to become one among the five

[3] See the 2013 RBI Discussion Paper on "Banking Structure in India", for details of pros and cons of banking consolidation in India. This is available at http://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/DPBS27082013_F.pdf

largest in the world is rather obvious". In his maiden Budget speech of July 10, 2014, the Finance Minister Mr Arun Jaitley has said, "There have been some suggestions for consolidation of Public Sector Banks. Government, in principle, agrees to consider these suggestions" (para 129). More recently, in January 2015, in the *Gyan Sangam,* the Bankers' retreat in Pune, one of the key agenda item was, "Consolidation and restructuring of PSBs for better efficiency, governance and capital efficiency".[4]

Despite the convergence of the views in favour of bank consolidation across all political spectrum, there has been ambivalence in Indian policy thinking. For example, the 2013 RBI Discussion Paper on "Banking Structure in India went on to say, "Taking into account the pros and cons of consolidation, it has to be borne in mind that while consolidation of commercial banks with established synergies and on the basis of voluntary initiatives is welcome, it cannot be imposed on banks". The moot question then is: why did it not happen so far? Does the country need 114 Indian banks, comprising 26 Public Sector Banks, 7 New Private Sector Banks, 13 Old Private Sector Banks, 4 Local Area Banks (LABs), 64 regional rural banks (RRBs)? Does not the number seem to be large? The answer to this question perhaps lies in the inability of the financial sector reform process to break the vested interests. After all, a large number of banks suit all the stakeholders - the trade unions, aspiring banking czars and rent seeking / favor distributing politicians with regional fiefdoms - equally well. Consumers' interest in this whole process is a forgotten story. Do we expect the near future to be any different? We will reserve our verdict till the forthcoming Budget pronouncements of Mr. Jaitley on February 28, 2015.

******

[4] http://finmin.nic.in/press_room/2015/GyanSangam020115.pdf

New Dynamism in Money Market

Golaka C Nath*

Dr. Golaka C Nath is a Senior Vice President at the Clearing Corporation of India Ltd. (CCIL). He has over 21 years of experience in the banking and financial sector, having previously worked with the National Stock Exchange of India Ltd. and Vijaya Bank. In the past, he has worked on a World Bank Project on "Developing Bond Market in South Asia". He has also provided secretarial service to the High Powered Committee on "Corporate Bonds and Securitization" appointed by the Ministry of Finance, Government of India.

Overnight Money Market is an important source of support system for Banks seeking to balance the temporary cash flow mismatches in the system. Banks having temporary surplus funds can lend the same to other needy ones who are facing temporary shortages. Dynamism in the money market underwent dramatic change once RBI implemented Term Repo auctions at variable rates for longer maturities (7 and 14-day Repo) and restricted borrowing under Repo Liquidity Adjustment Facility (LAF) window at policy Repo Rate to 0.25% of NDTL. Regular auction of Term Repo is likely to help in developing a term borrowing market for the system which has been one of the important missing link in the money market. Indian money market remained predominantly overnight in terms of characteristics as banks stick to overnight borrowing and lending positions and roll over the same on continuous basis. This overnight nature of the market may bring higher level of volatility in times of stress as Banks will be exposed to roll over risk.

Indian Money Market is one of the most liquid market in terms of its daily turnover. The daily activity has grown significantly in recent years. During 2004-2007, system had excess liquidity and aggressively banks park their surplus funds with RBI in the daily LAF window. Financial crisis forced central banks to infuse good level of liquidity and RBI also infused substantial amount of liquidity to the Banking system. This resulted in surplus funds with Banks in 2009 and ultimately Banks parked these surplus funds with RBI through LAF Reverse Repo window.

Year	Net RBI Support (` crore)	Money Market Activity (` crore)	Avg Money Market Rate (%)
2004	-18380	17324	4.41
2005	-19854	26553	4.99

2006	-22191	42264	6.18
2007	-3639	54107	5.87
2008	3842	66979	7.17
2009	-96784	96578	2.99
2010	11087	81617	4.69
2011	65867	79997	7.36
2012	94267	83575	8.18
2013	87702	114935	8.19
2014	78729	113016	8.17

The overnight Money Market activity revolve around Inter-bank Call, Repo and CBLO market. CBLO is a tradable Repo product. Since 2010, liquidity shortage forces banks to borrow funds from RBI through daily LAF Repo window. Last four years have witnessed substantial borrowing by Banks and the overnight Rate has moved upward as policy Repo Rate stayed at higher level.

In initial phase of the market, market activity was highly concentrated in un-collateralized market like Call but as markets matured, the activity started to move towards collateralized market like Repo and CBLO. In 2004, Call market accounted for 50% of the total activity which has dropped to 14% in 2014. CBLO activity jumped from 16% in 2014 to about 61% in 2009 and remained at that level subsequently.

Year	**Call**	**Repo**	**CBLO**	**Spread**
2004	50%	34%	16%	0.38
2005	45%	24%	31%	0.17
2006	32%	24%	44%	0.32
2007	25%	25%	50%	0.95
2008	23%	24%	53%	0.51
2009	12%	27%	61%	0.40
2010	13%	22%	65%	0.21
2011	18%	21%	61%	0.22
2012	23%	23%	54%	0.13
2013	16%	25%	58%	0.01
2014	14%	28%	58%	-0.10

Heavy dependence on Call market was moderated by putting few restrictions like maximum capacity to borrow and lend in the market by entities and phasing out non-bank entities from the call market segment to ensure the said segment remains a pure inter-bank market as per global standards. However, surprisingly, the spread (Call and Market Repo Rate) declined considerably in 2013 and became negative in 2014. This might happen if lending entities operating in Call market might not have access to other markets like Repo and CBLO to lend funds.

Call market is typically a one-hour market where major portion of activity takes place at the beginning of the day. In 2010, the first hour of trading accounted for 77% of the market activity while in 2011, the same jumped to 81%. However, the same is dynamically changing in recent years. The change in activity pattern is linked to RBI changing the timing of Repo auctions to afternoon. As RBI is auctioning Government cash balances in the afternoon along with conducting variable Repo auctions, market participants wait till end of the market to adjust their positions. This has resulted in last one hour of the market garnering significant volumes of activity. This fragmentation of market may result in higher level of volatility.

Year	**9-10AM**	**10-11AM**	**11-12PM**	**4-5PM**
2010	77%	5%	2%	6%
2011	82%	4%	2%	4%
2012	81%	3%	2%	7%
2013	65%	4%	2%	19%
2014	51%	5%	2%	30%
2015	47%	4%	2%	38%

****