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EDITORIAL

In the changed global and national scenario, the issues of stock market reforms and corporate governance have become very important. Prof. Y.P. Singh and others have made an interesting study on stock market volatility in India with respect to BSE sensex. Dr. Pravin Saxena and Sandhya Garg have made an empirical study on interim financial reporting practices. The study has brought useful findings. Dr. Babita Kumar and others have discussed the menace of non-performing assets in NBFCs. An empirical study on computerization of accounting system in small and medium business enterprises has given us useful findings with respect to IT companies. The issues like IPO scams in India, corporate governance reforms, measurement of capital productivity, in equities in income tax etc. have also been examined by authorities on the subject. Address by our President regarding accounting education and research was an eye-opener. He outlined a special role of business community and higher education.

Date: 31.12.2007

Professor Nageshwar Rao
Chief Editor
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- **Prof. Ranjan K. Bal**, Professor, Department of Commerce, Utkal University, Bhubaneswar
It is my honor and pleasure to address all the members as the President of Indian Accounting Association. I thank the Executive Committee and the General Body of the Indian Accounting Association (IAA) for elevating my position from the Vice-President (Senior) to the President on December 16, 2007 at Jodhpur. The Executive Committee of the Association works as a team and is determined to work hard to keep IAA operating for the benefit of its members in particular and the society in general.

Professor Ranjan. K.Bal, the immediate Past President of IAA, in order to develop networking among the members, got a booklet containing the list of members with emails and phone numbers printed and distributed to members at Jodhpur. I appreciate his efforts and of all the office bearers. The good work of all Past Presidents should be continued.

The vision of the IAA, is to develop it as an Organization with network of Top class Accounting Researchers. In order to realize this, there is a need to have data base about the work being done throughout India in the field of accounting. We should start our own Website at all India level which should be maintained with data updating on day to day basis. Accordingly, a professional organization namely, Messrs. Pro-Part Solutions Ltd, Hyderabad is approached. They agreed to create and maintain the Website, free of cost to start with. The members can browse, download and send information on latest work done by them in the field of accounting for uploading it as well.

As per Indian Culture, Mother is meant for protecting the child; Father is for rendering help and motivates the child; The Guru is supposed to do both. The IAA consisting of majority of Gurus in Accounting as members, need to protect the Accounting knowledge and help young members to get motivated to do research in Accounting. Hence the website of IAA should become a repository of existing knowledge in Accounting and IAA should conduct quality seminars, workshops, and conferences in different chapters to motivate members to undertake quality research in Accounting. Accordingly, IAA-Hyderabad chapter has taken initiative in conducting a National Seminar on "Corporate Reporting" during August 9, 2008 and an International Seminar on themes like "Accounting for Intangibles", "Moving towards IFRB", "An evaluation of Accounting Research in India" during October 24-25, 2008 in collaboration with ISB. The details will be sent through the brochures shortly. I wish that all the chapters must activate the members in developing top class research work in the field of accounting.

The initiatives of all the chapters of IAA shall be consolidated in the form of a report and shall be presented at All India Accounting Conference being held at Ahmedabad in November, 2008. It is also proposed that the conference papers are sent to the concerned chairpersons well in advance so that quality papers are given sufficient time to present at conference at Ahmedabad.

I wish all the members a grand success in this Endeavour.

Prof. K.V. Achalapathi
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Accounting Education and Research

*Ranjan Kumar Bal

Incredible India

India is rising and shining. The letter ‘I’ in the word India stands for ‘innovation’. We are leaders in the process of innovation in IT and BT Industry. India is changing from ‘information-based society’ to ‘knowledge-based society’. India has the second fastest growing economy. Innovation, combined with large-scale global trade in the knowledge sector, is creating wealth and new opportunities. Inclusive innovation is essential for inclusive globalization. India is also poised to take over as a global soft power. Two Harvard Economists, Sachs and Warner, studied 97 countries over two decades to understand what drove the economic success of nations. To the surprise of many, availability of abundant natural resources actually correlated negatively with economic success. Human ingenuity and innovation is always more valuable than physical resources. Innovation is the only option for us if we have to retain our global edge. India has the potential to become a global leader in wisdom-based world. Of 500 fortune companies, 125 companies have R & D bases in India and 380 have outsourced software development to India. Indians have already proved their knowledge, wisdom and leadership in the world. The strengths of Indian economy are buoyant FDI flows, moderate inflation and comfortable foreign exchange reserve. India is also one of the youngest countries in the world as more than half the country’s population still to reach the age of 25. My visit to two countries, viz., Singapore and Malaysia in November 2007

Presidential Address delivered on 15-12-2007 by President, Indian Accounting Association.

*P.G. Department of Commerce, Utkal University, Bhubaneswar -751004
Indian Journal of Accounting

convinced me that the world is changing very fast and *change is the only constant in today's world*. The 19th Asian-Pacific Conference on International Accounting Issues at Kuala Lumpur was a learning experience for me. We have to recognize that there are inter-linkages between quality and excellence. Four delegates from India were able to prove this in the International Conference where delegates from 30 countries participated. I feel delighted to inform you that we, the Indians, now command respect in the world.

**Higher Education**

Knowledge is a resource, which is renewable and can easily be transported, stored and retrieved. Knowledge, it is said, has no substitute. Education is the driving force behind a knowledge-based economy and adds value to the economy. As teachers, researchers and professionals, we have a great responsibility to ensure that the education, which we provide, is really meaningful to the students, the market and the society at large. Nations become big when its young men and women dare to dream big and work for it. India today has a unique opportunity. We the teachers need a vision, a vision for reaching somewhere higher and higher, up the ladder and in areas where we enjoy working. Today's teachers and students are partners in the process of teaching and learning.

In the words of our former president Dr. A.P.J. Abdul Kalam, *"Life is purposeless without dreams. When dreams are intense and pure, they possess electromagnetic energy. Dreams help you to choose your mission in life. But, the realization of the mission requires hard work and perseverance."* The teacher is only facilitator/catalyst, one who will help the student grow to his/her potential to realize his/her dreams. Students remind me that my learning is not complete and never will be. Our HRD Minister, Mr. Arjun Singh, in a seminar organized by UGC said, *"Higher education is a sick child of education. It is not serving the cause of the young people of India ......."* (TOI, 12/10/07). Our Prime Minister Dr. Manmohan Singh is also worried about the "Diverse" between research and teaching in higher education. We are really concerned with the falling standard of higher education. The need of the hour is the pursuit of excellence in our colleges and Universities.

Mr. Sam Pitroda, Chairman of National Knowledge Commission, said recently, *"We must introduce radical changes in education"*. There is need for a research culture in India. Continuous and life long learning is now going to be a pre-requisite to prevent rapid obsolescence. To achieve excellence in life, we have to bridge the gap
between our potential and our performance. Let me give personal views on the higher education in accounting. I must confess that we are not adding much knowledge at the postgraduate level. I feel that IAA should play a role at the postgraduate level education. We should make effort to create good accounting teachers for future. To do so, there is a need to revise our curriculum at the postgraduate level. If ICAI is known all over the world for creating world-class accounting professionals, let us make an effort to see that IAA will be known for developing world-class accounting teachers.

**Accounting Education, Research and Practice**

Accounting is the language of business and also an information system, which helps the stakeholders of the business in their decision-making. It is a well-established branch of knowledge and a respected profession throughout the world. Every university, college and management institute offers courses in accounting. We have to strengthen the three pillars of accounting, viz., *education, research* and *practice*, and also to strengthen their interrelationship.

The new millennium has witnessed globalization of trade and commerce, and revolution of information technology. These unprecedented developments have emphasized the need for raising the quality of accounting education in the 21st century. Research studies show that while business world is experiencing phenomenal changes; accounting education has remained relatively unchanged.

The Albretch and Sack study sponsored by American Accounting Association found the accounting curricula to be very narrow, outdated and irrelevant. (AAA, 2000) It seems that the accounting curriculum is not keeping pace with the emergence of knowledge economy.

We have to make sincere efforts to develop *"accounting curriculum, course contents, pedagogy and faculty resources"*. Accounting curriculum needs to be broadened and cramming of rules or company law sections should be de-emphasized. What is needed is the development of skill of critical thinking, learning to learn on a life-long basis and the faculty for critical analysis. Teaching should not emphasize what accountants used to do but what they are likely to do. The development of values, ethics, integrity and global perspective should be focused in the curriculum. Accounting education should prepare its graduates to be business partners, consultants and team players. Accounting deserves its status of professional and technical education.

Given the change in environment, accounting pedagogy should include *"creative type of learning, team work, assignment with real companies, case analysis,***
oral presentations, role playing, videos, writing assignments, involving business professionals in the classroom, and studying current events". To enrich classroom instructions, students should be provided with opportunities for out-of classroom experiences, such as internship, field studies, on-line (internet) experiences and service-learning assignments. Students need more exposure to the impact of technology on business. We, in India, have to learn from the experiences of other countries to face the emerging challenges of the new millennium. The globalization and liberalization of our economy demands that our accounting curricula, teaching and research should be of global standards. There is need to reposition teaching of accounting in school level to create interest and attract young minds to this profession. Accounting practice should also focus on knowledge and skill development.

Accounting Standard

The accounting fraternity is facing a challenge of making the financial reporting relevant to different stakeholders. In 2001, the IASC after issuing 41 international accounting standards, was replaced by the International Accounting Standard Board (IASB). Since its formation, the IASB has issued eight International Financial Reporting Standards (IFRS) as well as modified several IASs, the standard promulgated by its predecessor, IASC. The EU gave international standards a large boost in June 2000 when it announced that all listed companies throughout the European Union to use IFRS from 2005. Now around 9,000 European companies are using IFRS. China is requiring its listed companies to use IFRS from 2007. Canada and India decided recently to switch to IFRS from 2011. IFRS is now accepted in over 100 countries. The US Securities and Exchange Commission, the capital market watchdog has changed its attitude and is accepting financial statements prepared under International Financial Reporting Standards. (ET, 20/11/07). Henceforth, 1,100 overseas companies listed in the US, including Indian blue chips like Tata Motors, Wipro, HDFC Bank, ICICI Bank and Infosys will no longer have to publish two sets of accounts. We need convergence and global accounting standards. High quality information is integral to high quality decision-making and that is possible only if we have standardized reporting. There is a need to check the impact of the proposed shift to IFRS on the present curriculum at the graduate and postgraduate level education. Moreover, I can see that there is a need for the teachers of accounting to get well acquainted with the new standards. We should be ready to examine and understand the impact of IFRS on reporting requirements. I propose that the IAA should take the responsibility for creating awareness about IFRS at college and university
level. I propose that, IAA should create an expert committee to examine the implications of IFRS and give its views to the policy makers.

Business - The Responsibility
Corporations are powerful institutions whose activities have a significant impact on individuals, communities and society at large. They must be accountable for their business policies and practices, for their own good and for the good of the society. But unfortunately, overemphasis on economic performance as the sole yardstick of success of so called an economic entity leads inevitably to several extra-market implications in modern society, inflicting it with deterioration of quality of life through environmental degradation, social dislocation, exploitation of the weak members of the society and erosion in the value system. There has been a shift in perception about the role, authority and status of business organization from 'economic profit maximizing private entity to economic quality of life enriching social institution'. The new model of business success for corporate would include a movement from philanthropy to convergence of business-social interests as a source of sustainability. The way forward is through sustainable development programmes that increase wealth, promote social equity and preserve ecological integrity. In a resource crunch economy like India, the corporate social responsibility is more important. The participation of the corporate sector in education in India should be significant.

Conclusion
In the modern day knowledge economy, accounting education, research and practice are gaining increasing importance. The expectations and demands of the stakeholders are growing from accounting. Let us make sincere efforts to make accounting education more user friendly and business friendly. I am sure, we can make accounting education really meaningful and relevant to the needs of the knowledge based economy. The Indian Accounting Association has to play pioneering role in developing the accounting education in India. I urge all of you to see yourselves as leaders, motivators and change agents. The new economy in the new millennium is creating a lot of opportunities for accounting. We, the accounting educators, researchers and professionals, can either be relevant or victim of change - the choice is ours. We have come a long way and yet have to traverse a longer way still to fulfill our goals. Swami Vivekanand, the great Indian philosopher, exhorted us then, "Arise! Awake! And stop not till the goal is reached." It is relevant and works well even today.
Stock Market Volatility in India
A Case of Bombay Stock Exchange - Sensex

*Y.P. Singh
**Sudhir Kapoor
***Sonal Khanna Babbar

Abstract
The issues of volatility and risk have become increasingly important in recent times to financial practitioners, market participants, regulators and researchers. The concept of Volatility, its measurement and forecasting has taken a centre stage in econometric analysis dealing with financial variables. The present paper has been taken up to deal with the Volatility issue. This study examines the stylized facts of Sensex Index returns series and measures the extent and pattern of stock return volatility (Interday and Intraday volatility) prevalent in the Indian stock market over the seven years period (2000-2006). However, from an investor's point of view, it would be immensely useful if the future Stock return volatility could be predicted from the past data. In the present study, an attempt has been made to Model the stock market volatility process from the past stock return data.

Volatility of stock returns has been studied in the developed as well as emerging markets. In the Indian context, Roy and Karmakar (1995) focused on the measurement of average level of volatility as the sample standard deviation and examined whether volatility has increased in the early 1990's and whether the trend of the share price movement

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impaired the development process of our economy. Kaur (2002) analysed the extent and pattern of stock return volatility during 1990-2000 and examined the effect of company size, day of the week and FII investments on volatility measured as the sample standard deviation. As per the study, the daily returns of Indian equity market feature Conditional Heteroskedasticity and non linear dependence that cannot be captured by the random walk model. The Autoregressive conditional Heteroskedasticity models are used. The evidence presented reveals that the GARCH (1, 1) model fits the Sensex returns data best. ARCH / GARCH models to forecast volatility have been used by Kaur (2004), Karmakar (2006), Banerjee and Sarkar (2006). A different class of volatility estimators, known as the 'Extreme-value volatility estimators is proposed by Parkinson (1980), Garman and Klass (1980). In addition to the daily closing price, these estimators take into account the daily opening, high and low prices for arriving at the measure of volatility. Due to their superior information content, these estimators are more efficient as compared to the classical estimator. Raju and Ghosh (2004), the research has been taken to understand the time series variations and higher order moments in the volatility of equities in 18 developed and emerging markets. The Interday and Intraday volatility has been calculated using Classical estimators, extreme value estimators namely (Parkinson; Garman & Klass estimators), and Return squared volatility. Pandey (2005) explored the extreme value estimators and found that they perform better than the traditional close to close estimators and the conditional volatility models on efficiency criteria. However, in terms of bias, conditional volatility models perform better than extreme value estimators. Kumar (2006) evaluated, the comparative ability of different statistical and econometric volatility forecasting models in the context of Indian stock and forex markets. A total of ten different models were considered in this study. It is inferred that EWMA will lead to improvements in volatility forecasts in the stock market and the GARCH (5, 1) will achieve the same in the forex market. Toner, In this paper the appropriateness of the different measures of price volatility has been examined, and it has been concluded that measures which incorporate extreme values are more efficient than those that rely on closing prices as they incorporate the full range of prices observed over the entire trading day.

The objective of the present paper is to Model the Daily volatility of the Indian stock market from the past returns. In order to achieve this main objective, further sub-objectives have been laid out which are as follows:

- To analyze the return behaviour exhibited by Sensex and its 30 constituent stocks.
To test whether the mean daily return shown by Sensex is greater than Zero.
To estimate the interval of mean daily return of Sensex for the year 2007.
To measure Interday and Intraday volatility of Sensex.

The study utilized daily price data (high, low, open, Close) for BSE Sensex from January 2000- December 2006. Seven measures of volatility have been used: (i) Close to Close Estimator,(ii) Open to Open Estimator,(iii) High - Low prices, (iv) Parkinson's Extreme value Estimator, (v) Garman and Klass Extreme value Estimator,(vi) Rogers and Satchell Extreme value Estimator,(vii) Exponential Weighted Moving Average (EWMA).

1. Data and Model for Stock Market Volatility

The data employed in the study consists of daily prices of the major stock market index i.e. BSE Sensitive Index (henceforth, BSE Sensex) and its 30 constituent stocks (as on December 31, 2006) for a seven-year period from January 3, 2000 to December 29, 2006. For BSE Sensex, four sets of prices were used. These were daily high, low, open, and close prices. The necessary data have been collected from online database, "Prowess", maintained by CMIE (Centre for monitoring of Indian Economy). Our sample contains a total of 1758 data points of Sensex taken at one-day intervals. The choice of the period is guided by the fact that a lot of policy reform initiatives in the Indian securities market have started during this period. For example, introduction of trading in Index futures, introduction of T+2 settlement system, increase in activity of Foreign Institutional Investors (FIIs) etc., these reforms have made India an attractive destination for many investors.

In order to achieve the main objective of the study, i.e. to model the stock market volatility process from the past stock returns data, the research methodology has been divided into various sub-sections.

1.1 Return behaviour of Sensex

Returns using logarithmic method have been computed

\[ r_t = \ln \left( \frac{P(t)}{P(t-1)} \right) = \ln [ P(t) ] - \ln [ P(t-1) ] \]  \hspace{1cm} (1)

where \( r_t \) is the return in period 't'; \( \ln \) is log (e), a natural logarithm; \( P(t) \) and \( P(t-1) \) are the closing prices for the two successive periods. The returns are multiplied with 100 to convert them into percentage for easier comparison.

• Return statistics which include: Arithmetic Mean, Median, Standard Deviation (\( \sigma \)) and Variance (\( \sigma^2 \)) are computed.
Stock Market Volatility in India/ Singh, Kapoor and Babbar

- We go beyond the first and second order moments, and compute third and fourth order moments to infer more information about the patterns of price returns. Therefore, skewness and kurtosis have also been computed.
- To know whether the data is consistent over the years, the Coefficient of Variation (C.V) has been analyzed.
- Variance of Mean and Variance of Median have been compared to know a better estimator of the two.
- Mean and Variance of returns have also been compared to know the pattern of returns over the years. Intuitively,
  - Mean > Variance ? Binomial Distribution,
  - Mean = Variance ? Poisson Distribution,
  - Mean < Variance ? Geometric Distribution.

**Return statistics of BSE Sensex:** For computing the above mentioned statistics, the period of seven years was divided into two slots; Jan. 2000 - Dec. 2002 and Jan. 2003 - Dec 2006, in a way having three time periods for comparison [2000-02; 2003-06; 2000-06]. The measurements for the Index, BSE Sensex, have been done for these three time periods and also for the individual years.

**Return statistics of Individual Stocks:** In case of individual stocks, the statistics: First four Moments have been estimated over the seven year period i.e. Jan. 2000 - Dec. 2006. Also the correlation coefficient has been computed for each stock in relation to the Sensex. Through SPSS (Statistical Packages for Social Sciences), it has been tested whether the correlation coefficient for each stock and Sensex is significant.

1.2 In order to test whether the mean daily return shown by Sensex is greater than Zero, the following Hypothesis has been used: - The mean daily return of Sensex over the seven year period is zero. i.e.

\[ H_0 : \mu = 0 \quad \quad \quad \quad H_1 : \mu > 0 \]

\[ \alpha = 10\% \text{ (Level of significance)} \quad \quad \quad \quad n = 1758 \text{ (Number of Days)} \]

Using Central Limit Theorem, sample size, \( n > 30 \); we approximate the distribution to be Normal Distribution, \( N \sim (0, 1) \).

- Also, the correlation has been computed between historical returns and one day lagged historical returns and its significance has been tested, using SPSS.
- The Interval estimate for mean daily return, i.e. the range within which the mean daily return of Sensex is likely to remain during the year 2007, has been estimated, using

\[ \mu = \bar{X} \pm z \text{ (se)} \]
Where $\mu =$ Population mean return,
$\bar{X} =$ Sample mean return,
$z =$ Normal variate,
$se =$ Standard error of mean

I.3 To measure Interday and Intraday volatility of Sensex, Traditional and Extreme value Volatility Estimators have been used. These methods are based on the assumption unconditional and constant volatility. To measure Interday volatility, traditional estimators, also called classical estimators, were used.

(i) Close to Close Estimator (Cl.-Cl.), (ii) Open to Open Estimator (Op.-Op.)
Here, volatility is estimated by the sample standard deviation of returns over a period.

$$\sigma_e = \sqrt{\frac{1}{n-1} \sum_{i=1}^{n} (r_i - \bar{r})^2}$$  \hspace{1cm} (2)

Where $\sigma_e =$Classical estimator,

$$r_t = \ln \left[ \frac{P(t)}{P(t-1)} \right] = \ln [P(t)] - \ln [P(t-1)]$$

where $\ln$ is log (e), a natural logarithm,

Returns are then converted into percentage by multiplying them with 100.
P (t) and P (t-1) are the closing prices for the two successive periods [Close to Close estimator], P (t) and P (t-1) are the opening prices for the two successive periods [Open to Open estimator].

* To measure Intra - day Volatility, the traditional as well as extreme value estimators have been used.

- High - Low estimator (Traditional Estimator)
- Extreme Value Estimators:
  ~ Parkinson estimator (1980),
  ~ Garman & Klass estimator (1980),

The notation developed by Garman and Klass is adopted:

$\sigma =$ asset volatility, to be estimated;
$C_t =$ closing price on day t;
$O_t =$ opening price on day t;
$H_t =$ high price on day t;
$L_t =$ low price on day t;
\( c_t = \ln C_t - \ln O_t \), the normalized close price;
\( o_t = \ln O_t - \ln C_{t-1} \), the normalized open price;
\( u_t = \ln H_t - \ln O_t \), the normalized high price;
\( d_t = \ln L_t - \ln O_t \), the normalized low price;
\( n = \) number of daily periods.

- Using this notation the Classical Variance Estimator is given by:

\[
\hat{\sigma}^2 = \frac{1}{n-1} \sum_{i=1}^{n} [(o_t + c_t) - \frac{1}{n} \sum_{i=1}^{n} (o_t + c_t)]^2
\]

However, the High - Low Volatility estimator can be computed using equation (2), here Returns can be calculated using high and low prices of day \( t \).

- The Parkinson [1980] estimator uses instead the high and low values to estimate the variance: It is theoretically five times more efficient compared to traditional close to close estimator.

\[
\hat{\sigma}_p^2 = \frac{1}{4n \ln 2} \sum_{i=1}^{n} (u_i - d_i)^2
\]

- Extending his work, Garman and Klass (1980) constructed an extreme value estimator incorporating the opening and closing prices in addition to the trading range which is theoretically 7.4 times more efficient than its counterpart. Their estimator is given by:

\[
\hat{\sigma}^2_{\text{GK}} = \frac{0.511}{n} \sum_{i=1}^{n} (u_i - d_i)^2 - \frac{0.019}{n} \sum_{i=1}^{n} [c_i(u_i + d_i) - 2u_id_i] - \frac{0.383}{n} \sum_{i=1}^{n} c_i^2
\]

- Both the Parkinson and Garman - Klass estimators, despite being theoretically more efficient, are based on the assumption of driftless Geometric Brownian Motion (GBM) process. Rogers and Satchell (1991) relaxed this assumption and proposed an estimator which is given by:

\[
\hat{\sigma}^2_{\text{RS}} = \frac{1}{n} \sum_{i=1}^{n} [u_i(u_i - c_i) + d_i(d_i - c_i)]
\]

2. **Empirical Results**

2.1 **Return statistics of BSE Sensex**

As a first step, the period of Seven years was divided into the following time slots;
Period 2000-02, Period 2003-06, Period 2000-06. This division lets us know the downturns and then the rebounds happened in the Sensex during this period.

- **Table-1** provides the Daily Return Statistics for the Sensex over different time slots.
  
  The daily return (Arithmetic Mean), volatility (standard deviation) etc. are calculated for each time period. The negative return is reported during the 2000-02 period. Daily Mean return, here is, -0.0525%. The measure of dispersion is 1.733. One interesting observation is that this time period has witnessed negative returns with high volatility, this suggests that investors should enter or exit the market at appropriate time otherwise they would be losers.

  - The experience of time period 2003-06 tells a different story. It has recorded 0.1394 % which suggests a good increase in returns and Volatility 1.392 % for the investors.

  - The overall trend that has been portrayed by time period 2000-06, shows mean returns to be 0.0576 %. (Volatility 1.5492 %)

  - As far as Skewness and Kurtosis are concerned, all three periods have shown returns to be negatively skewed and Leptokurtic in two of the cases.

Moving averages are used to emphasize the direction of a trend and to smooth out price and volume fluctuations, or "noise" that can confuse interpretation. Typically, upward momentum is confirmed when a short-term average (e.g. 5-day) crosses above a longer-term average (e.g. 100-day). Downward momentum is confirmed when a short-term average crosses below a long-term average.

- **Table -2** provides the Return Statistics for the Sensex for individual years.
  
  When we see this table, we find, except the years 2000 and 2001; all others have recorded positive returns. The year 2003 has shown the highest returns, followed by the years 2006 & 2005.

  - When we look at the volatility aspect of the individual years, it is found that year 2000 had remained most volatile with daily s = 2.204, followed by the years 2001 & 2006. The least volatile year recorded was 2005.

  - Third and Fourth order moments infer that the daily return series is negatively skewed, except for the year 2002. In case of Kurtosis, except the year 2004 (Leptokurtic return series), all other years are showing platykurtosis. However, if we see the daily returns over the seven-year period, 2000-06, they are leptokurtic (4.52). The results thus suggest that the return series have fatter tails than the normal distribution.

  - The coefficient of variation is 0.268 for the period January 2000 to December 2006, we interpret that the data has remained consistent over the years.

  - Variance of mean remained lower than the variance of median suggesting that the Mean is a better estimator than Median. As variance is nearly equal to zero, Mean is considered to be a consistent and efficient estimator. [Variance (Mean) = 0.00136 and Variance (Median) = 0.00214].

12
\[ V(\bar{X}) = \frac{\sigma^2}{n} \quad \text{and} \quad V(\text{Med.}) = \pi \frac{\sigma^2}{2n} \]

Therefore, \( V(\bar{X}) < V(\text{Med.}) \). But when \( n \) is large both Mean and Median are consistent estimators. [\( n \) - number of observations.]

Mean of returns is less than variance of returns, it can be said that intuitively, the data is following GEOMETRIC DISTRIBUTION.

2.2 Return statistics of Individual stocks

- The Reliance communications, which was listed on Sensex in the year 2006, has shown the highest daily returns 0.233 %, followed by Maruti Udyog, ICICI Bank. [See Table: 3]

- The most volatile stocks were ITC (6.65%), HLL (5.98%), the least daily volatility is observed in NTPC, Bajaj Auto.

- Out of 30 securities, 25 have shown leptokurtosis in the return Series. Almost 75% of securities have witnessed negative skewness in the return series. It can be generalized that fatter tails and negative asymmetry is prevailing in the Indian stock market.

- The Coefficient of Correlation is also computed between the Sensex and the security. Except Hindalco Ltd. and Infosys, all other securities have positive correlation with Sensex.

- In case of all the securities correlation coefficient is found to be significant at 1 % or 5 % level of significance, except in the case of Hindalco (\( r = -0.012 \)), HLL (\( r = 0.047 \)) and ICICI Bank (\( r = 0.009 \)), where null hypotheses get accepted. (Correlation between Sensex and respective security is zero.)

- It is usually said that an investor is likely to earn returns from equities only if he remains invested for the long term. In this study, we have tested the hypotheses whether the mean daily return of Sensex over 7 years is making the investor earn or lose.

  - Mean Daily Return of the Sensex over the period of seven years is observed to be 0.0576 % and the corresponding Standard Deviation to be 1.5492 %.

  - At 10 % level of significance, the null hypotheses (mean daily return of Sensex is zero) is rejected. That is, the alternative hypotheses is accepted which says the mean daily return over the period of 7 years is greater than zero. If the investor remains invested for long, he trades off between the risk and return.

- The Correlation coefficient between Historical Returns and a one day lagged Historical Returns is found to be 0.0771 and this coefficient is significant at 1% level of significance (p-value: 0.0012)
The Interval estimate for mean daily return, i.e. the range within which the mean daily return of Sensex is likely to remain during the year 2007, has been estimated, using

\[
\mu = \bar{x} \pm z \times (se)
\]

\[
\bar{x} = 0.0576\% \quad \text{[sample mean daily return]}
\]

\[z = 1.64 \quad \text{[90\% confidence level]}
\]

\[se = 1.5492\% \quad \text{[Daily Standard Deviation]}
\]

\[
\frac{0.0576 \pm 1.64 \times 1.5492}{-2.483 \text{ to } 2.598}\%
\]

Thus, the interval within which the mean daily return of Sensex could lie with 90\% confidence is -2.483 to 2.598\%.

2.3 **Measure of Interday and Intraday Volatility**

- To measure Interday Volatility, traditional estimators, also called classical estimators, were used.
  - Close to Close Estimator (Cl.-Cl.),
  - Open to Open Estimator (Op.-Op.).

Here, volatility is estimated by the sample standard deviation of returns over a period. Open-to-Open estimator is very important for several participants. Any positive or negative information that comes after the close of the market and before the start of next day's trading, is expected to get reflected in the opening prices of shares and on the index.

Table 4 provides the Interday volatility and Annualised volatility. Table 5 provides Daily Returns and Annualised Returns.

- Both Returns and Volatility exhibit high variation over a period of time. We see both the estimators (Open to Open estimator & Close to Close estimator) are showing marginal differences in respect of volatility as well as returns.

- The Daily volatility had remained in the range 1-3\% and the corresponding returns in the range -0.097 to 0.231\%.

- Table 4 & 5: The year 2000 has had the highest mean daily volatility as per both the traditional estimators; however, the corresponding returns in this year were negative. [Op.-Op. s = 2.99\%; Cl.-Cl. s = 2.204\%; Returns = -0.0971\%]. Similar results have been experienced in the year 2001; it experienced higher volatility accompanied by negative return. The year 2005 recorded the lowest daily volatility (1.08\%).

- Table 4 & 5 also give the Annualised figures for volatility and returns. We can interpret the same results as above.

- The Most volatile year was 2000 with s = 47.58\% (Op-Op); 34.98\% (Cl-Cl). The Least volatile year was 2005 with s = 17.26\% (Op-Op); 17.15\% (Cl-Cl).

- The Highest returns in the year 2003, 54.61\%.
Thus, we can say that Open-to-Open and Close-to-Close volatility and returns moved in tandem with little divergence in few periods.

For many fund managers, investors, regulators and policymakers, in recent times, intraday volatility has assumed considerable significance because of its influence on the decision of the market participants. Several metrics are employed to estimate intra-day volatility:

- High - Low estimator (Traditional Estimator)

For all the years, these metrics are computed. High-Low volatility conveys extreme movements and dispersion during the trade time. A high degree of high low volatility may shake the investor's confidence in the market. Therefore the market regulators try to ensure that certain measures are implemented to bind the extremes with the help of circuit breakers, exposure limit etc.

- Table 6 gives the Intra-Day volatility and Annualised volatility. The traditional estimator gives different results from that of extreme value estimators. The most volatile year was 2000 as per all the estimators, but when we observe the results for the least volatile year, we have different answers. As per High-Low method, it is year 2005 that has been judged as the least volatile year but according to the 3 extreme value estimators; the least volatile year is 2002.

- One of the interesting points is that the High-Low estimator has given almost similar rankings to the years as in the case of Open-to-Open and Close-to-Close estimators. But, we do find differences among them in absolute terms. The Annualised volatility as per the High-Low estimator is between 9-25 % which is very different from that of Open-Open estimator 17-48 % and that of Close-Close estimator 17-35 %.

3. Conclusions

- Through the study conducted, it has been found that, this seven-year period starting from January 2000 to December 2006 has seen many ups and downs, in respect of prices, returns and most importantly the stock market volatility. The Sensex has witnessed a downfall up to the year 2002; thereafter the continuous improvement is seen in the stock market. The mean daily return have remained in red during the years 2000 & 2001. During the initial years, the high volatility was accompanied by negative returns. Beyond this, the returns started to become positive and this trend is still on. However, the average daily return over seven-year period is no different from zero but surely is positive (0.0576 %). The daily standard deviation from mean value is 1.5492 %.

- The volatility over the years has declined probably because of introduction of financial derivatives, the T+2 cycle, the circuit breakers etc. On the other hand, the returns over time have increased.
The ex-ante relationship between risk and returns, (higher the risk, higher the return) is not observed ex-post. The initial period of the study witnessed high volatility and negative returns; the recent years saw high volatility and also comparatively high returns.

In respect of third and fourth order moments, the data for individual years have been showing mixed results, viz. Negatively skewed in almost all cases except for the year 2002 (positively skewed), and platykurtosis in almost all cases except years 2004 & 2006 (leptokurtic). However, if we see the overall scenario considering period 2000-2006, it is found that the daily return series of BSE Sensex is negatively skewed and showing fatter tails than that of normal distribution (leptokurtic).

Moving averages (MA) are used to emphasize the direction of a trend. The two moving averages have been compared, 5 days MA and 100 days MA. Upto the year 2002, downward momentum is confirmed when a short-term average (5-day) crosses below a long-term average (100-day). Beyond 2002, the 5-day MA crosses above a 100-day MA, confirming the upward trend. During the year 2006, the 5-day MA crosses above 100-day MA, probably hinting the rising trend.

The data over the years found to be consistent as coefficient of variation is 0.268.

Mean is considered to be a consistent and efficient estimator. [Variance (Mean) < Variance (Median)].

The return series is intuitively following Geometric distribution as mean of returns found to be less than variance of returns.

The Reliance communications, which was listed on Sensex in the year 2006, has shown the highest returns 0.233 %, followed by Maruti Udyog, ICICI Bank. The most volatile stocks were ITC (6.65%), HLL (5.98%), the least volatility is observed in NTPC, Bajaj Auto.

Out of 30 securities, 25 have shown leptokurtosis in the return Series. Almost 75% of securities have witnessed negative Skewness in the return series. It can be generalized that fatter tails and negative asymmetry is prevailing in the Indian stock market. Except Hindalco Ltd. and Infosys, all other securities have positive correlation with Sensex. Diversification of risk is possible by holding portfolio of securities as the standard deviation of Sensex is lower than that of any of its security.

The mean daily return over the period of 7 years is greater than zero as the null hypotheses of mean daily return to be zero gets rejected at 10 % level of significance.

The interval within which the mean daily return of Sensex could lie with 90 % confidence is -2.483 to 2.598%.

The year 2000 has had the highest mean daily volatility; the year 2005 recorded the lowest daily volatility. We can say that Open to Open and Close to Close volatility and returns moved in tandem with little divergence in few periods. The traditional estimator gives different results from that of extreme value
estimators. As per High-Low method, it is year 2005 which has been judged as the least volatile year but according to the 3 extreme value estimators, the least volatile year is 2002. The Annualised volatility as per the High-Low estimator is between 9-25% which is far different from that of Open-Open estimator 17-48% and that of Close-Close estimator 17-35%. A high Open to open volatility reveals informational asymmetry and also overflow of information. This information is expected to be reflected in the next day's opening prices of the securities.

• The extreme value estimators have given almost same rankings to various years and the difference in absolute terms is also minimal. As per G&K, the highest volatility is observed in the year 2000 and the lowest volatility in the year 2002.

• The forecast of Annualised Volatility for the year 2007 is 20% and the Annualised returns for the year 2007 have been estimated as: 37.32% The Volatility of the stock market in the year 2007 is expected to be lower than that of year 2006.

References


Chowhan, Piyush Kumar and Vasant Shukla,; "Volatility of Indian Stock markets"; Area-Finance Microstructure, Journal of Economic Literature, Classification-G.


Gupta O.P., "Effect of introduction of Indian Futures on Stock market volatility: The Indian evidence"; Department of Financial studies, University of Delhi South Campus.

Harper, David: "Exploring The Exponentially Weighted Moving Average"; March 5, 2007, investopedia.

Jain, Ravi Kant: "Putting volatility to work"; Active trader, April 2001.

João Duque and Dean A. Paxson: "Empirical evidence on volatility estimators." Associate Professor, Universidade Técnica de Lisboa; Professor of Finance, University of Manchester.


Toner, Martin: "What is the best estimator of price volatility in Futures Markets?"; Futures Research Centre.

PROWESS- online database maintained by Centre for Monitoring of Indian Economy (CMIE).

The Financial Times (ET), December 22, 2006; "Stock market: Highlights and factors to watch".

Table 1: BSE Sensex : Return Statistics January 2000 - December 2006

<table>
<thead>
<tr>
<th></th>
<th>2000-02 (%)</th>
<th>2003-06 (%)</th>
<th>2000-06 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mean bse(M)</td>
<td>-0.05254</td>
<td>0.1394</td>
<td>0.0576</td>
</tr>
<tr>
<td>2. Median</td>
<td>0.0493</td>
<td>0.2458</td>
<td>0.16</td>
</tr>
<tr>
<td>3. Variance (Mean)</td>
<td>0.004009</td>
<td>1.92178E-05</td>
<td>0.001365</td>
</tr>
<tr>
<td>4. Variance (Median)</td>
<td>0.00629</td>
<td>3.01911E-05</td>
<td>0.0021</td>
</tr>
<tr>
<td>5. CV</td>
<td>-32.984</td>
<td>9.988</td>
<td>26.882</td>
</tr>
<tr>
<td>6. SD(σ)</td>
<td>1.73305</td>
<td>1.392</td>
<td>1.5492</td>
</tr>
<tr>
<td>7. Variance</td>
<td>3.0034</td>
<td>0.01939</td>
<td>2.40013</td>
</tr>
<tr>
<td>8. Kurtosis</td>
<td>2.1592</td>
<td>7.9606</td>
<td>4.5262</td>
</tr>
<tr>
<td>9. Skewness</td>
<td>-0.33704</td>
<td>-0.8942</td>
<td>-0.6131</td>
</tr>
<tr>
<td>10. Trading days</td>
<td>749</td>
<td>1009</td>
<td>1758</td>
</tr>
</tbody>
</table>

Table 2: BSE Sensex : Daily Return Statistics January 2000 - December 2006

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mean (M)</td>
<td>-0.0925</td>
<td>-0.0793</td>
<td>0.01379</td>
<td>0.2146</td>
<td>0.0483</td>
<td>0.1406</td>
<td>0.1532</td>
</tr>
<tr>
<td>2. Median(Me)</td>
<td>0.1052</td>
<td>0.0068</td>
<td>0.0427</td>
<td>0.31</td>
<td>0.1717</td>
<td>0.21492</td>
<td>0.3009</td>
</tr>
<tr>
<td>3. Var(Mean) [V(M)]</td>
<td>0.0194</td>
<td>0.0119</td>
<td>0.00484</td>
<td>0.00535</td>
<td>0.0102</td>
<td>0.0046</td>
<td>0.01059</td>
</tr>
<tr>
<td>4. Var(median) [V(Me)]</td>
<td>0.0305</td>
<td>0.0187</td>
<td>0.0076</td>
<td>0.00841</td>
<td>0.01603</td>
<td>0.0073</td>
<td>0.0166</td>
</tr>
<tr>
<td>5. Coefficient of (C.V) variation</td>
<td>-23.82</td>
<td>-21.68</td>
<td>79.902</td>
<td>5.4312</td>
<td>33.266</td>
<td>7.6819</td>
<td>10.6157</td>
</tr>
<tr>
<td>6. SD</td>
<td>2.204</td>
<td>1.7209</td>
<td>1.10237</td>
<td>1.166</td>
<td>1.6099</td>
<td>1.0804</td>
<td>1.6273</td>
</tr>
<tr>
<td>7. Variance(V)</td>
<td>4.857</td>
<td>2.9616</td>
<td>1.215</td>
<td>1.359</td>
<td>2.5918</td>
<td>1.1672</td>
<td>2.6481</td>
</tr>
<tr>
<td>8. Kurtosis</td>
<td>0.946</td>
<td>1.6627</td>
<td>1.4935</td>
<td>0.1329</td>
<td>13.748</td>
<td>0.4047</td>
<td>3.0024</td>
</tr>
<tr>
<td>9. Skewness</td>
<td>-0.242</td>
<td>-0.456</td>
<td>0.1421</td>
<td>-0.1898</td>
<td>-1.553</td>
<td>-0.4421</td>
<td>-0.4845</td>
</tr>
<tr>
<td>10. Trading days</td>
<td>250</td>
<td>248</td>
<td>251</td>
<td>254</td>
<td>254</td>
<td>251</td>
<td>250</td>
</tr>
</tbody>
</table>

M<V Geometric distribution V(M)< V(Me) Mean a better estimator
Table 3: Daily Return Statistics (%) of Sensex stocks: January 2000-December 2006

<table>
<thead>
<tr>
<th>Company</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
<th>Kurtosis</th>
<th>Skewness</th>
<th>Trading days</th>
<th>Correlation coeff. b/w Sensex &amp; Security</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>0.079</td>
<td>0.063</td>
<td>2.661</td>
<td>3.58</td>
<td>-0.17</td>
<td>1758</td>
<td>0.585</td>
</tr>
<tr>
<td>Bajaj auto</td>
<td>0.113</td>
<td>0.04</td>
<td>2.151</td>
<td>2.41</td>
<td>0.105</td>
<td>1758</td>
<td>0.437</td>
</tr>
<tr>
<td>BHEL</td>
<td>0.132</td>
<td>0.093</td>
<td>2.841</td>
<td>4.84</td>
<td>-0.28</td>
<td>1758</td>
<td>0.561</td>
</tr>
<tr>
<td>Bharti Airtel</td>
<td>0.216</td>
<td>0</td>
<td>2.71</td>
<td>3.14</td>
<td>2.71</td>
<td>1226</td>
<td>0.44</td>
</tr>
<tr>
<td>Cipla</td>
<td>-0.101</td>
<td>0.017</td>
<td>5.071</td>
<td>679.1</td>
<td>-22.61</td>
<td>1758</td>
<td>0.268</td>
</tr>
<tr>
<td>Dr.Reddy</td>
<td>-0.037</td>
<td>0.027</td>
<td>3.44</td>
<td>179.68</td>
<td>-9.04</td>
<td>1758</td>
<td>0.27</td>
</tr>
<tr>
<td>Grasim</td>
<td>0.105</td>
<td>0.033</td>
<td>2.554</td>
<td>3.59</td>
<td>-0.09</td>
<td>1758</td>
<td>0.489</td>
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<tr>
<td>Guj. Amb.</td>
<td>-0.049</td>
<td>0.043</td>
<td>5.406</td>
<td>1135.39</td>
<td>-30.2</td>
<td>1758</td>
<td>0.23</td>
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<tr>
<td>HDFC Bank ltd</td>
<td>0.103</td>
<td>0.021</td>
<td>2.247</td>
<td>13.69</td>
<td>0.11</td>
<td>1758</td>
<td>0.419</td>
</tr>
<tr>
<td>Hero Honda</td>
<td>-0.026</td>
<td>-0.019</td>
<td>4.658</td>
<td>841.82</td>
<td>-24.01</td>
<td>1758</td>
<td>0.249</td>
</tr>
<tr>
<td>Hindalco</td>
<td>-0.091</td>
<td>0.029</td>
<td>5.889</td>
<td>1279.37</td>
<td>-33.05</td>
<td>1758</td>
<td>-0.012</td>
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<tr>
<td>HLL</td>
<td>-0.133</td>
<td>-0.038</td>
<td>5.988</td>
<td>1309.33</td>
<td>-33.61</td>
<td>1758</td>
<td>0.047</td>
</tr>
<tr>
<td>HDFC</td>
<td>0.098</td>
<td>0.025</td>
<td>2.858</td>
<td>201.28</td>
<td>-8.045</td>
<td>1758</td>
<td>0.227</td>
</tr>
<tr>
<td>ICICI bank</td>
<td>0.144</td>
<td>-0.01</td>
<td>3.04</td>
<td>3.36</td>
<td>0.18</td>
<td>1758</td>
<td>0.009</td>
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<tr>
<td>ITC</td>
<td>-0.075</td>
<td>-0.003</td>
<td>6.649</td>
<td>1377.03</td>
<td>-34.91</td>
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<td>Infosys Tech</td>
<td>-0.106</td>
<td>0.059</td>
<td>5.056</td>
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<td>L&amp;T</td>
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<td>-5.52</td>
<td>1758</td>
<td>0.458</td>
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<tr>
<td>Maruti udyog</td>
<td>0.197</td>
<td>0.083</td>
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<td>2.36</td>
<td>0.26</td>
<td>878</td>
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<td>NTPC</td>
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<td>0.059</td>
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<td>1.674</td>
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<td>540</td>
<td>0.584</td>
</tr>
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<td>ONGC</td>
<td>0.081</td>
<td>0.058</td>
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<td>27.742</td>
<td>-1.449</td>
<td>1758</td>
<td>0.414</td>
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<td>Ranbaxy lab</td>
<td>-0.048</td>
<td>0</td>
<td>3.133</td>
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<td>-9.11</td>
<td>1758</td>
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<tr>
<td>Reliance comm.</td>
<td>0.233</td>
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<td>3.291</td>
<td>4.77</td>
<td>-0.51</td>
<td>207</td>
<td>0.687</td>
</tr>
<tr>
<td>Reliance energy</td>
<td>0.056</td>
<td>-0.022</td>
<td>2.66</td>
<td>12.32</td>
<td>-0.44</td>
<td>1758</td>
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<tr>
<td>Reliance Industr.</td>
<td>0.096</td>
<td>0.164</td>
<td>2.391</td>
<td>16.3</td>
<td>-1.04</td>
<td>1758</td>
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<td>Satyam</td>
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<td>0.066</td>
<td>5.587</td>
<td>403.14</td>
<td>-14.64</td>
<td>1758</td>
<td>0.443</td>
</tr>
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<td>SBI</td>
<td>0.097</td>
<td>0.089</td>
<td>2.335</td>
<td>3.86</td>
<td>-0.43</td>
<td>1758</td>
<td>0.641</td>
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<tr>
<td>TCS</td>
<td>0.035</td>
<td>0.217</td>
<td>3.449</td>
<td>311.03</td>
<td>-15.07</td>
<td>591</td>
<td>0.364</td>
</tr>
<tr>
<td>Tata motors</td>
<td>0.085</td>
<td>0.102</td>
<td>2.854</td>
<td>1.67</td>
<td>-0.178</td>
<td>1758</td>
<td>0.569</td>
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<tr>
<td>Tata Steel</td>
<td>0.069</td>
<td>0.093</td>
<td>2.88</td>
<td>35.69</td>
<td>-2.32</td>
<td>1758</td>
<td>0.607</td>
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<tr>
<td>Wipro</td>
<td>-0.082</td>
<td>-0.018</td>
<td>4.832</td>
<td>170.26</td>
<td>-8.19</td>
<td>1758</td>
<td>0.491</td>
</tr>
</tbody>
</table>
### Table 4: Interday and Annualised volatility (%) (Traditional Methods)

<table>
<thead>
<tr>
<th>Year</th>
<th>Interday Op.-Op. volatility estimator</th>
<th>Annualised Op.-Op. volatility</th>
<th>Ranks</th>
<th>Interday Cl.-Cl. volatility estimator</th>
<th>Annualised Cl.-Cl. volatility</th>
<th>Ranks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2.9974</td>
<td>47.58</td>
<td>1</td>
<td>2.204</td>
<td>34.98</td>
<td>1</td>
</tr>
<tr>
<td>2001</td>
<td>1.9854</td>
<td>31.51</td>
<td>2</td>
<td>1.7189</td>
<td>27.28</td>
<td>2</td>
</tr>
<tr>
<td>2002</td>
<td>1.1811</td>
<td>18.74</td>
<td>6</td>
<td>1.10237</td>
<td>17.49</td>
<td>6</td>
</tr>
<tr>
<td>2003</td>
<td>1.2351</td>
<td>19.606</td>
<td>5</td>
<td>1.166</td>
<td>18.509</td>
<td>5</td>
</tr>
<tr>
<td>2004</td>
<td>1.709</td>
<td>27.12</td>
<td>3</td>
<td>1.61114</td>
<td>25.57</td>
<td>4</td>
</tr>
<tr>
<td>2005</td>
<td>1.0883</td>
<td>17.27</td>
<td>7</td>
<td>1.0804</td>
<td>17.15</td>
<td>7</td>
</tr>
<tr>
<td>2006</td>
<td>1.6018</td>
<td>25.42</td>
<td>4</td>
<td>1.6273</td>
<td>25.83</td>
<td>3</td>
</tr>
</tbody>
</table>

### Table 5: Daily and Annualised returns (%) (Traditional Methods)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>-0.0971</td>
<td>-24.275</td>
<td>7</td>
<td>-0.0925</td>
<td>-23.125</td>
<td>7</td>
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<tr>
<td>2001</td>
<td>-0.0849</td>
<td>-21.0552</td>
<td>6</td>
<td>-0.079</td>
<td>-19.592</td>
<td>6</td>
</tr>
<tr>
<td>2002</td>
<td>0.023</td>
<td>5.773</td>
<td>5</td>
<td>0.0137</td>
<td>3.4387</td>
<td>5</td>
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<tr>
<td>2003</td>
<td>0.213</td>
<td>54.102</td>
<td>1</td>
<td>0.215</td>
<td>54.61</td>
<td>1</td>
</tr>
<tr>
<td>2004</td>
<td>0.465</td>
<td>11.811</td>
<td>4</td>
<td>0.0483</td>
<td>12.2682</td>
<td>4</td>
</tr>
<tr>
<td>2005</td>
<td>0.14186</td>
<td>35.60686</td>
<td>3</td>
<td>0.1406</td>
<td>35.2906</td>
<td>3</td>
</tr>
<tr>
<td>2006</td>
<td>0.1582</td>
<td>39.55</td>
<td>2</td>
<td>0.153</td>
<td>38.25</td>
<td>2</td>
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</table>

### Table 6: Intraday and Annualised volatility (%)

<table>
<thead>
<tr>
<th>Year</th>
<th>High-Low Estimator</th>
<th>Annual Rank</th>
<th>Parke Rank</th>
<th>Annual Rank</th>
<th>G&amp;K Rank</th>
<th>Annual Rank</th>
<th>R&amp;S Rank</th>
<th>Annual Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1.559</td>
<td>24.762</td>
<td>1</td>
<td>1.906</td>
<td>30.265</td>
<td>1</td>
<td>1.785</td>
<td>28.347</td>
</tr>
<tr>
<td>2001</td>
<td>1.292</td>
<td>20.5190</td>
<td>4</td>
<td>1.504</td>
<td>23.879</td>
<td>2</td>
<td>1.469</td>
<td>23.329</td>
</tr>
<tr>
<td>2002</td>
<td>0.695</td>
<td>11.042</td>
<td>6</td>
<td>0.965</td>
<td>15.323</td>
<td>7</td>
<td>0.929</td>
<td>14.755</td>
</tr>
<tr>
<td>2003</td>
<td>0.721</td>
<td>11.455</td>
<td>5</td>
<td>1.013</td>
<td>16.085</td>
<td>5</td>
<td>0.964</td>
<td>15.316</td>
</tr>
<tr>
<td>2004</td>
<td>1.443</td>
<td>22.91</td>
<td>3</td>
<td>1.409</td>
<td>22.380</td>
<td>4</td>
<td>1.35</td>
<td>21.440</td>
</tr>
<tr>
<td>2005</td>
<td>0.623</td>
<td>9.891</td>
<td>7</td>
<td>0.974</td>
<td>15.463</td>
<td>6</td>
<td>0.953</td>
<td>15.130</td>
</tr>
<tr>
<td>2006</td>
<td>1.472</td>
<td>23.375</td>
<td>2</td>
<td>1.46</td>
<td>23.183</td>
<td>3</td>
<td>1.432</td>
<td>22.476</td>
</tr>
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Computerization of Accounting System in Small and Medium Business Enterprises - Some Issues

*V. Ushakiran
**M.V. Karunasri

Abstract

Accounting needs differ greatly by type of business though each business has the flow of transactions, which ultimately end up in sale and collection of proceedings. Further, the size of the business also matters when it comes to the establishment of accounting system. Most of the small and medium size business entities used to adopt manual accounting system i.e. handling of accounts manually. Of late small and medium business houses are also taking the help of computers in managing the accounting system. While computerizing the accounting system, business enterprises have to take some important decisions and analyze certain issues. The managements have to deliberate on some aspects like how much is to be invested, what software is to be purchased, whether training is to be imparted to self or staff, what kind of precautions are necessary in administering the computerized accounting system. Keeping in view the importance of a proper accounting system in organizations and its computerization, an attempt is made through this paper to overview the computerization of accounting system in small and medium enterprises.

Accounting needs differ greatly by type of business though each business has the flow of transactions, which ultimately end up in sale and collection of

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**Faculty, Department of Commerce, Osmania University College for Women, Koti, Hyderabad
proceedings. Further, the size of the business also matters when it comes to the establishment of accounting system. Most of the small and medium size business entities used to adopt manual accounting system i.e. handling of accounts manually. Of late small and medium business houses are also taking the help of computers in managing the accounting system. While computerizing the accounting system, business enterprises have to take some important decisions and analyze certain issues. The managements have to deliberate on some aspects like how much is to be invested, what software is to be purchased, whether training is to be imparted to self or staff, what kind of precautions are necessary in administering the computerized accounting system. Keeping in view the importance of a proper accounting system in organizations and its computerization, a survey is conducted to overview the computerization of accounting system in small and medium enterprises.

Objectives and Hypotheses

The research study is conducted with the following objectives:

- To understand the extent of computerization of accounts in small and medium enterprises located in a particular neighbourhood business area.
- To throw light on the decisions required in computerizing the accounting system.

The study is based on the following hypotheses:

- Hypothesis 1: There is no association between the level of education of businessmen and the computerization of accounting system.
- Hypothesis 2: There is no association between the Commerce background of businessmen and the computerization of accounting system. Computerization of accounting system is adopted irrespective of the faculty of the education from which the businessmen come from.
- Hypothesis 3: There is no association between the turnover of the business and the computerization of accounting system.

Research methodology

The study is based on primary data collected from 61 shops located at an important business area, Koti, Hyderabad. This area is known for a variety of businesses with different investments and turnovers. A questionnaire was prepared and administered to the small and medium business enterprises, which were chosen on convenience basis. While selecting the sample, required care is taken to see that all kinds of business establishments are covered. The study mainly considers the business establishments located in a particular geographical area; hence the conclusions drawn may be suffering
from this constraint. General details about the business enterprises are given for the entire sample whereas analysis of decisions with reference to the computerization of accounting system is taken up on the basis of 53 business enterprises which have computerized their accounting system. The data are analyzed with the help of percentages. The Chi-square test is used to test the hypotheses.

**Business Enterprises - Profile Characteristics**

The survey includes 61 sample business units, which differ in type of business, size, accounting system and type of control. Each business enterprise has a history of its own and each owner is different in risk taking, control and organization.

**Business - Size**

Size of the business determines the accounting requirements, employee requirements and other controlling aspects. The sample mainly includes small & medium enterprises. Business enterprises with less than 200 employees and whose turnover is less than Rs.250 million are known as small and medium enterprises.

**Table 1: Business Size based on Turnover**

<table>
<thead>
<tr>
<th>Turnover in Rs. Lakhs</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 15</td>
<td>21</td>
<td>34</td>
</tr>
<tr>
<td>15 --- 30</td>
<td>21</td>
<td>34</td>
</tr>
<tr>
<td>30 --- 45</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>45 --- 60</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>60 --- 75</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>75 --- 90</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>90 --- 105</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>61</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from primary data

A majority of the business units (34% each) belong to a turnover category below Rs. 15 lakhs and Rs.15 to 30 lakhs followed by other categories i.e. Rs. 30 lakhs to 45 lakhs, Rs.90 lakhs to 105 lakhs, (8% each) Rs.75 lakhs to 90 lakhs (7%).

In this connection, a hypothesis is set to understand the relationship between the turnover and adoption of computerization of accounting system. The hypothesis holds true, as the calculated value (1.11) is less than the table value 5.99 for two degrees of freedom at 5% level of significance. [For the purpose of computation of 2 the turnover (in Rs. Lakhs) is categorized into three, i.e., 0-45, 45-90 and above 90, hence,
3X2 table]. The decision of computerizing the accounting system is not dependent on the size of the business.

**Computerization of Accounting System**

The explosion of computer accessibility and processing power brought with it a revolution in book keeping and accounting. What was once a burdensome and difficult process has become almost effortless. Almost all business units small or big now are dependent on computers for maintenance of the dreary chore of tracking what has happened to predict what is to come.

**Table 2: Adoption of Computerized Accounting**

<table>
<thead>
<tr>
<th>Maintenance of Accounts</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Computer</td>
<td>53</td>
<td>87</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>61</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from primary data

It can be observed from Table 2 that 87% of business organizations have adopted computerization of accounts. Business enterprises realized that with computerization, the task of accounting becomes more easy, organized and productive. The efficiency of organizations increase as minute-to-minute changes and the transactions are recorded accurately. Very complicated financial statements, key ratios, net worth, taxes payable and paid, depreciation calculations etc., can be obtained on just a click of button.

**Decision over Accounting Software**

There are numerous software packages available for accounts maintenance. Business houses have to decide whether to go for a general software or buy a customized or tailor made software.

**Table 3: Popularity of Accounting Software**

<table>
<thead>
<tr>
<th>Accounting software</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tally</td>
<td>33</td>
<td>62</td>
</tr>
<tr>
<td>Focus</td>
<td>15</td>
<td>28</td>
</tr>
<tr>
<td>Wings</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Any other</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>53</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from primary data
In an enquiry about the software, it is found that most of the business organizations (62%) use Tally software followed by Focus (28%), Wings (8%) and others (2%). The selection of software mainly depends on what kind of accounting information is necessary and what type of business one is into. Almost all the software packages can produce similar statements such as income, cash, balance sheet, stock etc. But some software packages are very specialized, powerful, user friendly, which, make them more adoptable than other software. It is further found that the cost of software of different companies is not varying much and works out to Rs 15,000 to Rs one lakh depending on the complexity of software,

Initiation of Computerized Accounting

Computerization of accounting system has been a recent phenomenon as revealed in Table 4. Majority of the organizations (62%) has computerized accounting in the last 3 to 5 years followed by 22% of the organization trying it for below 3 years.

<table>
<thead>
<tr>
<th>Years of usage</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below 3</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td>3 -- 5</td>
<td>33</td>
<td>62</td>
</tr>
<tr>
<td>5 -- 10</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td>Above 10</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from primary data

Further, it is noticed that a very few organizations (16%) have ventured and taken initiative well before the year 2002 in computerizing accounting system.

Computerization of Accounting System - Control and Training

Perhaps even more important than selecting the software is the decision as to who will be operating it. The best accounting package in the world isn't going to be much help unless the person operating the program has accounting and computer skills.
Table 5: Operation and Control of Accounting System

<table>
<thead>
<tr>
<th>Control &amp; Maintenance of Accounts</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only Owner</td>
<td>11</td>
</tr>
<tr>
<td>Owner + Part time employee</td>
<td>9</td>
</tr>
<tr>
<td>Owner + Full time employee</td>
<td>20</td>
</tr>
<tr>
<td>Owners' Control</td>
<td>40 (75%)</td>
</tr>
<tr>
<td>Full time Employee</td>
<td>10</td>
</tr>
<tr>
<td>Part time Employee</td>
<td>3</td>
</tr>
<tr>
<td>Employees' Control</td>
<td>13 (25%)</td>
</tr>
</tbody>
</table>

Source: Compiled from primary data

It is observed from Table 5 that in an overwhelming percentage of the business enterprises (75%) owners on their own or along with employees maintain these operations. A mere twenty five percent of the enterprises left the control to employees exclusively. Further, the organizations should understand that training is an important factor in computerization of accounts. It is not just the selection of software, which makes the system efficient, but the training one receives in running the programs.

Table 6: Training Details

<table>
<thead>
<tr>
<th>Attend Computer Training</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>40</td>
<td>75</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>53</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from primary data

Table 6 shows that 75% of the owners have equipped themselves with the soft skills by undergoing the training programme. Further, the study also reveals that 20% of organizations have sent their employees for computer training. Training makes one learn effectively and feel comfortable with different programs, which provide for different day-to-day accounting information needs.

Computer software companies, nowadays, provide software along with the training and also ongoing support system. It is always better to buy software, which can integrate different functions and also provide the required support.

**Purchase Decision - Influencers**

Computerization of accounts is a major decision taken by organizations. This decision makes an impact on the organization as it brings major changes in entire business
in terms of systems, human resources and financial commitment (especially at the time of computerization). The business organizations should weigh pros and cons of computerizing the accounts and take the decision. Friends, trade associations, self-interest or motivation by chartered accountants or software companies are the factors influencing the computerization of accounting system.

**Table 7: Influencers in Computerization of Accounting system**

<table>
<thead>
<tr>
<th>Influencers in Computerization</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivated by Chartered Accountants</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Own Idea</td>
<td>16</td>
<td>30</td>
</tr>
<tr>
<td>Suggestion from Friends</td>
<td>19</td>
<td>35</td>
</tr>
<tr>
<td>Motivated by Software companies</td>
<td>7</td>
<td>14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>53</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Compiled from primary data

It is found that 35% of business entities computerized accounts on the advise of friends followed by self motivation (30%), on the suggestion of chartered accountants (21%) and motivation from software companies (14%). Word of mouth (suggestion from friends and chartered accountants (30% + 21% = 51%)) plays an important role in computerization of accounts. It shows that such decisions are taken by observing the experiences of others.

**Technology usage in Business**

Computer usage in organizations varies with the type of use they are put to. It is possible to use computers for many operations such as billing, at the point of sale, inventory control, accounts maintenance. Some organizations adopt computerization in a big way whereas some organizations graduate from basics to complex operations.

**Table 8: Use of Computer in Business**

<table>
<thead>
<tr>
<th>Use of Computer</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billing Only</td>
<td>01</td>
<td>2</td>
</tr>
<tr>
<td>Billing &amp; Maintenance of Accounts</td>
<td>15</td>
<td>28</td>
</tr>
<tr>
<td>Maintenance of Accounts only</td>
<td>37</td>
<td>70</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>53</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Compiled from primary data

It is observed from Table 7 that 70% of business houses adopted computers for the maintenance of accounts only whereas 28% of the organizations using it for both
accounts and billing. Just 2% of the organizations are using computer for billing. It clearly shows that business organizations are for automated accounting system.

**Computerization of Accounting system - Loss of Data**

When computers are used for accounting, there is some probability of loss of data due to accidents, software or hardware damage, fraud or embezzlement. While establishing the automated accounting system itself, the business enterprises should prepare themselves to meet such contingencies.

**Table 9: Readiness in meeting the contingencies**

<table>
<thead>
<tr>
<th>Preparedness to face loss of data</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Accounts</td>
<td>20</td>
<td>38</td>
</tr>
<tr>
<td>C Ds</td>
<td>21</td>
<td>40</td>
</tr>
<tr>
<td>Never thought of</td>
<td>12</td>
<td>22</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>53</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from primary data

The survey reveals that 69% of the business houses are cautious and are prepared for the breakdown of computer system. Maintenance of back up accounts in CDs and manual accounts are the ways adopted by business houses to face the loss of data.

**Computerization of Accounting system - Frauds**

Does automation reduce frauds in an organization is a very big question. With or without computerization of accounting system, there always lies a probability of foul play by employees. With proper security checks and internal control it is always possible to reduce frauds in computerized accounting system.

**Table 10: Computerization - effect on fraud**

<table>
<thead>
<tr>
<th>Does the computerization reduce frauds</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>51</td>
<td>96</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>53</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Compiled from primary data

As per Table 10, 96% of the business organizations are happy that computerization reduces the frauds.
Conclusion

All the business houses seek to be efficient and accurate in maintaining accounting system, which helps management in understanding the financial soundness of the business. Most of the business entities realized that computerization of accounting system is the only answer in handling complex financial records to give out complicated reports with in a minute moment. While automating the accounting system, organizations have to concentrate on the informational needs of the management and decide on the type of software to be used. The other important decisions relate to training the human resources, how much amount to be invested in hardware and software, what type of security care is necessary to face loss of data, whether to start with integrated package or a basic then to upgrade. It is quiet certain that all most all the business houses convert their accounting system from manual to computerization in near future as the happy experience with computerization of accounting system spreads in the business community through the word of mouth.

References
4. How Computers have simplified accounting , Carol.L.Cook, Yale- New Haven Teachers Institute.- www.yale.edu/ynhti/curriculum/units
5. A Computer is only as good as its software - scholar.google.com
6. The entrepreneur as controller - scholar.google.com
7. Getting started: Determining what you need - scholar.google.com
8. Are you ready for big leagues - scholar.google.com
Interim Financial Reporting Practices in Indian Corporate Sector

*Sandhya Garg
**Pravin Saxena

Abstract
The study deals with measuring the quality of content provided by Indian Companies in their interim reports. Interim reports are crucial for companies as well as investors. Transparent operations and time-to-time provided information help companies in attracting more number of investors. The study depicts that most of the companies under consideration are not providing necessary information as none of them has reported and disclosed the cash flow statement and balance sheet, which are considered by financial analysts and investors to judge financial soundness of company. Companies are providing information related to profit and loss statement and explanatory notes only. The study also provides an insight of global indexation.

Introduction
India's key routes of commerce and communication, the resilience of its democratic institutions, the enterprise and skill of its people in science and knowledge industries make it a right dissemination for foreign direct investment. Looking at the current trend it can be found out that more and more foreign investors are willing to invest funds in India and at the same time Government of India is also opening new avenues to allow foreign direct investment in India. The question that arises in mind of foreign investors is of decision that in which companies they should go along with their money. While making their decision, investors bend towards companies that are

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Interim Financial Reporting Practices in Indian Corporate Sector / Garg and Saxena

transparent in their operations and provide time-to-time information. In this way, preparation of interim financial reports can also help companies in attracting foreign direct investment. Interim Financial Reporting (IFR) began in 1902 with the United States Steel Corporation becoming the first corporation to publish quarterly financial information. Interim statements are designed to provide a timely reporting of pertinent financial information with highlights of significant happenings. The IFR is intended to assist the investors and other users in foreseeing the performance trend of the business. With the passage of time and increasing volatility of the market 'more information faster' is the watchword of today.

In India, IFR are prepared and presented by the listed companies in compliance with the requirement of the listing agreement. The frequency of interim reporting varies from country to country. With the liberalization of financial and capital market in the late 1980's, there has been mounting pressure on Indian Industries to provide good quality information on international standards to promote the stability of the market. Hence, the present study has been undertaken in respect of IFR practices in Indian corporate sector in order to examine the following objectives.

Objectives of the Study
• To analyze the IFR practices of Indian companies in respect to compliance of Accounting Standard 25
• To compute IFR practice index to rank companies on qualitative and quantitative aspect.

Research Methodology

The following research methodology was adopted to achieve the objectives of the study:
Sample size : 30 companies
Sample Design : Domestic Indian companies preparing IFR
Sampling Technique : Companies, which published their IFR first in Economic Times and Hindustan Times during the year 2006-2007

Sources of data collection
Secondary data : Internet, News papers, Magazines, Journals, Books, Company reports, Company websites

Review of Literature

Indian Journal of Accounting

Manoharan T.N., (2004): Attempted to find out whether there could be any significant improvement in IFRs reporting in India as per AS 25.

Turner Lynn E., (1999): In their study entitled "Initiatives for Improving the Quality Of Financial Reporting", Chief Accountant, U.S. Securities and Exchange Commission, attempted to examine the issues affecting the quality of transparency, financial reporting audit effectiveness and current focus on financial reporting issues.

Compliance to Accounting Standard 25

Accounting Standard 25

Accounting Standard 25, 'Interim Financial Reporting', issued by the Council of the Institute of Chartered Accountants of India, comes into effect in respect of accounting periods commencing on or after 1-4-2002. The objective of this Statement is to prescribe the minimum content of an interim financial report and to prescribe the principles for recognition and measurement in a complete or condensed financial statement for an interim period.

Content of an Interim Financial Report

A complete set of financial statements normally includes: a) Balance sheet; b) Statement of profit and loss; c) Cash flow statement; and d) Notes including those relating to accounting policies and other statements and explanatory material that are an integral part of the financial statements.

Analyses of Degree of Compliance to AS 25

In order to measure the extent of compliance of AS 25 in Interim Financial Reports of companies, a comparison between Interim Financial Reports of companies and minimum contents of AS 25 has been carried out as mentioned above.

A. Balance Sheet

According to AS 25, financial statement of a company must include balance sheet. A company disclosing its balance sheet in IFR must present specific information as per AS 25 in respect to Sources of Funds viz Capital, Reserve and surplus, Minority interests (in case of consolidated financial statements), Loan funds: a) Secured loans, b) Unsecured loans and Application of Funds viz Fixed assets: a) Tangible fixed assets, b) Intangible fixed assets, Investments, Current assets, loans and advances: a) Inventories, b) Sundry debtors, c) Cash and bank balances, d) Loans and advances, e) Others.
Findings

It has been found that none of the company is preparing its balance sheet for the purpose of IFR. Thus, it can be concluded that domestic companies are lacking far behind in fulfilling the requirement of AS 25, which is a matter of serious concern as regard to compliance of AS 25. In absence of balance sheet, the change in the owner's equity and financial position cannot be analyzed and hence various stakeholders will feel unsecured and will be unable to take informed financial decisions.

B. Statement of Profit & Loss

Another component, which is required under minimum contents of AS 25, is 'Statement of Profit & Loss'. The information which is required in this statement and being disclosed by the companies under study is as follows:

<table>
<thead>
<tr>
<th>Contents</th>
<th>No. of Companies Disclosed</th>
<th>No. of Companies Not Disclosed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Turnover</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>2. Other Income</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>2</td>
</tr>
<tr>
<td>3. Changes in inventories</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>4. Cost of raw materials</td>
<td>28</td>
<td>2</td>
</tr>
<tr>
<td>5. Salaries, wages and</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>6. Other expenses</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>7. Interest</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>8. Depreciation and amortizations</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>9. Profit or loss from ordinary activities before tax</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>10. Extraordinary items</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>11. Profit or loss before tax</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>12. Tax expense</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>13. Profit or loss after tax</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>14. Minority Interests</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>15. Net profit or loss for the period</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>Earnings Per Share</td>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>1. Basic Earnings Per Share</td>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td>2. Diluted Earnings Per Share</td>
<td>28</td>
<td>2</td>
</tr>
</tbody>
</table>

Findings

Following findings have been observed:

1. All companies are providing basic information regarding their turnover, inventory, expenses, interest, depreciation, taxes, profits etc.
2. The information where companies are lacking behind is 'Extra ordinary items' viz losses from natural disaster, insurance claims etc & 'Minority interest'. It has been observed that only 20% companies are disclosing information about extra ordinary items whereas a mere 6.67% companies are providing information regarding minority interests.

3. Some companies are also providing extra information, which are not required as per AS 25. 46.67% companies are mentioning about earning before interest, tax & depreciation. 10% companies providing information about earnings before depreciation & tax.

C. Cash Flow Statement

Information required as per AS 25 as regard to cash flow statement are cash flows from operating, investing, financing activities, net increase/(decrease) in cash and cash equivalents, cash and cash equivalents at beginning and end of period.

Findings

Cash flow statement is not being prepared by any of the company. Hence, the users of accounting statements are unable to evaluate the ability of the enterprise to generate cash and cash equivalent and forecast the future cash flows.

D. Selected Explanatory Notes

According to paragraph 16 of AS 25, an enterprise should include the following information, as a minimum, in the notes to its interim financial statements, if material and if not disclosed elsewhere in the interim financial report. The table below shows the number of companies disclosing and not disclosing the required contents of explanatory notes.

Table 2: Disclosure As Regard To Selected Explanatory Notes

<table>
<thead>
<tr>
<th>Contents</th>
<th>No.of Companies Disclosed</th>
<th>No.of Companies Not Disclosed</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Follow up of same accounting policies as before &amp; any change in</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>accounting policies may be depicted stating the nature and affect of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Comments about seasonality of interim operations</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>c) Nature &amp; amount of item affecting assets, liability, equity, net</td>
<td>24</td>
<td>6</td>
</tr>
<tr>
<td>income, cash flow</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

34
| j) Nature and amount of changes in estimates | 17 | 13 |
| of amounts reported in prior interim | period or financial years if those changes | have material affect |  |
| e) Issuance, buybacks, repayment, restructuring | 15 | 15 |
| of debt, equity and potential equity shares |  |
| f) Dividend (aggregate per share, percentage) | 2 | 28 |
| for each category |  |
| g) Segment reporting to disclose segment | 25 | 5 |
| information: |  |
| Product segment: |  |
| Segment revenue | 11 | 19 |
| Segment capital | 11 | 19 |
| Segment results | 11 | 19 |
| Geographical segment: |  |
| Segment revenue | 1 | 29 |
| Segment capital | 0 | 30 |
| Segment results | 1 | 29 |
| h) Material events subsequent to the end of | 5 | 25 |
| the interim period not reflected in the |  |
| financial statements for the interim period |  |
| Effect of change in composition of the | 22 | 8 |
| enterprise during the interim period such as |  |
| amalgamation, acquisition or disposal of |  |
| subsidiaries and long term investments |  |
| restructurings and discontinuing operations |  |
| j) Material changes in contingent liability | 0 | 30 |

**Findings**

a) 93.33% companies are not stating any thing about accounting policies being followed in the interim financial statements. 6.67% of them are mentioning that they have followed different policies in their quarterly reports, but the effect of change on profitability and its impacts on financial position is not being disclosed.

b) None of the companies are providing any note about seasonality of interim operations and material changes in contingent liability.

c) 80% companies are mentioning about nature of items effecting assets, liability, equity or cash flow. For e.g. revised employee benefit plans

d) 56.67% companies are providing information regarding some estimated changes in respect to future mergers, amalgamations, change in policies etc.
e) 50% companies are disclosing information about issuance, buyback, repayment, restructuring of debt, equity etc.

f) Only 6.67% companies are providing information about dividend.

g) 83.33% of companies are stating a note related to their segment division.

h) As information about material events is quite important part for investors to make their decisions but only 16.67% companies are providing note about those activities, which are material to their company.

i) 73.33% are giving note about effect of change in composition of enterprise.

j) In respect to segment reporting, AS 25 requires disclosure viz product & geographical segment. It was observed that none of the companies are providing information as regard to both the segments. 36.67% are disclosing information as regard to product wise whereas just 10% companies are disclosing information of their business according to geographical segmentation.

Computation of Interim Financial Reporting Practices Index

A comparative analysis of Interim Financial reporting practices of companies under consideration was done and they were put on scorecard according to content and context. For this purpose a scorecard developed by Mak Yuen Teen and Penelope Phoon-Cohen for business times named BUSINESS TIMES CORPORATE TRANSPARENCY INDEX was taken into consideration. Above index was modified according to Indian environment. The index rates companies on the quality of their financial disclosures and the way they are presented. Companies score higher on the index when they provide information beyond the requirements specified in the listing requirements (content) and provide such information in a more timely, transparent and accessible manner to the market.

The index reviews, analyses and scores quarter-end financial reports filed and associated documents, such as press releases, corporate fact sheets and presentations, against a scorecard which is split into two sections: "content" and "context". The "content" section assesses the quality and quantity of financial information provided. The "context" section scores the effectiveness of how the "content" is communicated to the market. The index provides a maximum score of 100, out of which 60 points are allocated to the content section and 40 points to the context section.
Table 3: Factors Considered For Indexation

<table>
<thead>
<tr>
<th>CONTENT</th>
<th>IFRICODE</th>
<th>MAX SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Completeness of information released:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance Sheet</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Profit and Loss Account</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Cash Flow Statement</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Statement of Changes in Equity</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Segmental breakdown (market, country, industry, product)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Expenses breakdown (interest, directors' remuneration, auditors' fees, depreciation, staff costs)</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Detailed Explanation of results</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Future plans and prospects</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Details of borrowings, contingent liabilities, risks, provisions</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Maximum for Content</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td><strong>CONTEXT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Timeliness of release of results (mutually exclusive):</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Results announced within 30 days</td>
<td>11</td>
<td>15 (max)</td>
</tr>
<tr>
<td>- Results announced after 30th day but before 60th day:</td>
<td>12</td>
<td>Variable</td>
</tr>
<tr>
<td>- Results announced on 60th day</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>- Results announced after 60 days 0</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>Means of dissemination*</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Key management represented at results conference**</td>
<td>16</td>
<td>5</td>
</tr>
<tr>
<td>Stock exchange announcement of release date</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>Results announced/displayed on company's website</td>
<td>18</td>
<td>5</td>
</tr>
<tr>
<td>Maximum for Context</td>
<td>19</td>
<td>40</td>
</tr>
<tr>
<td><strong>MAXIMUM OVERALL</strong></td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

*Means of Dissemination*

Under "means of dissemination", additional points that are given by companies for uploading their presentation slides or having web casts of their briefings on their websites are considered.

**Key Management Represented at Result Conference**

This section states about the key management representatives who were present at the time of presentation of report. It shows about the attitude and significance for the company towards disclosure of quarterly reports.
**Table 4: Computation Of Index (Annexure1)**

**Findings**

1. 83.33% of total companies are going for segmental breakdown. But it has been observed that none of those 83.33% companies are going for more than single segment wise classification.

2. For expenses breakdown, all companies are disclosing information related to 3 factors only that are interest, depreciation and staff cost. None of the companies are providing information related to director's remuneration and auditor's fees.

3. For detailed explanation of results, companies are not scoring well. Highest score that companies are scoring here is 6.66 out of 10. 53.33% companies are scoring in range of 3 to 5 whereas 10% of them are scoring even below 2.

4. Only 26.67% companies are stating something about their future plans and prospectus.

5. "Other details" is another area where companies are not scoring well. None of them is stating about their borrowings and risks. Only 10% and 13.33% are giving information related to contingent liability and provisions respectively.

6. As it is given in scorecard that 15 marks are to be awarded to those companies who are releasing their quarter results within 30 days, it has been observed that all companies are releasing their results within 30 days.

7. 36.67% of the companies have shown some statistical calculations on slides, for e.g. percentage by which their sales increased/decreased, their EPS etc whereas only 3% companies are showing some graphical pictures like comparison of current year's results with previous year's results.

8. For key management represented at result conference and stock exchange announcement of release date, information is not accessible; therefore no marks could be awarded for these sections of scorecard.

9. There are 3% companies who are not having their registered website. Excluding those all other companies are displaying their results on their websites.

**Companies At Score Card**

On plotting the scores on a scorecard ranking from highest to lowest, it has been found that company scoring highest marks is KEI Industries ltd.th 49.5831 out of total score of 100. Lowest marks scoring company is Supreme Yarns Ltd. with score of 34.336. These results show very clearly that Indian companies are far lacking behind in their interim financial report disclosing practices.
Table 5: Companies At Scorecard

<table>
<thead>
<tr>
<th>Company</th>
<th>Scores</th>
<th>Company</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kei Industries Ltd.</td>
<td>49.58</td>
<td>J H S Svendgaard Laboratories Ltd.</td>
<td>42.58</td>
</tr>
<tr>
<td>Lakshmi Energy &amp; Foods Ltd.</td>
<td>46.91</td>
<td>Pioneer Embroideries Ltd.</td>
<td>42.58</td>
</tr>
<tr>
<td>LT Overseas Ltd.</td>
<td>46.25</td>
<td>Tata Consultancy Services Ltd.</td>
<td>42.08</td>
</tr>
<tr>
<td>O C L India Ltd.</td>
<td>45.24</td>
<td>Venus Remedies Ltd.</td>
<td>41.91</td>
</tr>
<tr>
<td>JK Agri genetics ltd.</td>
<td>45.08</td>
<td>Monnet Ispat &amp; Energy Ltd.</td>
<td>41.91</td>
</tr>
<tr>
<td>Sutlej Textiles &amp; Inds. Ltd.</td>
<td>44.58</td>
<td>Jindal Stainless Ltd.</td>
<td>41.25</td>
</tr>
<tr>
<td>Bajaj Auto Ltd.</td>
<td>43.91</td>
<td>Hindustan Zinc Ltd.</td>
<td>41.25</td>
</tr>
<tr>
<td>Kamdhenu Ispat Ltd.</td>
<td>43.24</td>
<td>Moser Baer India Ltd.</td>
<td>40.00</td>
</tr>
<tr>
<td>Bharat Earth Movers Ltd.</td>
<td>43.24</td>
<td>Ranbaxy Laboratories Ltd.</td>
<td>39.58</td>
</tr>
<tr>
<td>Biocon Ltd.</td>
<td>42.58</td>
<td>Ess Dee Aluminium Ltd.</td>
<td>39.58</td>
</tr>
<tr>
<td>Dalmia Cement (Bharat) Ltd.</td>
<td>42.58</td>
<td>K S Oils Ltd.</td>
<td>39.5</td>
</tr>
</tbody>
</table>

Suggestions & Recommendations

It was observed during the study that Indian companies are not matching with global standards in their interim financial disclosure practices. Here are some suggestions to improve the quality of their disclosure practices:

- It is suggested that companies should disclose balance sheet as this statement is of immense importance for investors for making projection about the financial health of the company.
- It is recommended that statement of change in owner’s equity should also be prepared as a part of IFR.
- Cash flow statements should be prepared as it gives an insight about the inflows and outflows of cash and cash equivalent and may help in future forecasting of cash.
- Indian companies are lacking in providing some important information like material event, estimated changes, effect of changes etc. By giving such information, Indian companies can improve their standard of disclosing practices.
- Attitude of company towards interim reports is reflected in terms of key management represented at result conference. Presence of top management authorities at the time of disclosure of reports will help companies in gaining confidence of investors.

References

Revised Business Times CTI 2006 scorecard by Mak Yuen Teen and Penelope Phoon-Cohen
<table>
<thead>
<tr>
<th>IFRICODE</th>
<th>CONTENT</th>
</tr>
</thead>
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Menace of Non Performing Assets (NPAs) in Non Banking Finance Companies (NBFCs)

*Babita Kumar  
*Gagandeep Banga  
**Sukhmani Bhatia

Abstract

NBFCs are into the business of providing loans of small amounts for a short duration and are relatively small-sized financial intermediaries working in miniscule niches. RBI has eased its policy on granting licences to national and even foreign banks for setting up NBFCs in India. Competition is very high in this financial sector. In order to acquire business and in the absence of stringent norms w.r.t NPAs and provisioning, these NBFCs acquire a portfolio saddled with bad loans called NPAs. No study has been conducted on the NPAs in NBFCs in India. This research paper analyses the reasons of NPAs in one of the leading NBFC of Ludhiana. The NPAs of this firm in Ludhiana exceeds the internal benchmark of the company i.e., 6% of the total loans disbursed and the 1-2% norm of RBI for banks. This can have serious implications for the financial health of the company if this study is an indication. Hence the need of the hour is to have stricter norms w.r.t NPAs in NBFCs.

NBFCs are privately owned, decentralized, and relatively small-sized financial intermediaries working in different, miniscule niches and make the market more broad-based and competitive. NBFCs have registered significant growth in recent years both

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Menace of NPAs in NBFCs / Kumar, Banga and Bhatia

in terms of number and volume of business transactions. NBFCs have succeeded in India in mobilization of dormant assets and users of credit because of their ability to take quicker decisions, mould their service according to the needs of the clients, and render prompt and courteous services with lesser formalities, personalized and higher level of customer orientation and undertake few pre and post sanction requirements. For regulatory purposes, NBFCs have been classified into 3 categories (a) those accepting public deposits, (b) those not accepting public deposits but engaged in financial business and (c) core investment companies with 90% of their total assets as investments in the securities of their group/holding/subsidiary companies.

One of the major problems being faced by these NBFCs is of NPAs. NPAs have been defined according to their environment and system in different countries. Non Performing Asset in India means an asset or account of borrower, which has been classified by a bank or financial institution as sub-standard, doubtful or loss asset, in accordance with the directions or guidelines relating to asset classification issued by RBI. Sub-standard asset is the asset, which has been classified as NPA for a period not exceeding two years. Doubtful asset is an asset which has remained NPA for a period exceeding two years. Loss asset is the one where a loss has been identified by the firm or internal or external auditors or the RBI inspection but the amount has not been written off wholly or partly. RBI has fixed NPA limit for the banks to be between 1-2% of the total assets whereas there is no such norm for the NBFCs. While banks enjoy an elaborate legal credit recovery mechanism in the form of DRT (Debt Recovery Tribunals) and SARFEASI Act (Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002), NBFCs do not have this privilege.

Many researchers tried to find the reasons for a loan turning into non performing loan in various sectors. A large part of the bad debts in banks are a result of the misuse of the Indian banking industry for political reasons (Sharma, 2001), lack of trained personnel, direct lending and directed investments, politicking in the appointment of the top people of banks, politically motivated loan melas and loan waiver schemes and no provisions for bad and doubtful debts separately (Subramanya, 2002). The major reason for the large accumulated NPAs in SFCs (State Financial Corporations) was the lack of experience and technical know-how on the part of entrepreneurs in managing their units and poor follow up by the SFCs (Gupta et al, 2004). Most of the studies reviewed relate to banks and very few to the other financial institutions like SFCs etc. Hardly any study has been conducted on NPAs in NBFCs. The present study was conducted with the objective of probing the various causes of NPAs of a selected NBFC.
The study was conducted on one of the leading NBFC of Ludhiana which was established in the city in 2000-2001. There are 5 branches of this NBFC in Ludhiana and data from all the 5 branches of the NBFC was taken. To study the NPAs both primary and secondary data was collected. The secondary data was collected for Personal Loans (more than 90% business of the company is in personal loans) from the records of the company for the time period 2001-2006 on the amount of logins, disbursements, recoveries and NPAs. The primary data w.r.t causes of NPAs was collected with the help of two structured non-disguised questionnaires—one for the executives and other for the NPA accounts. A list of executives/managers working in credit, sales and collection department of all the 5 branches was collected. 6 executives/managers were chosen proportionately from each branch (2 from each department) and hence a total of 30 executives/managers were contacted as they were responsible for loan sanctioning, disbursement and recovery. The 30 accounts which had turned NPA, were also contacted. The list of NPAs was obtained from the collection head of the company and the respondents were chosen randomly and contacted to find the reasons for non-payment of the loans. The results from the NBFC executives and NPA accounts were compared to find if any difference existed between them.

Critical Appraisal of NPAs

As there are liberal norms for recognition of and provisioning against NPAs for NBFCs, loans are given liberally increasing the risk of acquiring bad loans.

Logins, Disbursements and Recoveries

The chosen NBFC gives loans of small amounts for a short duration at an interest rate of approximately 15-20%. First of all the applications/requests for the loans are received called logins. Then the company disburses the sanctioned amount to the customer after all the documents are found to be in tune with the policies of the company and all the formalities have been fulfilled. Once the loan has been disbursed then the next step is to see that the collection of loan takes place in time i.e. the borrower pays all his installments in time.
Table 1: Logins, Disbursements, Recoveries and NPAs

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<th>No. of Disbursements (%age increase)</th>
<th>Disbursements as %age of logins</th>
<th>Recoveries in Rs. Lakhs (%age increase)</th>
<th>NPAs in Rs. Lakhs (Percentage Increase)</th>
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<td>2002</td>
<td>16228 (-)</td>
<td>5408(-)</td>
<td>33.3</td>
<td>1821.82(-)</td>
<td>70.98(-)</td>
<td>3.75</td>
</tr>
<tr>
<td>2003</td>
<td>18575 (14.46)</td>
<td>6019(11.30)</td>
<td>32.4</td>
<td>2032.92(11.59)</td>
<td>73.73(3.87)</td>
<td>3.5</td>
</tr>
<tr>
<td>2004</td>
<td>21148 (13.83)</td>
<td>9752(62.02)</td>
<td>46.1</td>
<td>3259.61(60.34)</td>
<td>153.59(108.31)</td>
<td>4.5</td>
</tr>
<tr>
<td>2005</td>
<td>28770 (36.04)</td>
<td>9973(2.27)</td>
<td>34.7</td>
<td>3298.57(1.20)</td>
<td>191.98(25.00)</td>
<td>5.5</td>
</tr>
<tr>
<td>2006</td>
<td>30078 (4.55)</td>
<td>11542(15.73)</td>
<td>38.4</td>
<td>3797.32(15.12)</td>
<td>242.38(26.25)</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Table 1 shows that there is a sharp increase (62%) in disbursements in 2004 because the competition was negligible and the major market share was held by this NBFC. With the aim of expanding business, the company started a number of employee contests focused on disbursements. Due to greater number of disbursements in 2004, increase in the work force, introduction of the concept of mobile vans and a tie up with Vishal Mart, increased the number of logins in 2005 sharply (36%). It helped the company to penetrate in the market better. In the year 2006, the company registered a very small increase (4.55%) in the percentage of logins because company decreased work force due to black listing of some direct sales force team members. Some of the high performers left the company to join the competitors which adversely affected the performance. Due to a sizable increase in the portfolio (logins and disbursements) in 2004 recoveries also increased (60.34%). The compounded annual growth rate for the five years for logins, disbursements and recoveries was 117%, 121% and 120% respectively. The average percentage increase for logins, disbursements and recoveries was 17.22%, 22.83% was 22.06% respectively for five years. As compared to Logins the disbursements were high, increasing the risk of the company acquiring bad loans. Growth of recoveries was comparable to that of the disbursements. Disbursements as percentage of logins were found to be near the 33% benchmark set by the company. In most of the years it exceeded the benchmark because of the emphasis of the company to disburse more and more in the market.

Also there is a tremendous increase in the level of NPAs or delinquent accounts (108.31%) in the year 2004 because of the increase in the number of disbursements. In the pursuit of acquiring business, the company acquired some bad loans with weak profiles which are not able to make their payments in time and some times don't make payments at all, leading to greater number of NPAs. In 2005 the percentage growth of
NPAs dropped to 25%. Due to shooting up of NPAs in the previous year the company's attention was focused on the collections. The compounded annual growth rate of NPAs and average percentage increase for the five years was found to be 136% and 40.85% respectively. Recoveries show lesser growth. The percentage of NPAs has almost doubled in these 5 years i.e., from 3.75 to 6%. The national benchmark for the company is 4%. In the initial years the delinquency was between this limit but now the limit of delinquency has been crossed and has reached 6% which is posing a great problem to the company as greater NPAs directly impact the company's profitability.

Factors considered before giving loan

The company employees were asked to rate the factors considered for loan approval in order of importance on a five point scale.

Table 2: Factors considered before giving loan

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person's credibility</td>
<td>5.0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Past track record of person</td>
<td>4.1</td>
<td>1.17</td>
<td>5.32*</td>
</tr>
<tr>
<td>Processing fees</td>
<td>2.4</td>
<td>0.93</td>
<td>3.52*</td>
</tr>
<tr>
<td>Influential reference</td>
<td>1.9</td>
<td>1.31</td>
<td>4.75*</td>
</tr>
<tr>
<td>Business profile</td>
<td>4.7</td>
<td>0.48</td>
<td>19.04*</td>
</tr>
<tr>
<td>Type of loan</td>
<td>4.3</td>
<td>0.47</td>
<td>15.28*</td>
</tr>
<tr>
<td>Duration of loan</td>
<td>4.2</td>
<td>0.43</td>
<td>15.70*</td>
</tr>
<tr>
<td>Loan amount</td>
<td>4.5</td>
<td>0.51</td>
<td>15.832*</td>
</tr>
<tr>
<td>Capacity to pay</td>
<td>4.6</td>
<td>0.5</td>
<td>17.03*</td>
</tr>
</tbody>
</table>

* Significant at 5% level of significance

Table 2 shows that the most important factors were person's creditability, business profile, capacity to pay, loan amount, type of loan, duration of loan and past track record of the person. All the factors are significant at 5% level of significance.

Causes and Remedies of NPAs

The responses regarding causes and remedies of NPAs have been recorded from the employees and NPA turned accounts of the company and a comparison was made to find out if there was any difference between these responses.
Table 3: Comparison of reasons of NPAs

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>Employees</th>
<th></th>
<th></th>
<th>NPA Accounts</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean 1</td>
<td>R1 rank</td>
<td>t value</td>
<td>Mean 2</td>
<td>R2 rank</td>
<td>t value</td>
<td>d=R1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macro factors</td>
<td>4.2</td>
<td>4</td>
<td>16.858*</td>
<td>4.1</td>
<td>3</td>
<td>7.999*</td>
<td>1</td>
</tr>
<tr>
<td>Business Slowdown</td>
<td>4.5</td>
<td>2</td>
<td>9.127*</td>
<td>4.2</td>
<td>2</td>
<td>7.309*</td>
<td>0</td>
</tr>
<tr>
<td>Internal family problems</td>
<td>4.2</td>
<td>4</td>
<td>16.858*</td>
<td>3.8</td>
<td>5</td>
<td>3.525*</td>
<td>-1</td>
</tr>
<tr>
<td>Unable to pay</td>
<td>4.3</td>
<td>3</td>
<td>15.277*</td>
<td>4.4</td>
<td>1</td>
<td>15.389*</td>
<td>2</td>
</tr>
<tr>
<td>Wrong commitment by</td>
<td>4.0</td>
<td>5</td>
<td>4.014*</td>
<td>4.0</td>
<td>4</td>
<td>4.568*</td>
<td>1</td>
</tr>
<tr>
<td>the officer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrong dealing of customers</td>
<td>3.8</td>
<td>6</td>
<td>4.323*</td>
<td>3.5</td>
<td>7</td>
<td>2.151*</td>
<td>-1</td>
</tr>
<tr>
<td>Delay in disbursement</td>
<td>2.5</td>
<td>10</td>
<td>2.921*</td>
<td>2.7</td>
<td>8</td>
<td>1.439</td>
<td>2</td>
</tr>
<tr>
<td>Wrong selling</td>
<td>4.6</td>
<td>1</td>
<td>10.500*</td>
<td>4.0</td>
<td>4</td>
<td>3.808*</td>
<td>-3</td>
</tr>
<tr>
<td>Over leverage of existing</td>
<td>4.6</td>
<td>1</td>
<td>10.500*</td>
<td>4.1</td>
<td>3</td>
<td>4.750*</td>
<td>-2</td>
</tr>
<tr>
<td>borrowers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of exp. &amp; technical</td>
<td>3.6</td>
<td>7</td>
<td>3.739*</td>
<td>3.6</td>
<td>6</td>
<td>2.786*</td>
<td>1</td>
</tr>
<tr>
<td>knowledge of the</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disbursement of loans</td>
<td>2.8</td>
<td>8</td>
<td>0.961</td>
<td>2.6</td>
<td>9</td>
<td>2.183*</td>
<td>-1</td>
</tr>
<tr>
<td>before compliance of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>conditions of sanctions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insufficiency of funds</td>
<td>2.3</td>
<td>11</td>
<td>2.710*</td>
<td>2.5</td>
<td>10</td>
<td>2.386*</td>
<td>1</td>
</tr>
<tr>
<td>Political interference/</td>
<td>2.6</td>
<td>9</td>
<td>1.459</td>
<td>2.7</td>
<td>8</td>
<td>1.273</td>
<td>1</td>
</tr>
<tr>
<td>influence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 5% level of significance  
\[
\mu = 3 \quad t \quad 5\% \quad (d.f. = 29) = 2.045  
\]
\[
r = 0.99, \quad t (\text{calculated}) = 5.354, \quad t \quad 5\% \quad (d.f. = 28) = 1.701  
\]

Table 3 shows that the most important causes of loan turning into an NPA according to the company employees was wrong selling, over leverage of existing borrowers, business slowdown and simply unable to pay. The result are found to be significant for all factors at 5% level of significance except disbursement of loans before compliance of conditions of sanctions and political interference/ influence.

According to the NPA accounts the most important reasons for their turning into bad loans was simply unable to pay, business slowdown, macro factors, over leverage of existing borrowers and wrong selling. The results have been found to be
significant at 5% level of significance for all factors except delay in disbursement and political interference.

Spearman's rank correlation coefficient was found to be 0.99 which shows that the responses of two samples are positively and highly correlated to each other for all the factors. This correlation coefficient was checked at 5% level of significance and was found significant.

Follow up activities

The follow up activities carried out by the company in order to prevent NPAs for keeping a check on the current customers and a track of the sick accounts.

<table>
<thead>
<tr>
<th>Follow up activities</th>
<th>No. of employees(%)</th>
<th>No. of NPA Accounts(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal visits</td>
<td>30(100.0)</td>
<td>29(96.7)</td>
</tr>
<tr>
<td>Telecalling</td>
<td>29(96.7)</td>
<td>27(90.0)</td>
</tr>
<tr>
<td>E-mails</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Notices are sent</td>
<td>21(70.0)</td>
<td>13(43.3)</td>
</tr>
<tr>
<td>SMS</td>
<td>-</td>
<td>17(56.7)</td>
</tr>
</tbody>
</table>

* Multiple responses

Table 4 shows that both the sets of respondents agreed that personal visits and telecalling was done. 70% of the employees said that notices were sent for payment of instalments while only 43.3% NPA accounts agreed with it. 56.7% of NPA respondents also said that SMS were sent to remind them of the due date of payment of installments and as reminders. Emails were not used because most of the borrowers are from the low income group who might not have an access to internet.

Corrective steps followed by the company

The respondents were asked to rate the corrective steps taken by the company in order to control the increasing level of NPAs on a five point scale ranging from most important (5) to least important (1).

Table 5 shows that the important corrective steps followed by the company were ensuring vigilant and responsive management, efficient reminder system, efficient follow up procedure, loan settlement, credit monitoring cell at corporate and zonal office, information technology and maintenance and regular updating of client profile. The t for
Menace of NPAs in NBFCs / Kumar, Banga and Bhatia

all factors except Inter department MIS and risk monitoring office has been found significant at 5% level of significance.

Table 5: Corrective activities followed by the firm

<table>
<thead>
<tr>
<th>FACTORS</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit monitoring cell at corporate and zonal office</td>
<td>4</td>
<td>1.27</td>
<td>4.447*</td>
</tr>
<tr>
<td>Information technology</td>
<td>3.8</td>
<td>1.23</td>
<td>3.699*</td>
</tr>
<tr>
<td>Risk monitoring office</td>
<td>3.1</td>
<td>1.06</td>
<td>0.516</td>
</tr>
<tr>
<td>Maintenance and regular updating of client profile</td>
<td>3.7</td>
<td>0.48</td>
<td>7.616*</td>
</tr>
<tr>
<td>Credit rating of clients</td>
<td>3.6</td>
<td>0.93</td>
<td>3.739*</td>
</tr>
<tr>
<td>Computerization of loan accounts</td>
<td>2.7</td>
<td>0.76</td>
<td>2.408*</td>
</tr>
<tr>
<td>Inter department MIS</td>
<td>3</td>
<td>1.17</td>
<td>0.107</td>
</tr>
<tr>
<td>Efficient Follow UP procedure</td>
<td>4.3</td>
<td>1.24</td>
<td>5.884*</td>
</tr>
<tr>
<td>Loan settlement</td>
<td>4.2</td>
<td>0.43</td>
<td>15.703*</td>
</tr>
<tr>
<td>Efficient reminder system</td>
<td>4.3</td>
<td>1.12</td>
<td>6.364*</td>
</tr>
<tr>
<td>Ensuring vigilant and responsive management</td>
<td>4.5</td>
<td>0.9</td>
<td>9.127*</td>
</tr>
</tbody>
</table>

* Significant at 5% level of significance, \( \mu = 3 \) \( t_{5\%} (d.f.=29) = 2.045 \)

Future plans regarding NPAs

The employees were asked as to how the company planned to reduce the existing level of the NPAs in future.

Table 6: Future plans of the company regarding the NPAs (N= 30)

<table>
<thead>
<tr>
<th>Factors</th>
<th>No. of respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fraud control unit</td>
<td>28</td>
<td>93.3</td>
</tr>
<tr>
<td>Rebooking of loans</td>
<td>30</td>
<td>100.0</td>
</tr>
<tr>
<td>Database sharing between competitors</td>
<td>21</td>
<td>70.0</td>
</tr>
<tr>
<td>Making credit policies to decrease delinquency</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Cross check randomly cases at the time of disbursement</td>
<td>10</td>
<td>33.3</td>
</tr>
</tbody>
</table>

* Multiple responses

Table 6 shows that all the employees believed that rebooking of the loans was the best route to reduce NPAs followed by setting up of fraud control units (93.3%), data base sharing between the competitors regarding the NPAs (70%) and cross checking the credentials before giving the loans (33.3%) in future.
Conclusions

It was found out that the NPAs of the respondent company were very high i.e., 6% in 2006. They were much higher than the 4% benchmark set up internally for the firm and the guidelines or the standard fixed by the RBI for NPAs for banks i.e., between 1-2%. This showed that the company has to work towards improving the level of NPAs. Greater amount of NPAs added to additional collection costs in terms of recruiting more employees, loan settlement, rebooking of loans and filing of legal suit etc. that affected the profitability of the firm further. If the level of NPAs increases further, then the company can suffer seriously in terms of its profitability, liquidity and performance. Also as RBI eases its policy on granting licenses to national and even foreign banks for setting up NBFCs in India competition will increase further. In order to acquire business these NBFCs are likely to take up bad loans. Hence the need of the hour is to have stricter norms w.r.t NPAs in NBFCs.

Debt Recovery Tribunals (DRTs) and private NPA resolution agencies assume great importance in the context of recovery from NPAs. Efforts are on to set up more DRTs during this year and also to strengthen them. Various legal measures suggested are formation of Asset Reconstruction Corporation, company mergers, lok adalats, creation and enforcement of security interests by banks and FIs (Bill, 2001), Civil courts and circulation of list of defaulters. Further, some non-legal measures like setting of a reminder system, recovery camps, rephrasing unpaid loan installments, rehabilitation of sick units, loan compromise, and appointment of professional agencies for recovery were also required to maintain controllable level of NPAs.

References


IPO Scams in India

*Dhiraj Sharma

Abstract
Present paper takes into account the IPO scams in India specifically for the period of 2003-2005 - a period when a number of irregularities in the conduct of IPOs were reported by the media. During this period, in order to have allotment of shares in the IPOs of various companies, certain entities made multiple applications for shares, actively colluding with depository participants (DPs) and also misusing the banking facilities. Surprisingly, thousands of demat accounts in fictitious names were opened by many DPs in the sheer disregard of the guidelines laid down by the regulators. Moreover, several banks opened thousands of accounts without proper documents and usual formalities. And who were at the stake? It was thousands of genuine small investors who spoiled their lifetime savings and suffered huge financial losses. The paper attempts to highlight and examine, step-by-step, scattered investigations and revelations made by the market regulator i.e. SEBI.

As a part of surveillance activity by SEBI into the various aspects of working of securities market, SEBI had initiated probe and advised BSE and NSE to look into the dealings in the shares issued through Initial Public Offerings (IPOs) before the shares are listed on the stock exchanges. In October 2005, the stock exchanges submitted their preliminary observations on the IPO of Yes Bank Ltd. (YBL) which hinted at the possibility of 'large scale off-market transactions' immediately following the date of

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allotment and prior to the listing on the Indian stock exchanges [The Hindu, 2005]. SEBI therefore carried out a preliminary scrutiny by calling for data from the depositaries and the Registrar to the Issue (RTI). It was found that large number of multiple dematerialized accounts with common addresses were opened by a few entities. On noticing the irregularities and widespread abuse, SEBI acted against the entities who were responsible for the irregularities by passing orders restraining them from participating in all future IPOs and also directing the depositaries to effectively freeze their dematerialized accounts. Close on the heels of the order in the case of IPO of Yes Bank Ltd. [SEBI, 2005], SEBI examined the dealings in another major IPO of Infrastructure Development Finance Co. Ltd. (IDFC) wherein the very same players were suspected to have played a major role in cornering the shares [The Hindu, 2006a]. SEBI issued interim orders in the case of IDFC also along the similar lines as done in the case of Yes Bank [SEBI, 2006a].

Anomalies in the Allotments

SEBI regulations prescribe a quota for small investors wishing to invest in the IPOs. A small investor is defined as one who applies for shares worth Rs. 100,000 or less (Rs. 50,000 previously). Consequent to the preliminary scrutiny, SEBI found that certain entities had cornered IPO shares reserved for retail applicants by making applications in the retail investor category through the medium of thousands of fictitious/benami1 IPO applicants with each of the application being for small value so as to be eligible for allotment under the retail category. Subsequent to the receipt of IPO allotment these fictitious allottees had transferred shares to their principals who in turn transferred the shares to the financiers2 that had originally made available the funds for executing the scheme. The financiers in turn sold most of these shares on the first day of listing thereby realizing the windfall gain of the price difference between IPO price and the listing price.

It was found that almost all the dematerialized accounts that were in the names of fictitious entities were held through the Depository Participant (DP) Karvy Stock Broking Ltd. Further, inspection of Karvy by NSDL and CDSL revealed that the DP has obtained letters from the concerned banks towards Proof of Identity (POI) and Proof of Address (POA) for the purpose of opening demat accounts. As per SEBI guidelines [SEBI, 2004] an identity card/document issued by Scheduled Commercial Banks containing the applicant’s photo/address may be accepted as POI and POA. Thus, it appeared that first the bank accounts were opened in the names of fictitious/
benami entities and this facilitated the fictitious bank account holders to open
dematerialized accounts. The entire modus operandi, led to the suspicion that the
thousands of entities in each of whose names separate dematerialized accounts and
bank accounts had been opened and IPO applications made were merely name-
lenders or non-existent. The findings of RBI also confirm the findings of SEBI that these
thousands of name lenders were fictitious. Even the key operators3 (master account
holders) who had executed the plan were merely intermediaries acting on behalf of
financiers. These key persons and their financiers are not investors but mere opportunists
who seek to make a profit by disposing the IPO shares cornered by them on the
date of listing. The banks have also played their part by opening bank accounts
and providing loan to these fictitious entities with the objective of earning interest and
other charges.

Investigation by SEBI

SEBI advised the depositories (NSDL and CDSL) to examine all the IPOs during
the period from January 2003 to December 2005 in respect of those dematerialized
accounts that had received 20 or more credits reckoning the period from the date of
close of respective IPO to the first day of trading on listing (both days including). SEBI
obtained the details of all IPOs during the above period from the stock exchanges i.e.
BSE and NSE and forwarded the same to NSDL and CDSL [SEBI, 2006b, 2006c].

The SEBI adopted a floor level of 500 or more for determining the suspect
multiple demat accounts in typical samples, as samples with lesser numbers may not be
truly representative of the suspect character. Further, any group activity involving 500
or more demat accounts in IPO allotment excites a suspicion in the context of off-market
transfers from such accounts to one account. However, where there are less than 500
afferent accounts, the same would pass off as genuine.

In the case of NSDL, 23 master account holders had received shares from 500
or more afferent account in 21 IPOs (refer Table 1) during the years 2003-2005 whereas in
the case of CDSL there were three such master account holders who had received
shares in 9 IPOs (refer Table 2) during the year 2005 (including two which are common
for both NSDL and CDSL) [SEBI, 2006c] [SEBI, 2006e].
Table 1: IPOs of NSDL with 500 or more demat accounts

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of IPO</th>
<th>No.</th>
<th>Name of IPO</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>FCS Software Solutions Ltd.</td>
<td>15.</td>
<td>Sasken Communication Tech. Ltd.</td>
</tr>
<tr>
<td>5.</td>
<td>Gateway Disriparks Ltd</td>
<td>16.</td>
<td>Shoppers Stop Ltd.</td>
</tr>
<tr>
<td>6.</td>
<td>Gokaldas Export</td>
<td>17.</td>
<td>SPL Industries Ltd.</td>
</tr>
<tr>
<td>9.</td>
<td>Infrastructure Dev. Finance Co. Ltd.</td>
<td>20.</td>
<td>Tata Consultancy Services Ltd.</td>
</tr>
<tr>
<td>11.</td>
<td>Nandam Exim Ltd</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Compiled from the interim orders of SEBI.

Table 2: IPOs (during 2005) of CDSL with 500 or more demat accounts

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of IPO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Shoppers Stop Limited (April-May)</td>
</tr>
<tr>
<td>2.</td>
<td>Nectar Lifesciences Limited (June)</td>
</tr>
<tr>
<td>3.</td>
<td>Yes Bank Limited (June)</td>
</tr>
<tr>
<td>4.</td>
<td>SPL Industries Limited (June-July)</td>
</tr>
<tr>
<td>5.</td>
<td>Infrastructure Development Finance Company Limited (July)</td>
</tr>
<tr>
<td>6.</td>
<td>IL &amp; FS Investmart Limited (July)</td>
</tr>
<tr>
<td>7.</td>
<td>FCS Software Solutions Limited (August)</td>
</tr>
<tr>
<td>8.</td>
<td>Sasken Communication Technologies Limited (August)</td>
</tr>
<tr>
<td>9.</td>
<td>Suzlon Energy Limited (September)</td>
</tr>
</tbody>
</table>

Source: Compiled from the interim orders of SEBI.

The largest number of benami/fictitious applications was found in the IPO of IDFC [SEBI, 2006a, 2006b]. Further, it was observed that the first IPO in which the key operators participated was the IPO of Maruti Udyog Ltd. (June 2003); however the fictitious/benami demat accounts used by the key operators in the Maruti IPO were not in significant numbers (i.e. less than 500) and hence was not investigated by SEBI. The last IPO in which the same modus operandi for cornering the retail portion of the IPO had been adopted was Suzlon Energy Ltd's IPO during September 2005.

Examination of Key Operators

After identifying the IPOs, SEBI focused on the scale of operation of the key operators. It was found that the entities that have received IPO shares from 500 or more
demat accounts during the pre-listing period were the key operators that have abused the IPO allotment process through the means of making multiple applications in fictitious names for cornering the retail portion of the IPOs. It was found that a total of 24 key operators had indulged in abusive practices in respect of 21 IPOs (refer Table 1). The 24 master account holders had 34 demat accounts and out of these as many as 16 demat accounts were held with Karvy DP. Also, out of these 24 master account holders as many as 14 master account holders had their demat accounts with Karvy-DP. It was observed that almost all the afferent demat accounts that served as conduits for these master account holders were also held with Karvy-DP [SEBI, 2006d].

Many of these master account holders were found to have in turn made off-market transfer of the IPO shares to various common groups of entities who appeared to be their principals. It was observed that some of the master account holders had also made off-market transfers amongst themselves. Financial transactions amongst the master account holders as well as between the master account holders and Karvy have been noticed thereby leading to the conclusion that there were strong inter-linkages amongst the master account holders as well as between Karvy and the master account holders [The Indian Express, 2006].

**Examination of Demat Accounts**

SEBI obtained the data relating to the demat accounts that had acted as conduits (afferent accounts) for the above entities from NSDL. It was observed that there were 37,240 demat accounts that had acted as afferent accounts for the above entities. NSDL informed SEBI that out of the above 37,240 dematerialized accounts, as many as 31,818 demat accounts have been closed. In respect of the remaining 5422 accounts, NSDL advised its DPs to confirm whether they had the KYC (Know Your Customer) documents for such accounts. Subsequent information furnished by NSDL relating to 4602 demat accounts, showed that in many of the cases the DPs had obtained KYC documents towards POI and POA. However, in respect of 6 demat accounts (four with DP ICICI Bank, one with Ind Vysya Bank and one with Shah Investor's Home Ltd), there were neither POI nor POA. In respect of 820 accounts pertaining to HDFC Bank (684 accounts) and Karvy DP (136 accounts), NSDL informed that the same would be provided in due course [SEBI, 2006d].

Further, it was noticed that many of the above afferent accounts were opened in bulk on certain days. The details where 500 or more accounts were opened on the
same date were investigated. Based on the data furnished by NSDL to SEBI it was found that the 37,240 afferent accounts were held with 55 DPs. It was observed that out of 37,240 afferent accounts as many as 34,924 afferent accounts were held with Seven DPs with each of these DPs having 500 or more afferent accounts (refer Table 3). Karvy DP alone had 29,309 afferent accounts representing about 80% of the total afferent accounts in NSDL.

Table 3: DPs of Afferent Accounts under NSDL

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Source DP Name</th>
<th>No. of Afferent A/cs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Karvy Stock Broking Ltd.</td>
<td>29309</td>
</tr>
<tr>
<td>2.</td>
<td>Hdfc Bank Ltd</td>
<td>1793</td>
</tr>
<tr>
<td>3.</td>
<td>Khandwala Int.Fin. P. Ltd.</td>
<td>1153</td>
</tr>
<tr>
<td>4.</td>
<td>IDBI Bank Limited</td>
<td>1017</td>
</tr>
<tr>
<td>5.</td>
<td>Jhaveri Securities P Ltd</td>
<td>598</td>
</tr>
<tr>
<td>6.</td>
<td>Ing Vysya Bank Ltd.</td>
<td>544</td>
</tr>
<tr>
<td>7.</td>
<td>Pravin Ratilal Sh &amp; Stk</td>
<td>510</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>34,924</strong></td>
</tr>
</tbody>
</table>

Source: Compiled from the interim orders of SEBI.

The data relating to the demat accounts that had acted as 'afferent accounts' for the three master account holders (key operators) was obtained from CDSL. It was found that there were 21,698 demat accounts that had acted as afferent accounts for the three master account holders in CDSL and all these accounts were held with Karvy DP or Pratik DP. 20,399 afferent accounts (representing about 95% of the afferent accounts in CDSL) were held with Karvy DP and 1299 accounts were held with Pratik DP. As per information furnished by CDSL it was found that out of 21,698 afferent accounts, as many as 21,612 accounts were closed.

In NSDL and CDSL taken together, a total of 58,938 accounts had been used as afferent accounts for cornering the retail portion of the IPO. Also, in the case of both NSDL and CDSL, many of the afferent accounts had been opened in bulk on a few dates and the demat account-holders had the same address as that of the master account holders. Significantly as many as 14 out of the 24 master account holders also had their respective demat accounts with Karvy-DP. Thus, it was clear that Karvy-DP was actively in league by opening demat accounts for many of the master account holders and also for most of the afferent accounts that served as conduits for the master account holders [SEBI, 2006c].

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 Victimization of Small Investors

The key operators and their financiers made huge gains through 58,938 demat accounts (afferent accounts). The gains so made by the financiers and key operators were at the expense of genuine retail investors who failed to get allotment or got allotment of fewer number of shares because of the large number of applications made in the name of fictitious/benami demat account holders and therefore represents the loss caused to investors. To arrive at the loss suffered by genuine retail investors, SEBI adopted the following methodology: in respect of each of the 58,938 demat accounts for each of the 21 IPOs, the number of shares received through IPO allotment was multiplied by the difference between the closing price on NSE on the first day of listing of respective IPO and the respective issue price thereby arriving at the gains that accrued to the fictitious demat account holders. This can be restated with the following formula:

\[ \text{Disgorgement Amount} = \text{No. of shares allotted to specified persons} \times (\text{Closing price on the date of listing - Allotment price in IPO}) \]

Using the above methodology the gains made through the 37,240 afferent demat accounts in NSDL works out to Rs.93,01,88,402.00 (i.e. about Rs.93.02 crores) and through the 21,698 afferent demat accounts in CDSL works out to Rs.25,79,52,157.70 (i.e. about Rs.25.80 crores). Thus the total gains made through the 58,938 afferent demat accounts in NSDL and CDSL taken together works out to Rs.118,81,40,559.70 (i.e. about 118.81 crores).

Examination by CDSL and NSDL

Upon examination of the details of afferent accounts that served as conduits for the master account holders, it was observed that multiple demat accounts were opened in large numbers since November 2003. More multiple demat accounts got opened in 2004 and the process continued till August 2005. Another common feature of the above conduit accounts was that most of these demat account-holders were found to share common addresses which were the same as that of the master account holders. Hence, SEBI advised NSDL and CDSL to advise their DPs to verify the genuineness of demat account holders where 20 or more account holders share common address.

As per information provided by CDSL to SEBI, it was found that 53 DPs of CDSL had 20 or more demat account holders sharing common addresses. All the 53 DPs confirmed to CDSL that the KYC documentation in respect of the above demat accounts was complete in all respects. The verification by NSDL revealed that there were 56216 dematerialized accounts wherein 20 or more account holders were sharing common
addresses. These 56216 demat accounts were held with 105 DPs. The DP HDFC Bank Ltd. had the largest number of demat account holders sharing common addresses. However, SEBI decided to conduct further verification relating to the above DPs. Accordingly, SEBI engaged an independent CA firm to conduct inspection. The inspection by SEBI appointed CA firm brought out numerous violations and irregularities.

**Role of Depositaries**

In the light of the irregularities found in the IPOs of Yes Bank and IDFC, SEBI examined the role of depositaries. SEBI also looked into the inspections of the Depository Participants conducted by NSDL and CDSL. SEBI obtained from NSDL and CDSL all the inspection reports pertaining to seven DPs viz. Karvy Stock Broking, HDFC Bank, Pratik Stock Vision Pvt. Ltd, IL & FS, Centurion Bank, Wellworth Share & Stock Broking and Dindayal Biyani Stock Brokers Ltd. These DPs were shortlisted on the basis of the occurrence of large number of multiple accounts with same addresses.

SEBI found that NSDL had no byelaws for any internal monitoring review and control of its processes as required under Section 26 (p) of Depositories Act, 1996 as well as Section 34 of SEBI (Depositories and Participants) regulations, 1996. Auditors had pointed this out for IS (Information System) audit at different times but was never been implemented. NSDL’s internal auditors (Aneja & Associates) had been appointed since 1998 but there was no agreement signed between NSDL and the auditors. The reports were just perfunctory and did not maintain temporal integrity. In the same way, inspection reports for the Depository Participants were also called for from CDSL. On perusal of inspection report it was found that CDSL used to get its inspections conducted by outside professionals. The inspection reports of CDSL were of poor quality and no effort was taken by CDSL to work on the format of the inspection report.

**Actions Taken by SEBI**

Karvy Computershare Ltd., the Registrar to the Issue in the two IPOs was inspected and there were numerous anomalies in its working. Further, SEBI received references from various Government Agencies including Reserve Bank of India (RBI), Serious Fraud Investigation Office (SFIO) and Intelligence Bureau (IB) [The Hindu, 2006e]. Further, SEBI ordered on November 21, 2006 depositories National Securities Depository Ltd (NSDL) and Central Depository Services Ltd (CDSL) and eight depository participants, which were found guilty in the IPO allotment case, to pay back around Rs. 116 crore, which, the regulator believed, was unjustly gained by these entities at the
cost of small investors. SEBI directed the depositories to make PAN compulsory for all demat accounts that are opened after 1 April, 2006. Further, from 1st October, 2006, the existing demat account holders are not to be allowed to operate their accounts if they do not produce their PAN card details [The Hindu, 2006f]. Accordingly, NSDL and CDSL have frozen about 20 lakh demat accounts following the failure of the demat account holders to submit PAN card details before 31st December, 2006 deadline [The Hindu, 2007].

SEBI has also initiated measures to stop pre-listing deals in IPOs by amendments in the regulations to make it mandatory for depositories to block the securities in demat accounts of investors till the shares are listed on stock exchanges. Significantly, SEBI is also taking steps to tackle the malice of 'excess securities' i.e.; dematerialisation of shares in excess of issued capital of a listed company. These include putting certain responsibilities on the depositories, issuer, its registrar and the depository participant to ensure that securities are not dematted in excess of listed/issued capital. SEBI will also make amendments in the SEBI (Depositories & Participants) Regulations, 1996 to impose penalty up to Rs 25 crore on those responsible for issue of excess securities. With all this the entire onus on checking the pre-listing transactions will be on the depositories viz., the National Securities Depository Ltd and Central Depository Services Ltd. [The Hindu, 2006g]. In the course of the investigations, SEBI obtained the bank account statements of the concerned entities held with Bharat Overseas Bank, Vijaya Bank, ICICI Bank and HDFC Bank and also recorded the statements of the officials of BOB, Ahmedabad, Chennai, Goregaon and Worli branches, Mumbai and Vijaya Bank, Ambavadi, Ahmedabad.

Conclusion

sampling of data under set parameters as brought out in its interim orders, SEBI's efforts and role cannot be undermined. SEBI's final order on the case is still awaited. Many respondents have appealed against the findings and their appeals are pending at various stages in the courts of law.

References

**SEBI Interim Orders and Circulars**


SEBI (2005) Interim Order WTM/GA/37/ISD/12/05 against YES Bank Ltd. (YBL) under sections 11B and 11(4) of the SEBI Act, 1992 in the matter of IPO investigations, 15th December.

SEBI (2006a) Interim Order WTM/GA/43/ISD/01/06 against Infrastructure Development Finance Company Ltd. (IDFC) under sections 11B and 11(4) of the SEBI Act, 1992 in the matter of IPO investigations, 12th January.


SEBI (2006c) Interim Order WTM/GA/60/ISD/O4/06, 27 April


SEBI (2006e) SEBI Interim Order WTM/GA/101/ISD/11/06, 21 November

*News Reports*

The Hindu, 2005, December 16, "SEBI uncovers scam in YES Bank IPO allotment - Bans 13 investors from trading".

The Hindu, 2006a, January 13, "SEBI unearths another IPO scam in IDFC".

The Hindu, 2006b, April 28, "SEBI bars Karvy, 23 other entities".

The Hindu, 2006c, February 22, "IPO scam: CBI raids brokers, officials."

The Hindu, 2006d, February 23, "IPO scam fall-out - CBI conducts search at Karvy, Vijaya Bank, Bhopal premises".

The Hindu, 2006e, January 21, "Underworld Money May Be Involved in IPO Scam".

The Hindu, 2006f, March 7, "PAN compulsory for demat accounts."

The Hindu, 2006g, June 20, "SEBI mulls steps to stop pre-listing deals in IPOs."

The Hindu, 2007, January 3, "20 lakh demat accounts frozen".

The Indian Express, 2006, April 29, "Karvy was the hub of IPO scam".

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Corporate Governance Reforms - A Continuance to Continue

*Ashutosh Dash

Abstract
The loss of public trust for the unethical industrial conduct has aggravated the entire debate about business-society relations and calls for a rock-hard multi-stakeholder governance opposed to the present mono-stakeholder governance. The ever increasing pressure from the institutions of civil society and market forces for responsibility, accountability and transparency demands an extended governance model where a representative, responsive and responsible board should be reconstituted with CSR orientation and a stakeholder linked incentive system in place of shareholder linked incentive should be adhered to. The fact that business is suddenly prepared to take all the voluntary initiatives in no way justifies less regulation. The external voluntary efforts are good steps in this direction as they do have the potential but the voluntary test to CSR has rendered a failure for its lemons problem and non establishment of accountability. To become stronger they need to be incorporated into the corporate governance practices for a better stakeholders' protection. The boards must emerge from the shadows to the vanguard of stakeholder governance to assert their unique role as trustees—indeed, creators—of the socially responsible corporation of the 21st century. Since the extended governance model has enough potent to serve as a risk management vehicle and can strengthen firm's competitive position, the paper suggests for a rethinking on corporate governance as it would be part of a larger unfolding story of how to address the governance deficit in a dynamic, globalizing world.

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The snowballing corporate scandals arising from high-profile business collapses due to unethical activities jointly on the part of corporate executives and the monitoring agencies in architecting a the creative accounting to mislead the users have severely defiled the continuing corporate governance system. A race for the top through the "survival of the fastest" mantra in the present business milieu has goaded many large companies such as Adelphia, Enron, Parmalat, Tyco, WorldCom etc to present misleading financial facts and received considerable criticism on the informative role of corporate reporting in efficient allocation of scarce resources in an economy (Brown and Caylor, 2004). The top executives of corporations are consistently accused of cooking the books and, in many cases they are convicted like that happened recently in case of Enron. The collapse of Enron has caused about $70 billion loss in market capitalization and the total loss of market capitalization resulting from the deception committed by Enron, WorldCom, Qwest, Tyco, and Global Crossing amounts to nearly $460 billion (Rezaee, 2005).

If 2002 was the year of U.S. corporate malfeasance, 2003 was Europe's turn: Accounting deception and other illicit activities were uncovered in many European nations like Switzerland's Adecco, the Netherlands' Ahold, and, of course, Parmalat, the Italian dairy concern whose owners' defrauded investors of billions (Hurst, 2004). Though European corporate sector was upholding a rich green and blue image, since 1999 an increasing proportions of the global population rate European companies below average in fulfilling their responsibilities to society. Company scandals while tarnishing the clean European image have forced companies to realize that just social responsibility on the part of a company is not sufficient and as a bare minimum it requires a blend of business ethics, governance and CSR policies to earn the title of a conscientious citizen (Hurst, 2004). The scandals in Europe and America not only highlight the risks of the continents itself but also pose risk for those nations from which these companies raise capital.

Hardly there will be anybody to disagree that corporate governance has got much attention in current years partly due to the Asian financial crisis. In Asia the conventional corporate governance mechanism are not strong enough to resolve agency problem. The crony capitalism, i.e., combination of weak governance and government interference coupled with low transparency led to vulnerable performance prone to economic crisis (Claessens and Fan, 2002). Further, the financial crisis also revealed that corporate governance mechanism had limited effectiveness in system with weak institutions and poor property rights (Claessens and Fan, 2002). India, in particular,
though did not experience severe corporate collapses like that of developed world, it can not be said that corporate sector in India is an exception to mis-governance as many critics allege that the Indian corporate sector has offered ample ground with their different kinds of questionable practices. Recently around 125 IPO scams have been experienced in Indian climate deceiving the innocent investors, where IPOs were all at premium through the book building process. Even many financial institutions have been alleged of collusion with entrepreneurs in IPO scam and many other capital market scams (Chattopadhyaya, 2006). Not only scandals but also the hostile takeovers make a mockery of corporate governance in a sense that companies doing well become targets of the empire-builders around the globe as well as in India.

**Governance Reforms - An Unfinished Agenda**

Keeping in view public concerns regarding the protection of investor interest, especially the small investor; the promotion of transparency within business and industry; the need to move towards international standards in terms of disclosure of information by the corporate sector many committees have been set up around the globe. The spate of financial collapses in late 1980s and early 1990s led the London Stock Exchange to set up Cadbury committee in 1991 for enhancing the role of self regulation as a measure of controlling the financial collapses. Similarly the high profile scandals have served as the impetus to the recent Sarbanes-Oxley Act of 2002, which is considered to be the most sweeping corporate governance regulation in the past 70 years (Byrnes et al., 2003). In an attempt to articulate the standards of corporate governance for a sound governance architecture, the Organization for Economic Co-operation and Development (OECD) framed the principles of corporate governance in 1999 as a fall out of economic and financial crisis and revisited those principles in 2004 to respond to the corporate scandals and to create global consciousness on improving the governance practices for bringing economic viability and stability to the nations.

Reform is designed to provide greater transparency regarding certain relationship, to enhance the ability of management in performing their duties effectively and to restore the faith and confidence of investors in the corporations. Further emphasis on mono-stakeholders (Shareholders) does not give a holistic approach the governance practices as the unified governance system discloses a gap in the contract due to their incompleteness for which the other stakeholders are excluded from their benefits accruing to them. That's why probably few academic elites express their concern whether the reforms would really be able to prevent all such corporate scandals that have been
experienced (Petra, 2006). The apprehension seems quite reasonable as it is experienced that single-minded pursuit of shareholder value acts as a driving incentive and creates a corporate culture in which accounting abuses could flourish.

Given the economic and regulatory context, it is predictable that such shareholder-focused moves to enhance corporate governance have yet to be balanced with stakeholder-focused measures based on recognition that social and environmental transparency, verification and accountability may be equally important for the long-term sustainability of companies (McLaren, 2004). There are basically two stakeholder models - a fiduciary model, where the board has discretion to take account of other stakeholders' interests, and a representative model, which substitutes direct stakeholder representatives for fiduciary directors (Hansmann and Kraakman, 2000). Both the models have rendered themselves to failure may be either due to the relative success of the shareholder model, or to collusion between shareholders and management that excludes their interests. Whatever it may be the fact remains that stakeholders currently have little influence over the corporations that affect their lives. On the other hand, corporate governance reforms grant more significant power to shareholders, albeit limited by collective action and agency problems.

Within corporate behavioural literature the convergence between CSR and corporate governance can be viewed from two angels, i.e., first, convergence at the level of values and then convergence at the operational risk level (Standberg, 2005). Good governance is becoming more broadly defined to include ethical considerations, a result of a number of significant governance oversight failures. Good governance is primarily about values rather than rules. If good governance flows from values, then CSR must be an external expression of those values. The legitimacy theory which claims to be the dominating motivation for CSR, hypothesizes that organizations seek to establish congruence between the social values associated with or implied by their activities and the norms of acceptable behavior in the larger social system of which they are a part and when an actual or potential disparity exists between the two value systems, there exists a threat to organizational legitimacy. As a deviation to the theory, Mathews & Reynolds (2001) in their study demonstrate that although many corporations have begun to respond to perceived demand for environmental disclosures in published accounts, their perspective of organizational legitimacy is a narrow view, in which information is targeted towards specific stakeholders and not to the general public. But the demand for increased corporate accountability today comes from all sectors of the modern society or so called civil society.
The incompleteness of governance reforms has been a matter of serious concern for the abuse of authority by a particular group of stakeholders creates an inherent risk as one group enjoys the physical assets of the firm at the cost of other groups. Stakeholders having direct access to the business decisions or deriving direct tangible benefits will tend to continue to influence the corporate choices to the extent stakeholders having thinner interests are dormant or unrepresented by a visible pressure group in legitimization of their interest. The pursuit of the interest of an individual, or of a group of individuals in the present generation may be achieved with a myopic vision but the human society, which is, if not perpetual, a relatively more permanent institution to approve corporate existence and performance for all times to come, can not afford to bear the risk and hazards associated with that type of a narrow pursuit. It is the society to ensure the betterment of today and tomorrow. This is perhaps the reason, why the constituents of civil society have come up with their contentious role to safeguard the society from the evils or anticipated evils - be it social, economic or ecological. Any entity what so ever be its form or size, causing damage to socio-ecologic status of the society is bound to encounter with such pressure.

Failed Voluntary Approach - An Economic and Political Analysis

Various tactics and strategies have been adopted by many voluntary organizations in promoting corporate social responsibilities. Even they have played the role of advisors, auditors, partners in activities closer to core corporate strategy like developing the right approach to ecological and social compliance and voluntary disclosures (Dash, 2005). The Proliferation of Social and Environmental Reporting Standards and the ability to influence Govt. policies and programmes have insisted the governments of different states to take initiatives to promote corporate sustainability reporting (Dash A). Apart from different codes and standards a new paradigm of stakeholder governance is characterized by "engagement" activities amongst "socially responsible" investors. Socially Responsible Investment (SRI) obtains greater credibility as a representative of stakeholder model when it is recognized that such interests are shared by many shareholders (McLaren, 2004).

Unlike conventional "screened" ethical investment, "engagement" SRI uses its ownership stakes to engage companies which under-perform in social, environmental and economic terms in dialogue and shareholder activism, rather than excluding such companies from its investments. Such investors have effectively turned from "exit" to "voice" in their relationships with unsatisfactory companies (McLaren, 2004).
discipline by exit, investors practice rational ignorance and simply sell out of companies when concerns arise. At the other extreme, investors may seek to replace management so as to directly impose changes of practice. Engagement encompasses all the forms of formal and informal measures of influence that investors use between these extremes. Engagement can reduce the information asymmetry between managers and shareholders, which might otherwise force investors to assume that managers were always trying to mislead them. And as intangibles such as knowledge and innovation account for a larger share of firms' value, information asymmetry increases and closer monitoring becomes more useful. Further engagement has the potential to overcome collective action problems as the SRI intermediary can pool the interests of multiple stakeholders (McLaren, 2004).

It is true that a number of voluntary codes and practices have been evolved but whether firms will actually change their practices depend more on an externally agreed code of conduct as many authors advocate that in recent times liberalization probably has fuelled a sloppy attitude in business houses in ensuring to do the right thing; hence the "voluntary" test failed (Claff, 2005). The ethical companies never enjoy a better credibility and improved believability because of the action of unruly companies. Since the social goods and services supplied by the firms are not similar, the community must have sufficient and believable information about the claims made by each supplier whereas the suppliers are unwilling or unable to provide verifiable or trustworthy information. At the same time, each seller immediately matches the claims of every other seller for which the public has no means to compare the truthfulness of competing claims, and each seller's information is treated as equally false and thereby debases the quality claims of all sellers (Sethi and Emelianova, 2006).

Corporate accountability is altogether a different notion implying legal obligations by corporations to promote sustainable development and to provide compensation when such obligations are breached (Claff, 2005). Opposed to that voluntary codes of conduct it represent a set of undertakings where the corporate promise to address some of the real or perceived societal concerns associated with or emanating from their conduct and Industry groups prefer this approach because it allows them to project and magnify their efforts at a minimum cost and changes in their modus operandi (Sethi and Emelianova, 2006). The external voluntary efforts are good steps in this direction as they do have the potential but to become stronger they need to be incorporated into the corporate governance practices or should be separately legally enforced. Hence the companies who have a low level of commitment need to be monitored externally for their compliances.
Corporate Governance Reforms - A Continuance to Continue / Dash

The success of voluntary approach depends on the collective effort of the largest possible number of companies in an industry with a commitment to bring out the desired changes in a good intent. But the point of argument is that these voluntary approaches rarely incorporate enforcement measures hence greatly suffers from free raider and adverse selection problem (Sethi and Emelianova, 2006). While free raider problem advocates for a pressure on the companies to proportionately share the cost which the collective groups are put up with for the benefits enjoyed by the entity, the adverse selection occurs when companies try to exploit benefit without considering the harm caused by them to the group they have joined. That's why CSR is a strategic issue which can not be excluded from overall corporate strategy. Ignoring CSR will have a tremendous negative impact in both economic and social terms.

Extended Governance Model - A need of the hour

The degrading socio-ecological status followed by a threat to sustainable development has been a major cause for concern in a vast number of studies recently undertaken on accountability, governance and regulations. In case of USA probably the total social cost amounts to two and half trillion dollars a year due to corporate irresponsible behaviour (Estes, 1996). A legally-binding, externally driven arrangement which requires parties to enact laws designed to enforce environmental and social accountability on the corporations, no matter where they operate globally or locally, has the potential to make an enormous difference to those communities currently facing negative impacts from the corporate dreadful behaviour. This is especially true for such communities in developing countries where the legal structures may not give them the right to make a claim against corporations that are causing environmental or social damage. Even a key study by UNCTAD found that the most influential motivating factor for transnational corporations to develop corporate environmental policies was government-based laws and regulations (Clapp, 2005). An externally driven governance could lead not only to strengthened regulations on multinational corporations operating in developing countries, but also to enhanced technical and financial assistance for monitoring and enforcement (Clapp, 2005). Its obvious that a major part of industries would strongly opposed to the legally binding governance of corporate social activities as it may cost the corporate enormously for the damage caused to the society for their unethical practices. So each and every developing and underdeveloped countries should develop a stronger regulatory system to have an extended governance model in convergence with the global governance system.

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Conclusion

Internationalization of business and the growth of MNCs have influenced the structure of corporate governance from control and command based to a market based system. As an allopathic therapy to corporate misdoings, crumples and collapses various committees have been set up to articulate the standards for sound governance architecture. Corporate governance codes in the form of pills have been prescribed to be taken on a routine manner. In the above framework, the cornerstone of governance reforms lies with extended opportunity to shareholders in monitoring and participating in the governance of companies. To bridge the gap, various strategy and tactics have been adopted by many voluntary organizations in promoting corporate social responsibilities. In the present business context the approach has met its failure for not establishing accountability and hence greatly suffers from free raider and adverse selection problem and furthermore creates lemon problem in the market. Hence, a legally-binding, externally driven arrangement demanding both environmental and social accountability on the corporations can make a material difference to those stakeholders who are currently facing negative impacts from the corporate dreadful behaviour. The present paper advocates for a stronger regulatory system with an extended governance model for every country whether developed, developing or underdeveloped in convergence with a global governance system. The suggestions have enough potent to serve not only as a risk management vehicle but also as a tool to strengthen firm's competitive position.

Selected References


Drobetz Wolfgang, 2003, "Corporate Governance - Legal Fiction or Economic Reality?", Working Paper No. 1/03, Department of Finance, University of Basel.


Juholin Elisa, 2004, "For Business or the good of all? A Finnish Approach to Corporate Social Responsibility", Corporate Governance, 4, 3, 20-31


McLaren Duncan, 2004, "Global Stakeholders: Corporate Accountability and Investors Engagement", Corporate Governance, 12, 2, April, 191-201.

Petra Steven T, 2006, "Corporate Governance Reforms: Fact or Fiction", Corporate Governance, 6, 2, 107-115


Measuring Capital Productivity
(A Study of Tamil Nadu State Transport Corporations)

*S. Mohan

Abstract

The main objectives of establishing the Tamil Nadu State Transport Corporations (TNSTCs) are to provide better service at reasonable fare to the societies and to make provision for employment to the people residing around the corporation. Such service motives are achieved at the cost of profit. Though profitability is not the primary goal of the TNSTCs, the corporation cannot run without earning a surplus. The bulk of capital outlay for capital investment comes from the government. Though there are social dimensions to the investment, decisions of the TNSTCs are basically economic decisions. Therefore, it is necessary to ensure productivity of the scarce resource in the TNSTCs. Further, the society as a whole, expects certain rate of growth of the economy, as a part of the resources of the economy is diverted to the TNSTCs and it is the society's expectation that the TNSTCs should contribute to the growth of the economy. To meet this challenging situation, the chief executive has to lay heavy emphasis on optimum utilization of resources, which have been employed in the TNSTCs. Today, in most of the TNSTCs' utilization of their resources are considerably lower than the corresponding standards. So the capital productivity of a TNSTC is measured in this paper.

One of the major problems faced by the TNSTC is the persistent low rate of capital productivity. Low generation of value added, high wages and salaries, heavy investment in fixed assets, low load factor, high capital - labour ratio and deteriorating

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Measuring Capital Productivity / Mohan

labour - management relations are mostly responsible for the low capital productivity. This leads to raise a question - whether or not the capital productivity increases with variables such as real value added, capital intensity, load factor and labour-management relations?

In productivity studies, the outputs and inputs are to be evaluated in physical terms. Due to heterogeneity in the product mix, output is counted in money units and the revenue product is transformed into physical units by the method of deflation. In this study, the output is deflated under double deflation method. First, the total revenue at constant price is obtained by deflating the current value of the total revenue of the study unit with the corresponding estimated product price index of the related base year. Secondly, the value of intermediate inputs are deflated by the simple average of the wholesale price indices of motor vehicle and spare parts, fuel and tyres to get the value of intermediate inputs at constant price. Then the difference between the deflated value of total revenue and the deflated value of intermediate inputs is termed as real value added.

Trends in Capital Productivity

As a prelude to the presentation of capital productivity of the selected TNSTC, it is considered necessary to indicate the extent of variations of its components viz., output and capital input. To examine the movements of output and capital input in the said TNSTC for the period from 1993-94 to 2002-03, the indices of output, capital input and capital productivity are calculated and presented in Table - 1.

The average growth rate of indices of output is less than the average growth rate of indices of capital input. The reason for the rapid increase in the capital input may be attributed to the increase in the secured loan from TDFC Ltd., over the years. But the output has no appreciable increase due to the fact that in many routes the collection may not be satisfactory and the increasing level of competition projected by the private transportation. Hence, the capital productivity has a steep decline over the years and hence the average growth rate has become negative. It is an indication that in future the running of selected TNSTC will be more expensive and will not be able to gain more profits. From this angle it may be argued that the only alternative is to increase the bus fare but the public would not take it in the right sense. So it is suggested that the selected TNSTC should impulse the working efficiency and adopt cost effective measures so that either the output is to be increased or the input be decreased so that the average growth rate could be encouraging.
Factors Affecting Capital Productivity

When all possible determinants of productivity are taken into account, its empirical analysis becomes quite complex. On a 'priori' grounds, the changes in capital productivity in the TNSTC could be attributed to the scale of production, capital intensity, load factor and labour management relations:

• Growth in scale of production permits adoption of new technologies which improve productivity. Expansion of scale also provides division of labour which in turn improves productivity. Real value added is used as proxy for scale of production in the present study.
• Capital intensity, measured by the real gross fixed capital per unit of real wages and salaries paid explaining the effect of technical change in output.
• Load factor measured as percentage of passenger kilometers to capacity kilometers explains the impact of capacity utilization.
• Labour - management relations affect motivation of workers, which in turn affects their will to work. Time variable is introduced as proxy for institutional factors like management-labour relations.

Multiple regression model

An attempt is made here to analyse the capital productivity by using the multiple regression model. The functions for capital productivity are estimated in semi-logarithmic form as given below:

\[ \log CP = a + b_1 \log RVA + b_2 \log K/L + b_3 \log LF + b_4 t \]

Where

- \( CP \) = Capital productivity index
- \( RVA \) = Real value added as proxy for scale of production
- \( K/L \) = Capital intensity as technology variable
- \( LF \) = Load factor as capacity utilization
- \( t \) = Time variable as proxy for labour management relations.
- \( a \) = intercept
- \( b_1, b_2, b_3, b_4 \) = regression coefficients (or) slopes

• The coefficient of the real value added (\( b_1 \)) is expected to be positive. It implies that the increase in real value added would tend to increase the capital productivity.
• As per the accepted theory as well as the previous studies, the coefficient of the capital intensity (\( b_2 \)) should be negatively related to capital productivity. It
indicates that the increase in capital intensity would tend to decrease the capital productivity.

- The coefficient of load factor should be positively related to capital productivity. The 'a priori' expectation is that higher load factor is associated with higher capital productivity. It implies that the increase in the load factor would tend to increase the capital productivity.

- It is 'a priori' expectation that the coefficient of time variable is positive if congenial atmosphere prevails between management and labour or vice versa. If the coefficient of time is positive, then it is presumed that the management-labour relations would tend to increase the capital productivity. The estimated regression results of capital productivity for the selected TNSTC are shown in Table 3.

To assess the influence of some selected factors such as RVA, K/L, LF and time over the capital productivity, the four independent variables are selected on 'a priori' grounds since it is rather complex to select all the contributory variables to the fluctuations in the capital productivity. Capital productivity is taken as the regressand.

For the data presented in Table -2, the results of regression analysis are presented in Table - 3. It is found that the value R2, the coefficient of determination is 0.945, which is very high, and it implies that nearly 95 per cent of changes in capital productivity are due to chosen explanatory variables and also the F statistic value is 21.519 with significant level at 0.002.

It shows that model is a good fit for the data. Regarding the significance of the regression coefficients of the independent variables, Student's 't' statistic values corresponding to the regression coefficients of the variables Real value added, Capital Intensity and Time are found to be significant. Hence these variables contribute to the variations in the capital productivity. The load factor is not an explanatory variable that influences the capital productivity because 't' statistic value of the same is not significant.

**Conclusion**

The average growth rate of the indices of capital output is less than the average growth rate of the indices of capital input. The reason for the rapid increase in the capital input may be attributed to the increase in the secured loan from TDFC over the years. But output has not shown appreciable increase. Hence, the capital productivity has a steep decline over the years and the average growth rate becomes negative. In the case of capital productivity the load factor value is not significant. The fact is that the
increased revenue by an increasing load factor does not straight away make higher addition to the capital increase, in view of the expenses involved on labour and maintenance. On the other hand, increased capital contribution would contribute to capital productivity by virtue of fact that improved machinery, infrastructure, better maintenance of the fleet, purchase of new vehicles all tend to increase the revenue and thereby ensure higher returns for the increased capital intensity.

Table - 1
Indices of Output, Capital Input and Capital Productivity

(Index Base: 1993-94 = 100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Indices of output (RVA)</th>
<th>Indices of Capital Input</th>
<th>Indices of Capital Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-94</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>1994-95</td>
<td>94.76</td>
<td>121.17</td>
<td>78.20</td>
</tr>
<tr>
<td>1995-96</td>
<td>91.22</td>
<td>133.70</td>
<td>68.22</td>
</tr>
<tr>
<td>1996-97</td>
<td>97.76</td>
<td>327.09</td>
<td>29.89</td>
</tr>
<tr>
<td>1997-98</td>
<td>132.37</td>
<td>338.30</td>
<td>39.13</td>
</tr>
<tr>
<td>1998-99</td>
<td>139.65</td>
<td>467.92</td>
<td>29.84</td>
</tr>
<tr>
<td>1999-00</td>
<td>159.58</td>
<td>351.92</td>
<td>45.35</td>
</tr>
<tr>
<td>2000-01</td>
<td>192.44</td>
<td>339.12</td>
<td>56.75</td>
</tr>
<tr>
<td>2001-02</td>
<td>190.19</td>
<td>350.57</td>
<td>54.25</td>
</tr>
<tr>
<td>2002-03</td>
<td>191.30</td>
<td>400.41</td>
<td>47.78</td>
</tr>
<tr>
<td>Annual growth</td>
<td>10.163</td>
<td>16.444</td>
<td>-5.393</td>
</tr>
</tbody>
</table>

Source: Compiled from the annual reports of the selected TNSTC.

Table - 2
Log of CP, RVA, K/L and LF*

<table>
<thead>
<tr>
<th>Year</th>
<th>Log. CP</th>
<th>Log. RVA</th>
<th>Log. K/L</th>
<th>Log. LF</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993-94</td>
<td>2.000</td>
<td>2.000</td>
<td>2.000</td>
<td>1.837</td>
<td>1</td>
</tr>
<tr>
<td>1994-95</td>
<td>1.893</td>
<td>1.976</td>
<td>2.008</td>
<td>1.858</td>
<td>2</td>
</tr>
<tr>
<td>1994-95</td>
<td>1.834</td>
<td>1.960</td>
<td>1.908</td>
<td>1.899</td>
<td>3</td>
</tr>
<tr>
<td>1996-97</td>
<td>1.476</td>
<td>1.990</td>
<td>2.332</td>
<td>1.903</td>
<td>5</td>
</tr>
<tr>
<td>1997-98</td>
<td>1.593</td>
<td>2.121</td>
<td>2.332</td>
<td>1.903</td>
<td>5</td>
</tr>
<tr>
<td>1998-99</td>
<td>1.475</td>
<td>2.145</td>
<td>2.334</td>
<td>1.900</td>
<td>6</td>
</tr>
<tr>
<td>1999-00</td>
<td>1.657</td>
<td>2.202</td>
<td>2.335</td>
<td>1.905</td>
<td>7</td>
</tr>
<tr>
<td>2000-01</td>
<td>1.754</td>
<td>2.284</td>
<td>2.278</td>
<td>1.902</td>
<td>8</td>
</tr>
<tr>
<td>2001-02</td>
<td>1.734</td>
<td>2.279</td>
<td>2.202</td>
<td>1.876</td>
<td>9</td>
</tr>
<tr>
<td>2002-03</td>
<td>1.679</td>
<td>2.281</td>
<td>2.221</td>
<td>1.845</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: Compiled from the annual reports of the selected TNSTC.

*CP - Capital productivity; RVA - Real value added; K/L - Capital intensity; LF - Load factor

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Table 3
Regression Model Summary for Capital Productivity

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>R square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>R Square Change</td>
</tr>
<tr>
<td>1</td>
<td>.972a</td>
<td>.945</td>
<td>.901</td>
<td>5.37E-02</td>
<td>.945</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), YEAR, Load Factor, Capital Intensity, Real Value Added.

**ANOVA**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.248</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>1.443E-02</td>
<td>5</td>
<td>6.212E-02</td>
<td>21.519</td>
<td>.002</td>
</tr>
<tr>
<td>Total</td>
<td>2.63</td>
<td>9</td>
<td>2.887E-03</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), YEAR, Load Factor, Capital Intensity, Real Value Added.
b. Dependent Variable: Capital Productivity

**COEFFICIENTS**

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95% Confidence Interval for B</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.137</td>
<td>1.982</td>
<td></td>
<td>.574</td>
</tr>
<tr>
<td>Real value added</td>
<td>1.817</td>
<td>.461</td>
<td>1.431</td>
<td>3.943</td>
</tr>
<tr>
<td>Capital Intensity</td>
<td>-.957</td>
<td>.184</td>
<td>-.902</td>
<td>-5.198</td>
</tr>
<tr>
<td>Load Factor</td>
<td>-.428</td>
<td>.880</td>
<td>-.071</td>
<td>-4.87</td>
</tr>
<tr>
<td>YEAR</td>
<td>-6.938E-02</td>
<td>.019</td>
<td>-1.229</td>
<td>-3.599</td>
</tr>
</tbody>
</table>

Source: Compiled from the annual reports of the selected TNSTC
Inequities in Income Tax

*P.K. Bandgar

Abstract

Government levy taxes on income, expenditure, property and commodities. These taxes are broadly classified as direct and indirect. A direct tax is one, which the government demands from those very people who are expected to bear its burden eventually. On the other hand, indirect tax is one which is demanded from the people who can shift its burden to others. A tax system is said to be administratively efficient if it can be collected from all sections of society in accordance with their ability to pay at a relatively low cost. India has made considerable progress over the last sixty years, including for reaching progress as regards its tax policies. However, there is a need for further progress on the tax front. An attempt has been made in this paper to study the discriminatory provisions in the Indian Tax System.

It is the height of injustice that more than 2.7 crore salaried people are paying tax on their gross income while others pay tax on their net incomes. Businessmen, self-employed and professionals pay tax on their net income, even as the income tax exemption limit is the same for every one. As per Income Tax Act of 1961, income tax is levied on net income. In the budget for assessment year 2006-07, Finance Minister Mr. Chidambaram disallowed the standard deduction for salaried people. This is a gross injustice to the salaried people and needs to be removed immediately. Justice P.N. Bhagwati has also pointed out in his book on Income Tax that exemption and deduction are distinguished and mere increase in the tax limit, the right of deduction cannot be taken away.

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Inequities in Income Tax / Bandgar

Tax Free Dividends

The Finance Minister made dividends tax free in the hands of the recipient in the year 1999-2000. However, the minister changed the norms and taxed dividend income in 2002-03 budget. Again in 2003-04 the Finance Minister reverted to earlier arrangement of making dividends tax free in the hands of the recipient. The argument was that the companies paid tax on their profits and the payment of dividend was only the distribution of that post-tax profits among the shareholders. It would be tantamount to taxing the same income twice. The exemption was meant for the benefit of the small investors. However, the benefits of tax-free dividend has gone to wealthy promoters which is evident from the following table:

Table 1: Dividend received by Wealthy Promoters over last three years.

<table>
<thead>
<tr>
<th>Promoter's Revenue</th>
<th>Amount of Dividends (Rs. In Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mukesh Ambani</td>
<td>1482</td>
</tr>
<tr>
<td>Azim Premji</td>
<td>1438</td>
</tr>
<tr>
<td>Shiv Nadar</td>
<td>776</td>
</tr>
<tr>
<td>Infosys</td>
<td>538</td>
</tr>
<tr>
<td>Hero Honda</td>
<td>328</td>
</tr>
<tr>
<td>Ranbaxy</td>
<td>300</td>
</tr>
<tr>
<td>Bajaj Auto</td>
<td>300</td>
</tr>
<tr>
<td>Ashok Leyland</td>
<td>300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5462</strong></td>
</tr>
</tbody>
</table>

Source: Fortune India, August 15, 2006

Collectively, 1050 listed companies paid dividends of Rs. 20,532 crore during last three years. Out of the total amount of dividend 45 percent went to the promoters which amounted to nearly Rs. 14000 crores. The income tax forgone on these dividends would be around Rs. 4,000 crore. Thus, wealthiest promoters took home thousands of crores of rupees as tax free income in spite of their fees salaries and allowances. Whereas, an employee with a salary of Rs. 30,000 per month has to pay 30 percent tax at margin. Therefore there is a need for restoration of the original purpose of the exemption, providing a level playing field to small investors. This could be achieved by limiting the tax exemption for dividend income to a particular amount or ceiling.

Tax Loss from FII Investments

According to present rules, only institutions approved by SEBI, can invest in the Indian Stock Market. These management fee-receiving institutions cannot be based in India because, if they were, they would not be treated as FII. This policy regarding
FII has several unintended consequences. The Indian Government is losing heavily by requiring foreign institutional investors to not be based in India. Tax loss due to the Government of India is given in the following table:

<table>
<thead>
<tr>
<th>Year ending 31st March</th>
<th>Cumulative flows Rs. Crores</th>
<th>Asset under management Rs. Crores</th>
<th>Sensex close as on 31st March</th>
<th>Stock % as on 31st March</th>
<th>Fees generated by FII</th>
<th>Tax loss to GOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>10226</td>
<td>9122</td>
<td>3261</td>
<td>-14</td>
<td>120</td>
<td>40</td>
</tr>
<tr>
<td>1996</td>
<td>16947</td>
<td>16301</td>
<td>3367</td>
<td>3</td>
<td>59</td>
<td>19</td>
</tr>
<tr>
<td>1997</td>
<td>24373</td>
<td>23329</td>
<td>3361</td>
<td>0</td>
<td>326</td>
<td>108</td>
</tr>
<tr>
<td>1998</td>
<td>30242</td>
<td>32701</td>
<td>3893</td>
<td>16</td>
<td>738</td>
<td>244</td>
</tr>
<tr>
<td>1999</td>
<td>29513</td>
<td>30402</td>
<td>3740</td>
<td>-4</td>
<td>654</td>
<td>216</td>
</tr>
<tr>
<td>2000</td>
<td>39278</td>
<td>51284</td>
<td>5001</td>
<td>34</td>
<td>2054</td>
<td>678</td>
</tr>
<tr>
<td>2001</td>
<td>48960</td>
<td>45313</td>
<td>3604</td>
<td>-28</td>
<td>1026</td>
<td>338</td>
</tr>
<tr>
<td>2002</td>
<td>57233</td>
<td>51908</td>
<td>3469</td>
<td>-4</td>
<td>906</td>
<td>299</td>
</tr>
<tr>
<td>2003</td>
<td>59902</td>
<td>48134</td>
<td>3049</td>
<td>-12</td>
<td>1038</td>
<td>343</td>
</tr>
<tr>
<td>2004</td>
<td>103902</td>
<td>138970</td>
<td>5591</td>
<td>83</td>
<td>8026</td>
<td>2649</td>
</tr>
<tr>
<td>2005</td>
<td>145318</td>
<td>204450</td>
<td>6493</td>
<td>16</td>
<td>4485</td>
<td>1480</td>
</tr>
<tr>
<td>2006</td>
<td>194207</td>
<td>415930</td>
<td>11280</td>
<td>74</td>
<td>30149</td>
<td>9949</td>
</tr>
</tbody>
</table>

Source: SEBI

Table 2 revealed that the Government of India has lost about Rs. 10,000 crores during the year 2005-06 and about Rs. 2,000 crores during the last 10 years due to the policy towards FIIs. It is an easy source of tax revenue particularly from rich people and from stock market activities. When an FII investor comes via Mauritius it avoids paying the short term capital gain tax at 10 percent. Most of these FIIs have subsidiaries in Mauritius and none of them has head office in that country. The fee income goes back to their head offices located in USA or UK and the fund managers pay tax in the country, in which their head office is located. Therefore, there is a need to modify the policy towards FII. The government can remove the restriction that this money cannot enter India unless the money is stamped as a foreign entity. SEBI can monitor such FII in flow and it can still require fund managers to report any purchases/sales made on behalf of the foreigners.

**Corporate Tax Rate**

The corporate tax collections are expected to emerge as the largest contributor to the Central Government's tax kitty. Corporate taxes are likely to contribute 31% to
the total tax revenue. During the 2005-06 the net corporate tax collections stood at Rs. 77,483 crores. The reduction in corporate tax rates have resulted in significant increase in corporate tax collections as a percentage of GDP contributing roughly, 2.67 percent in 2004-05 as against the level of 1.87 percent in 2002-03. corporate taxes make up about one quarter of Japan's total tax base, for higher than in other western countries where income tax and sales tax receipts account for a much bigger share than profit taxes. Corporate profits in Japan are taxed at about 30 percent.

India's corporate tax rate of 30 percent plus surcharge plus cess is not strictly comparable. According to the Budget Papers, after availing themselves of exemptions, corporate pay a tax rate in Singapore is 23 % and in Switzerland it is 21.3 percent. Whereas, in Canada it is 96.5 %, Italy 37.25 %, Germany 38.29 percent and South Africa 37.80 percent. Corporate tax rates in India have brought down to 30 % in the post liberalization period. The present tax rate of 30 percent is comparatively low. Small-scale enterprises with low profitability and meeting certain conditions may be subject to lower tax rate like China. Moderate rates of income tax, not only result in better tax compliance but also help in attracting Foreign Direct investment.

**Tax Evasion**

The common of equity status that people should contribute towards the government in proportion to their respective abilities, that is in proportion to the revenue which they respectively enjoy under the protection of state. Actoun Smith was also in favour of proportional taxation. This, implies that rich should contribute more in the form of tax. However, the fact shows that the tax compliance among the rich is very small. CAG data for 2004-05 states that there were only 1,22,000 tax payers in the above Rs. 10 lakhs category. This indicates that there is a possibility of tax evasion. NSS wage distribution data for 1999-00 indicate that the number of theoretical taxpayers in 2004-05 was 84 million and only 2,50,000 were in the Rs. 10 lakhs plus category since consumption comes from wealth and tax evasion increases wealth, a large number of individuals and households become rich. It results into creation of black money in the economy. Therefore, tax policy should be made with right facts and tax system should not be discriminatory in any respect between individuals.

**ESOP Taxes**

Employees Stock Option Scheme is a mechanism of stock options used by companies as an effective tool for attracting motivating and retaining employees a large
number of shares are involved and value is created for the employee when there is an increase in the company's share price, shares can be offered to employees in different ways. The employer can grant an option to employees to buy shares in the future at an agreed price and employer with holding a certain portion of the employer's salary for a fixed period and using the accumulated amount to offer shares at a discounted value to the employee. The employees are awarded the right to future cash payouts based on increase in price of the employee's stock. In this case a tax liability could arise at two points at the time of exercise of options and/or at the time of sale of shares. In case of a non-qualified plant at the time of exercise tax can arise on the difference between the market price on the date of exercise and the exercise price paid by the employee. This difference is salary income. Since it is paid by the employer as a benefit for the employee and therefore, the employer is required to withhold tax as an other salary payments. However, this tax can be differed to the date of sale of shares if the stock plan is qualified by the Government. In this case an employee is taxed even if he has not received any income.

Conclusions

This is against the canon of equity India has lost about Rs. 10,000 crore during the year 2005-06 due to the discriminatory policy towards Foreign Institutional Investors, whose investment is routed through Mauritius. India's corporate tax rate of 30% is not strictly comparable with many countries. There is a need to reduce tax rate to small and medium business due to low profitability and other conditions. There is also a possibility of tax evasion because the number of tax payers above the income of Rs. 10 lakh was just 1,22,000 on 31st March 2005. The tax provisions affecting stock options are also discriminatory. An employee who exercises his option for ESOP, is taxed even if he has not received any income.

References

2. Fortune India, August 15, 2006
3. Indian Economy, Mishra & Puri
4. The Hindu-Business Line, Friday, April 28, 2006
5. The Economic Times, October 9, 2006
6. The Economic Times, August 31, 2007
7. The Economic Times, August 7, 2007
Corporate Governance in Banks - A Note

*Arvind Jain

**Preeti Agrawala

Abstract

The corporate world in India could not remain indifferent to the developments that were taking place in the U.K. and had tremendous influence in our country, which finally led us to laying down our own ground rules on the concept of the corporate governance. In India the concept of corporate governance became popular after the 1990s when economic liberalisation and deregulation of industry and businesses became a popular policy parameter.

Role of corporate governance in banks

Corporate governance is a must not only in order to gain credibility and trust, but also as a part of strategic management for survival, consolidation and growth. Banks need to ensure good corporate governance in order to achieve the following key objectives:

For Excellence

Without corporate governance now the survival and progress of banks is not possible. It has become an essential criterion for their market existence. Without fulfilling the conditions of corporate governance no public sector bank could bring out their Initial Public Offer.

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Customer has become focus point for more personalised services and greater convenience to them for better customer relationship management through technology upgradation and changes in operational environment.

**For Transparency**
Governed by corporate governance, banks have now set up sound Board of Directors practising sound management practices. The decision-making processes too have become more scientific reflecting a sense of accountability and social responsibility.

**Maximising shareholders’ value and wealth**
Corporate governance has enabled the profitability and wealth generation capacity of banks. Banks have entered into diversified business avenues viz. insurance, depository services and varied rich retail products to offer to the customers.

**Code of Corporate Governance in Banks**
Adoption of best corporate governance and practices is the first step in realising the banks vision and mission and accordingly banks have adopted following code of Corporate Governance:

(i) To enhance shareholder value.
(ii) To protect the interests of shareholders and other stakeholders including customers, employees and society at large.
(iii) To comply with directives RBI, SEBI and other regulatory authorities.
(iv) To ensure transparency and integrity in communication and to make available full, accurate and clear information to all concerned.
(v) To ensure accountability and to achieve excellence at all levels.
(vi) To provide corporate leadership of the highest standard for others to Emulate.

Banks are committed to:
- ensure that their Board of Directors meets regularly, provides effective leadership, exercises control over management and monitors executive performance.
- establish a framework of strategic control and continuously review its efficacy.
- establish clearly documented and transparent management processes for policy development, implementation and review, decision-making, monitoring, control and reporting.
- provide free access to the Board to all the relevant information advice, resources as are necessary to enable it to carry out its role effectively.
ensure that the Managing Director has line of responsibility for all aspects of executive management and is accountable to the board for the ultimate performance of the bank and implementation of the policies laid down by the board, and

ensure that a senior executive is made responsible to the board to ensure compliance with all the applicable statutes, regulations and other procedures, policies as laid down by the board and report deviation, if any, to the Board.

Corporate Governance in Banks Management

A sound corporate governance culture enforces better discipline upon corporate management which, in turn, can help the given company to increase the shareholders' value. The KM Birla Committee's recommendations on various aspects of company management are applicable and being followed in banks management:

(i) Composition of Board of Directors: The Board of Directors is constituted according to the provisions of the listing agreement and the applicable Statue. The Board of Directors is headed by the Chairman with managing director, nominee directors and directors elected by the shareholders.

The role of the Board of Directors in banks has become significant as it lay down policies in critical areas such as investments, assets liability management and recovery of NPAs.

The following committees of the Board are functioning to look after various key activities of the banks:

• Nomination Committee: For appointment of nominee directors by banks.

• Shareholders/Investors Grievance Committee of the Board: In terms of the clause 49 of the Listing Agreement with the stock exchanges, the Shareholders/Investors Grievance Committee of the Board is constituted by the banks which review the complaints received and ensure for resolving them satisfactory.

• Director's Committee of the Board: The Director's committee is functioning in the banks and reviews the disposal of vigilance and other disciplinary action cases on a quarterly basis.

• Audit Committee: The Audit Committee of the Board is constituted which provides directions as also oversee the total audit function in the banks. Total audit functions implies the organisation operationalisation and quality control of internal audit and inspection within the banks and follow up on the statutory/external audit of the banks and inspection by the RBI. The ACB also reviews with management the annual financial statements before submission to the Board.

• Risk Management Committee: It manages effectively the risk profile of the banks.
(ii) **Stipulation of accounting standards and financial reporting:** In terms of disclosures in terms of accounting standards, Banks under various accounting standards make disclosures.

AS-5: Prior period items and changes in accounting policies.
AS-9: Revenue recognition.
AS-11: Accounting for the effects of changes in foreign exchange Rates.
AS-17: Segmental reporting.
AS-18: Related party disclosures.
AS-20: Earning per share.
AS-22: Deferred taxes.

(iii) **Level of disclosures relating to important financial and commercial transactions and shareholders’ rights:** Nowadays, the banks disclose many significant parameters of performance as required by RBI guidelines:

a. Capital adequacy ratio
b. Subordinated debts
c. Business ratios
d. Shareholding
e. Details of provisions and contingencies debited to profit and loss account
f. Lending to sensitive sectors
g. Movement of NPAs
h. Movement of provision for NPAs
i. Movement of provisions held towards depreciation on Investments
j. Maturity pattern of assets and liabilities
k. Investments made in shares etc. (gross value)/financing against shares
l. Information regarding loan restructuring undertaken during the year under Corporate Debt restructuring scheme and other than this scheme.

Such disclosures provide an opportunity to the stakeholders to evaluate the qualitative aspects of the balance sheet and have a fair idea of the impact of prevailing circumstances on the earning capacity of the banks.

(iv) **Corporate Strategy:** Banks nowadays have a well-articulated corporate strategy, which ensures the success of the contribution of individuals and overall success of the enterprise.

(v) **Appropriate information flows:** Strong mechanism exists in banks for information flow internally and to the public.
IAA NEWS

Report on the XXX All India Accounting Conference and International Seminar of the Indian Accounting Association

The XXX All India Accounting Conference and International Seminar on Accounting Education and Research was held at JN Vyas University-Jodhpur, during 15-16, Dec. 2007, under the auspices of IAA Jodhpur Branch and JNV University's Department of Accounting. The IAA conference was organised in Jodhpur for the third time. In the first instance Prof. UL Gupta was the Conference Secretary while Prof. BS Rajpurohit hosted for the second time. The Registration took place at 9 am in the cold weather conditions. The conference was inaugurated by Prof. Lokesh Kr Shekhavat, the Vice-Chancellor of JNV University. After vote of thanks in the inaugural session, the members of IAA observed three minutes silence in honour of Prof. UL Gupta. At the International Seminar on Accounting Education and Research a number of thought provoking research papers were presented followed by deep discussion into some of the interesting research areas in Accounting Education and Research. Three technical sessions took place concurrently on both days of the conference with rich deliberations.

The paper of Prof. Lalith Gupta & Dr. ML Vadera on Accounting Deserves Recognition as Technical Education was adjudged as the best paper in the International Seminar: Accounting Education and Research in the Competitive Environment. The paper of Prof. Sanjay Bhave on An Empirical Study on Transfer Pricing Practices in India was adjudged to be the best in Technical Session-I on Transfer Pricing. The joint paper of Dr. UL Pillai, Mrs S. Vardia & Prof. G Soral on Accounting Practices of Small & Medium Enterprises - A Comparison between India & Namibian SMEs was adjudged to be the best one in Technical Session - II on Accounting for Small & Medium Enterprises. The paper of Ms. KR Jalaja on the Shareholder Value Creation Related Performance Matrics: An Empirical Analysis of select Indian Companies was selected as the best paper in Technical Session - III on Shareholder Value Creation. The Association conferred IAA Young Research Award on Dr. Pradeep Kumar Singh. The Association conferred IAA Fellowship awards on (1) Prof. NM Khandelwal; (2) Prof. Sugan C Jain; (3) Prof. G.C. Maheswari; (4) Prof. Jawaharlal; (5) Prof. M. Gangadhar Rao and (6) Prof. K. Eresi. The IAA Accounting Standards Committee was reconstituted with Prof. NM Khandelwal as Chairman, Prof. Shirin Rathore, Prof. K Eresi, Prof. G. Soral; Prof. Nageshwar Rao; Prof. Pratap S Chouhan; Prof. S Singhal, Dr. KChAVSN Murthy and Prof. Lalit Gupta as members.

Prof. Nageshwar Rao and Dr. Anil Kumar were nominated to look into the website aspect of the Association. Therefore, all the branches are requested to send the email ids of the members as far as available, along with the latest lists of members to Prof. Nageshwar Rao, under copy to the General Secretary for providing data to the website.

Prof. KV Achalpathy was elected as the President while Prof. Shirin Rathore and Prof. GL Dave have been elected as the Sr. Vice President; and Jr Vice President respectively. Prof. D Prabhakara Rao, Prof. PS Chauhan and Prof. Nageshwar Rao were
reelected as General Secretary, Treasurer and Chief Editor respectively for a period of three years. Prof. JL Gupta; Dr. Ramachandra Gowda; Dr. M.L. Vadera; Dr. Sailesh Paramar and Dr. Audesh Kumar were elected to the Executive for a period of three years. Prof. Umesh Holani and Dr Appa Rao are nominated to EC as special Invitees for a period of one year.

Prof. M. Srinivas; Dr. Lalit Gupta; Dr. KChAVSN Murthy; Dr. Anil Kumar, Dr. PK Bhandgar, Prof. M. Sulochana, Dr. Sanjay Bhayani, Prof. NC Tripathy, and Dr. H.S. Oza the 31st Conference Secretary have been co-opted to the executive for a period of one year.

The proposal of Ahmedabad Branch was accepted to host the 31st Conference, with the following topics:

International Seminar: Accounting Education and Research
With Prof. B.S. Rajpurohit as Chairman

Technical Session-I: Corporate Reporting & Accounting Standards in the Global Scenario
With Prof. G.C. Maheshwari as Chairman

Technical Session-II: Capital Markets: Trends in India & Abroad
With Prof. Arindam Gupta as Chairman

Technical Session-III: Global Taxation: Current Issues
With Prof. PK Bhandgar as Chairman

The Valedictory Function of the Conference was highly cheerful with the felicitations to the IAA Fellowship awardees and presentation of mementos to the best paper awardees, besides the interesting presentations of subject deliberations during the conference. As a whole the 30th All India Accounting Conference was highly successful and the delegates expressed high degree of delight with the rich academic contributions and reasonable stay arrangements of the host. Members expressed full satisfaction at the arrangements made by the Conference Secretariat while thanking the Conference Secretary Prof. GL Dave, the Organizing Secretary Prof. Lalit Gupta and the Joint Conference Secretary Dr. ML Vadera.

18th Dec. 2007
Prof. D. Prabhakar Rao
General Secretary, IAA

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**Proposals for Young Researcher Award - 2008**

IAA invites proposals on Research Work done during the last five years in the area of accounting by scholars/faculty members of not more than 35 years of age as on 31.12.2007. For the consideration of IAA Young Researcher Award 2008, proposals may be submitted on or before 15th August 2008 to Professor D. Prabhakara Rao, Professor and Head, Department of Commerce and Business Administration, Andhra University, Vizag - 530013, Cell No. 09440130863, e-mail - drdpr_2009@yahoo.co.in.
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One Day State Level Seminar
IAA Gujarat Branch has organised State Level Seminar on Accounting Education and Research in Changing Scenario at PG Department of Business Studies, S.P. University, Vallabh Vidyanagar on September 23, 2007. Prof. N.S. Rao, Ex-Dean and Head, M.L. Sukhadi University, Udaipur and Dr. Amita Kantawala, Professor, Department of Commerce, M.S. University were Guest Speaker of two Technical Sessions of the Seminar. 125 participants have attended the Seminar.

Three Day State Level Workshop
IAA Gujarat Branch and S.D. School of Commerce, Gujarat University have jointly organised Three Day State Level Workshop on Research Methodology in Commerce and Management at S.D. School of Commerce, Gujarat University, Ahmedabad from September 30, 2007 to October 2, 2007. The Workshop was divided in Four Technical Sessions and the topics were covered - Problem Formulation, Research Design, Sampling Techniques, Scaling Techniques and Data Analysis Techniques. Dr. Tejas Desai, Professor of IIM, Ahmedabad was the keynote speaker at Inaugural Function. Dr. N.K. Patel, Pro-Vice Chancellor of Gujarat University was the Chairperson of Inaugural Function and Valedictory Function. 100 participants from the different universities of the Gujarat State actively attended the workshop. Dr. H.S. Oza, President, IAA Gujarat Branch and Director of School of Commerce and Prof. R.K. Rathod, Vice President, IAA Gujarat Branch were the organising secretaries of the workshop.

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