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EDITORIAL

Accounting education and research has taken a new shape. Prof. Shirin Rathore in her presidential address raised the issues of global financial crisis and its implications on accounting. The traditional thrust of recording tangibles has now shifted towards intangible assets. Prof. B. Banerjee has outlined a vivid picture on accounting for internally intangibles assets. The alternative methods of valuation has given an opportunity to evaluate the issue in right perspective. Dr. Karamjeet Singh and Susima have presented an empirical study on intangibles assets reporting practices on selected listed companies in Sri Lanka. An empirical study of the information needs of contributions to non-profit organisations has been made by Shankarappa and Mahadevappa. Performance of exchange traded funds in India has been analysed by Prof. Y.P. Singh and Swati Gupta. The issues of foreign direct investment and subprime lending are also analysed. With respect to subprime lending, US perspective was discussed by P. Chakraborty. The need of the hour is the interface between professional bodies and academics. The paper on Pact in a tract by Talluri and Murthy has given useful findings in this regards.

January 1, 2010

Professor Nageshwar Rao
Chief Editor

PRESIDENT'S SPEAKS

Happy New Year 2010,

I take this opportunity to wish you all a very happy academically fruitful and prosperous 2010. I am honored and privileged to serve as president of Indian Accounting Association for the year 2010 and convey my gratitude to the members for the confidence reposed in me. At the same time I seek your cooperation in elevating the association to greater heights.

Globalization of trade has increased the importance of Accounting where we need harmonization of Accounting Standards. The year 2011 will be a milestone in global standard setting when about 150 countries (including India) around the world would have adopted the International Financial Reporting Standards (IFRS) would have been reduced from miles to probably in feet and inches. We have an important role to play in creating awareness and understanding of IFRS amongst faculty and students, I therefore request all the chapters of IAA to organize seminars on the knotty issues that the economy would confront on the path of convergence. I am always ready to extend cooperation in organizing seminars, conference and workshop on these burning issues in Accounting.

We have seen in corporate sector many Accounting scandals right from Moondare in (1957) to Satyam incorporation (2008). The CRISIL, one of the top credit rating agency of India which states that out of 600 companies studied in India, almost all of them with few exceptions, were found to have resorted to various Earning Management Games or Window dressing of their accounts by resorting to creative accounting tricks like playing with the figures of closing stock depreciation Provision for contingencies, Employees stock Option Scheme (ESOS) etc.

According to one of the senior partners of Stern, Steward Research, The Americans, G. Bennet steward III "The real accounting scandals is not that a harmful of companies like Enron and Worldcom broke accounting rules to inflate their earning but that almost every company is bending the rules to smooth earning and meet investors expectations", under these circumstances, as Accounting Intellectuals, we have an important role to play by developing new techniques, rules and regulations so that frauds and manipulations and creative accounting practice may be controlled. I wish that regular interaction with these issues through workshop will help us to arrive at new methods and techniques in accounting. In this way we will not only be serving Accounting fraternity but to the common public at large.

Our past president right from Shri Raghunath Rai to prof. (Dr.) Shirin Rathore has contributed a lot in promoting the cause of Accounting Education and Research in India and abroad. It is due to their efforts and your cooperation the Accounting Association is the biggest body of Commerce and Management Education in India. Friends, let us join hands to make this association No.1 at world level.

Kindly do not hesitate to take my cooperation at any level to promote the cause of accounting education and Research.

Thanking you and wishing you a very happy and prosperous New Year.

Prof. (Dr.) G.L.Dave
President
Indian Accounting Association
Jodhpur (India)

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GLOBAL FINANCIAL CRISIS - IMPLICATIONS FOR ACCOUNTING

**Shirin Rathore*

The year 2010 would be ushered in with some cheer and optimism by the world, as the good news spreads that the US economy seems to have staged a come back, from its worst recession in the past 70 years. As per reports from the US Commerce Department the economy expanded at an annual rate of 3.5 percent in the July-September period after four quarters of downturn. Signs of recovery are also visible elsewhere, for instance Japanese industrial output rose for the seventh month in October and the German unemployment numbers fell in October. The million dollar question is- does this call for celebration? A closer look would reveal that though growth was generally broad based, a large part of it was driven by emergency development programmes such as the 'cash for dunkers', an incentive scheme for new auto purchases which resulted in larger production and sales of motor vehicles. This auto discount scheme, however, ended in August 09. The other encouragement was in the form of a tax credit of \$8000, for first-time home buyers which is due to expire shortly, though the Congress is working on a proposal to extend it. Thus though the US growth numbers relative to expectations are moderately positive, the real concern is of its sustainability as the impact of the stimulus begins to fade. Infact in its second reading of the third quarter the Commerce Department in the US corrected its earlier estimate of the growth rate and stated that the economy grew at 2.8 percent annual rate, rather than 3.5 per cent pace it estimated earlier (E.T. Nov.09). This therefore demonstrates that the rebound was a little bit more subdued than reflected in the earlier estimates and it's a bumpy road to recovery in the US. Wary policy makers and corporates in India are not celebrating yet; they are waiting for firmer signals to ascertain if the recovery is the real McCoy. The fact that this recovery is not accompanied by job creation and thus will not lead to crimping consumer spending and demand for the world's goods and services is also another cause for being skeptical. Even the Global Financial Stability Report (October 2009) observes, "Financial stability has improved significantly in the past six months. Reflecting the decline of systemic risks, all indicators have improved, however, the risk of reversal remains significant and indicators of financial stress remain elevated at the core of the financial system and in some market segments". So it ain't OK yet.

**Presidential Address, delivered at Gwalior at 32nd Annual Conference of IAA by Prof. Shirin Rathore, Advisor (Planning), Delhi University, Delhi*

IMPACT OF THE GLOBAL CRISIS ON THE INDIAN ECONOMY

The sub-prime mortgage crisis that surfaced around August 2007 primarily affected financial institutions in US and Europe. The Indian economy then appeared to be much insulated from it. In fact, its initial effect was positive, as the country received accelerated Foreign Institutional Investment (FII) inflows during the period September 2007 to January 2008. The RBI was also raising interest rates until July 2008 with a view to cooling the growth rate and containing inflationary pressures. However, with the collapse of Lehman Brothers in mid September 2008 the financial meltdown morphed into a global economic downturn which led to a crisis in financial markets, credit flows dried up and money market interest rates rose to above twenty percent.

The impact of the global crisis transmitted through three distinct channels, i.e. the financial sector, the trade sector and exchange rate fluctuations-

a) Financial Sector

The Financial sector including the equity markets, external commercial borrowings and remittances and the banking sector could not remain unscathed from the impact. The equity markets were, however, worst affected. The BSE sensex which stood at its peak of 21000 in January 2008 evidenced a 60 per cent decline and wiped off about \$1.3 trillion in market capitalization. Withdrawal of about \$12 billion from the market by foreign portfolio investors to strengthen the balance sheets of their parent companies, during the period September 2008 to December 2008, was primarily responsible for this. Besides commercial credit, both for trade finance and medium term advances from foreign banks had virtually dried up.

Fortunately the impact on the Indian banking sector was mild. ICICI Bank was the only large bank to be partly affected and the crisis could be averted by timely action by the government which virtually guaranteed its deposits.

b) Trade Sector

The export sector was also hit hard on account of a steep decline in the demand for Indian exports in major markets and because of drying up of international financial and trade credit. During 2008-09 growth in exports was robust till August 2008, thereafter in September 2008 it evinced a sharp dip and turned negative in October 2008. The continued decline in export growth was a consequence of the plummeting demand in developed markets. For this period, the main drivers of export growth were engineering goods and chemicals. Petroleum products and textile exports witnessed a positive but low growth. However, gems and jewellery were the first to feel the impact in November 2008 itself. Later the impact spread to garments and textile, leather, handicrafts and auto components.

The decline in import growth was witnessed within a month from the decline in exports i.e. from October 2008, and was negative during the period January to March 2009. For the year 2008-09 as a whole the over all growth in imports was subdued at 14.4 percent in dollar terms. The trade deficit increased from US \$88.5 billion (as per customs data) in 2007-08 to US \$ 119.1 billion in 2008-09. The services sector was less severely affected. In fact the financial

services sector registered a robust growth of 45.7 per cent despite the crisis, Software grew at 26%. However, a negative growth was registered in insurance and there was a sharp fall in the growth of travel services. The growth rate of services as a whole moderated at 16.3 per cent for the period.

c) Exchange rate development

Prior to the onset of the financial crisis the primary concern of the policy makers was excessive capital inflows which grew from 3.1 per cent of GDP in 2005-06 to 9.3 per cent in 2007-08. While this surge in capital flows led to an increase in foreign exchange reserves from US \$ 151.6 billion at the end of March 2006 to US \$ 309.7 billion at end of March 2008. It also resulted in an appreciation in the rupee from Rs. 46.54p per dollar in August 2006 to Rs.39.37p in January 2008. The global crisis reversed this trend and the rupee began a slow decline from then on. Simultaneously with this the unwinding of stock positions by FIIs, to replenish cash balances abroad also assisted in accelerating the decline. The final blow came with the fall of the Lehman Brothers in September 2008 compelling RBI intervention to reduce volatility. The rupee somewhat stabilized after October 2008. The scenario took a U turn after March 2009 as a consequence of signs of recovery and return of FII flows. Viewed as a whole for the year the nominal value of the rupee declined from Rs. 40.36 per dollar in March 2008 to Rs. 51.23 per US dollar in March 2009, reflecting a 21.2 per cent depreciation during the fiscal period 2008-09. The annual average exchange rate during the period worked out to Rs. 45.99 per US \$ as against Rs. 40.26 for the previous year 2007-08.

Let us now look at the monetary and fiscal developments during this period and the implications of the global financial crisis for the accounting discipline.

MONETARY DEVELOPMENTS

Prior to the onset of the financial crisis, the main concern of policy makers was excessive capital inflows which not only doubled the foreign exchange reserves over a two year period but also contributed to monetary expansion that fuelled liquidity growth, and resulted in the Wholesale Price Index (WPI) peaking at 12.8 percent in August 2008. The key policy rates of the Reserve Bank of India (RBI) were therefore designed to signal a contractionary monetary stance. While reverse repo rate (R-RR) was left untouched at 6 percent, the repo rate and cash reserve ratio (CRR) both under went an increase. The former increased by 125 basis points from 7.75 per cent at the beginning of April 2008 to 9 percent in August 2008. Similarly CRR was increased by 150 basis points from 7.5% to 9 percent during the same period.

The second half of 2008-09, however, witnessed an abrupt change in the monetary stance necessitated by the outflow of foreign exchange as a fall out of the crisis. The RBI responded to the emergent situation and monetary expansion was facilitated through decreases in the rates. Accordingly, beginning from March 5, 2000 the repo rate was slashed from 9% in August 2008 to 5% and the reverse repo rate from 6% to 3.5%. These rates were, again reduced by 25 basis points each w.e.f April 21, 2009. The statutory liquidity rate (SLR) was lowered by 100 basis points from 25 per cent of net demand and time liabilities to 24% with effect from

November 2008. The CRR was also slashed by 400 basis points from 9 to 5% w.e.f. January 17, 2009. These monetary measures had a statutory effect on the liquidity situation.

FISCAL DEVELOPMENTS

As stated earlier there was a sharp decline in the demand for exports. Domestic demand had also moderated considerably, leading to a down turn in industry and service sectors, which necessitated a fiscal response. The second half of 2008-09 saw the roll out of some measures such as payout of a part of arrears to government employees arising on account of the 6th Pay Commission recommendations, farm loan waiver package to alleviate the debt burden of distressed farmers. During December 2008 to February 2009 these measures were supplemented by increased plan expenditure, reduction in indirect taxes, and sector specific measures for textiles housing, infrastructure, automobiles and exports. These Fiscal measures taken together provided a fiscal stimulus of about 3.5 per cent of GDP.

Besides, these measures the government made its presence felt at various international forums such as the G20 group of countries and at other multilateral institutional mechanisms available.

The question before us today is: Is the Indian Economy on the path of recovery from one of the worst economic down turns in decades? The answer may be interpolated from a number of leading indicators such as increased hiring by organizations and greater freight movement at major ports. Besides industrial output as measured by the index of industrial production clocked an annual growth rate of 6.8 per cent in July 2009. According to the Central Statistical Organization (CSO) ETIG study of 1300 companies (excluding financial and oil and gas companies) reveals a 23% rise in net profit in the September quarter while sales grew a paltry 1.5%. Industries such as steel, cement, two-wheelers and passenger cars also reported relatively better sales growth. Recent indicators from leading indices such as Nomura's Composite Leading Index (CLI) UBs' Lead Economic Indicator (LEI) also bear out this optimism in the Indian Economy.

Besides foreign institutional investors have also turned net buyers in the Indian market and FII inflows have touched US \$10 billion during the April to September period of 2009-10. The finance minister, however, cautiously observes, 'The outlook appears to be bright, but we are not yet out of the woods.' The government does not plan to withdraw the series of stimulus it has announced, but return to fiscal prudence remains high on its agenda.

IMPLICATIONS OF THE CRISIS FOR ACCOUNTING

No sooner did the repercussions of the sub prime crisis spread; charges were leveled at fair value accounting as being the demon at the heart of the credit crisis. Critics of fair value accounting typically pointed out the obvious difficulties of measuring the fair values of subprime positions in the then prevailing illiquid markets. These arguments don't hold good. "The sub prime crisis was caused by firms and households making bad operating, investing and financing decisions managing risks poorly, and in some instances committing fraud (Rayan, 2008) One would agree that imperfect fair value accounting provides better information about these

Rathore

positions and is a better platform for mandatory and voluntary disclosure than alternative measurement attributes including any form of cost-based accounting.

Both Financial Accounting Standards Board (FASB) in the US and the International Accounting Standards Board, have had to deal with severe criticism of their fair value standard, which bankers largely blamed for the crisis following their large write down of securities backed by mortgages. The French president has also been one of the loudest critics of fair-value accounting. Infact the European Union was also able to pressurize the IASB chairman to skip over the normal process and expedite a rule permitting financial institutions to reclassify some loans so as to avoid marking those assets to market.

To ward of the criticism and get to the bottom of the problem FASB and IASB established a Financial Advisory Group in December 2008 - a heavyweight board comprising of current and former regulators and financial-services executives, headed by a former commissioner for the Securities and Exchange Commission (SEC). This group has been given the mission of staving of undue interference in accounting rule making and suggesting improvements to fair value accounting.

Fair value accounting has also found support from the UK, House of Commons. The report by the House Treasury Committee, released in May 2009, asserted. "The uncomfortable truth for banks is that market participants had over-inflated assets prices which have subsequently been corrected dramatically. Fair value accounting has actually exposed this correction, and done so more quickly than an alternative method would have done. We do not consider fair value accounting to be a suitable scapegoat for the hubris, poor risk controls and bad decisions of the banking sector."

Interestingly even the report of the Financial Crisis Advisory Group absolves fair value. To quote, "while the post mortems are still being written, it seems clear that accounting standards were not a root cause of the financial crisis."

'The financial crisis has illuminated the interconnectedness of global financial institutions and markets and other systemic risks, and has made the case for global convergence of accounting standards even more compelling than before.'

- Report of the Financial Crisis Accounting Group, July 2009

Normally when one argues in favour of convergence the focus is generally on the benefits to be derived in terms of cross-border capital formation and the promotion of efficient markets. The crisis has highlighted another important dimension, in times of stress convergence also benefits the world's financial system as it provides comparable, transparent and relevant information about financial institutions and other business entities that is of great assistance in identifying risk, promoting the efficient allocation of resources and minimizing opportunities for regulatory arbitrage arising from the inter play of accounting and prudential regulatory standards.

The urgency and significance of convergence can be ascertained from the fact that at the Pittsburg Summit "G-20 Leaders once again called on international accounting standard

setters to redouble their efforts to achieve a single set of high-quality, global accounting standards through their independent standard setting process and complete their convergence project by June 2011." (E &Y Overview, September 009).

Due credit must be given to the IASB, for the speed with which the road to convergence has been covered by it. At present there are 109 countries that have either adopted or permit International Financial Reporting Standards (IFRS) in preparation and presentation of financial statements. By the year 2011 this number is expected to go up to 147. Important players who would join in 2011 include Canada and India. As an association of accounting professionals and academicians there are two challenges before us. The first being, to impart instructions to students, both at college and university levels on IFRS and finally incorporate it into the curriculum itself. Training the trainer program has to, however, proceed this. Regional chapters can organize workshops for the teachers with the help of resource persons from the professional bodies.

Secondly adoption of IFRS in India will throw open a large number of issues which will need to be researched. Relevance of fair value measurement itself; particularly in case of illiquid markets which do not have depth. Tax implications of a number of provisions in the recently issued standards etc. The third challenge comes in the form of making available lucid, intelligible and accurate literature in the area. In a survey by the International Federation of Accountants (IFAC) in 2007 one of the key findings was "Accounting leaders believe they can play a key role in economic development globally and nationally." Let us understand and enhance our worth by contributing to this Herculean task of transition to international financial reporting standards. Thanks.

ACCOUNTING FOR INTERNALLY DEVELOPED INTANGIBLES

**Bhabatosh Banerjee*

ABSTRACT

While recognizing the importance of internally developed intangible assets for successful operation and growth of a firm, the author examines various pros and cons of their measurement and valuation. He suggests two alternative methods of valuation in this regard.

1. INTRODUCTION

Transformation of industrial economy into a knowledge-based economy is one of the important economic events in the 21st century. Organisations the world over now depend more on 'soft assets' than 'hard assets' as a means of doing business and creating sustainable competitive advantage. Apart from information technology (IT) industry, we find predominance of intangible assets in many other high-tech engineering, pharmaceutical and service organizations.

Wealth and growth in today's economy are driven primarily by intangible assets (Lev, 2001). Blair and Wallman (2001) concur that "the factors that have become most important to business success and economic growth in developed economies in the twenty-first century are intangibles or non-physicals." Yet accounting ignores and obscures the key factors to business success and value creation.

2. VALUES CREATED BY INTANGIBLE ASSETS VIS-À-VIS PHYSICAL ASSETS

There are many ways of measuring the values created by intangible assets. For example, a scan of the annual reports of high-tech firms will point out how, over time, sales to intangible assets have been growing. By the same token, sales to tangible assets are decreasing. Another popular way of measuring its importance is the spread between book value and the market capitalization of a firm. It may be due to a number of factors and impact of intangible assets is one of them. This gap is also widening over time. The position is shown in tables 1 and 2 below. In table 1, the average picture for the period 2003-04 – 2007-08 in respect four industry groups is given. Table 2, however, gives the current picture in respect of three successful units taken from different industry groups.

**Professor of Commerce & former Dean of Commerce & Management, University of Calcutta.*

Table 1
Intangible Assets to Market Capitalisation (%): 2003-04 – 2007-08

•	IT Industry
o	TCS 93.6; Infosys 89.3; Wipro 88.4
•	Pharmaceuticals
o	Ranbaxy 85.7; Lupin 84.5; Cipla 83.9
•	Automobiles
o	Tata Motors 76.7; Maruti 69.5
•	Infrastructure
o	ACC 54.8; Tata Steel 51.6

Note: Intangible Assets = Market capitalization less Net Worth.

Source: P.K.Singh, 2009.

Table 2
Difference between Market and Book Values

Type of value (Rs./crore)	Tata Steel	Infosys	SBI
Book Value (as on 31.3.09)	30,176.26	17,809.00	57,947.70
Market Cap. (as on 31.3.09)	15,050.15	75,847.10	67,713.13
As on 9.11.09*	44,333.88	1,27,150.90	1,39,940.30
MV*/BV	1.46	7.14	2.41

Source: Basic data from www.yahoo.com/finance.geojitbnpparibas.com.

The market values fluctuated quite significantly between 31.3.09 and 9.11.09. The sensex on 31.3.09 and on 9.11.09 was 9708.50 and 16498.72 respectively. Table 2 also shows the difference in MV/BV ratio among the three organisations. Assets that generate revenues are different among these three organisations across three industry groups – iron and steel, IT and service sector, respectively. Admittedly, Infosys has more intangible assets, both traditional and internally generated ones, than others for carrying its operations. This is captured by highest MV/BV ratio. The gap between market value and book value is different for different industry groups, as indicated by the three select organisations

3. INTANGIBLE ASSETS AND THEIR DIFFERENTIATING FACTORS

Traditionally, goodwill, patents, trade marks, brand, licence, etc. are considered as intangible assets. In India, Accounting Standard (AS) 26, which came into effect from 1.4.2004, deals with definitions of various terms, types of intangible assets, recognition and measurement, amortization, impairment of losses, retirement and disposal and disclosure.

AS 26 defines intangible assets as ‘an identifiable non-monetary asset, without physical substance, held for use in the production or supply of goods or services, for rental to others, or

for administrative purposes. Apart from identifiability clause, three other conditions to be fulfilled, namely, (i) controllability to the organisation, (ii) potential future benefits, and (iii) reliability of its cost measurement.

Common examples of intangible assets given are: computer software, patents, copyrights, motion picture films, mortgage service rights, fishing licences, import quotas, franchises, customer or supplier relationships, customer loyalty, market share and marketing rights. Any of these items that will satisfy the above-mentioned three conditions will be regarded as intangible assets subject to measurement and reporting as mentioned in the Standard.

IAS 38 deals with identifiable intangible assets. Intangible assets which can be recognized *independently* from other aspects of the business activity and which arise out of any contractual or legal rights are defined as 'identifiable intangible assets'. The three other conditions, as stated earlier in case of AS-26, are the same. IAS 38 also gives examples of many items as identifiable intangible assets viz., (i) patents, copyrights, industrial property rights, service and operating rights; (ii) brand names; (iii) computer software; (iv) publishing titles; (v) formulae, models, design, etc.; (vi) franchises and licences; (vii) intangible assets under development.

Appendix A to SFAS 141 provides examples of intangible assets that might be recognized separately. They are trademarks, internet domain names, non-competition agreements, customer lists, books, advertising contracts, construction permits, use rights, employee contracts, patented and unpatented technologies, and secret formulas.

In management literature host of items, and that too quite logically, are termed as intangible items. These items may be called, more appropriately, 'internally generated or developed intangibles'. They include customer relationships, employee skills, organisation culture, leadership style, networking, competence and systems.

When we compare some of the provisions of the three standards, we find some similarities and dissimilarities as well. Attempts are made to remove the differences between FASB standards and IASB standards as part of 'convergence movement'. Similarly, the current Indian standards are based on IAS or IFRS in order to move towards convergence. But one common thread is noticed in the standards issued by IASB, FASB and ICAI with respect to internally generated intangible assets. That is, no significant attempt has been made in recognizing their contribution to the success or otherwise of the firm. In the process, there is no provision for measurement and reporting of internally generated intangibles.

In section 2, we have seen (table 2) wide gap between book values and market values in respect of three successful organisations in three industry groups. Much of the gap, it may be argued, is attributable to unrecorded intangibles. It has now become a fact of corporate life that value derived from intangibles is significantly different from that created by purely physical assets. Kaplan and Norton have suggested a number of differentiating factors between the two (Niven, 2005) viz.

- *Intangible assets may not have a direct impact on financial results but may have a second or third order impact on financial success of a firm. Think of the value that may be created through effective training of the employees and its impact on the success of the firm.*

- *The value of intangibles is largely potential – it must be transformed.* For example, technology, employee skills, and empowering cultures must be transformed from the raw yet powerful forces they represent to actual value-creating opportunities.
- *Intangible assets require interdependence for success.* For example, a firm's leadership style, culture, organisation, employee skills, networks, and technology should all be forged together in order to draw maximum value from each.

4. THE ISSUES

In view of the above, we have a number of issues ranging from recognition and measurement to management of intangible assets. It is true that the notable accounting standard setting bodies of the world, such as, IASB, FASB, ICAI, have requirements relating to recognition and measurement of intangible assets. But they mainly relate to traditional *purchased intangible assets*, such as, goodwill, patents, copyrights, brand and the like. But what about the *intangibles developed internally*? Secondly, with respect to traditional intangible assets, there is no unanimity in recognition and measurement of them. For example, compare the provisions of the standards issued by the FASB (SFAS 142), IASB (IAS 38), ASB of the UK (FRS 10) and ICAI (AS 26). Although IFRS permits revaluation of intangible asset only when it is traded in the active market, the US GAAP prohibits it (Deloitte, 2008). It is true that convergence of accounting standards is in the active agenda now, even then some discussion on the issue may not be out of context.

Thus, in view of its important role in the success or failure of an organisation, it is imperative to have wider debate and more research on the subject. What would then be the research agenda? Some of the items are listed below:

- Is the definition of intangible assets all-pervasive? What about the concept of knowledge assets?
- How to identify the nature, characteristics and attributes of intangible assets?
- Are there any problems associated with conventional recognition and measurement methods?
- Will it be prudent to shift from cost-based to value-based accounting in respect of intangible assets?
- How to resolve the differences, if any, in the accounting treatments of intangible assets as specified in the standards issued by notable standard setting bodies?
- What are internally developed intangibles? How to recognize and measure them? Will it be prudent to report the measurable internally generated intangibles in the financial statements of corporate enterprises?

5. OBJECTIVES OF THE PAPER

It would be very difficult to deal with all the above issues in a single paper. Accordingly, this paper deals with the above-mentioned last issue and specifies its objectives as follows:

- To recognize the importance of value created by intangible assets than that by tangible assets.

- To identify the nature of internally developed intangibles assets to facilitate their recognition and measurement.
- Suggest some methods of valuation and examine their problems and prospects.
- To examine the prospect of reporting.

While we considered the first two objectives in sections 2 and 3 earlier, section 6 deals with rationale for accounting of intangible assets. Sections 7 and 8 discuss the prospect of and methods for measurement and valuation. The reporting aspect is then examined.

6. RATIONALE FOR ACCOUNTING OF INTERNALLY DEVELOPED INTANGIBLES

As we have seen earlier, accounting is blind in its treatment of internally generated intangibles as if they have no value and hence are not worthy of measurement and reporting. There is no doubt that improving the information used by decision makers for optimal investment in intangibles would serve different parties. Creditors and investors want to know which companies to invest in and which holdings to liquidate. Managers are concerned for selection of profitable investment opportunities. Regulators and policy makers want to know which research needs to be funded, and whether increased information and disclosure on intangibles should be mandated. Thus, the key issue that arises is how to improve measurement and reporting of internally developed intangible assets.

Currently, only purchased goodwill attracts measurement and reporting in the books of accounts although there are differences in approach in different standards. But if the goodwill is developed internally, it has no place in accounting. Is this rational and speaks of real life business situation? Hundreds and thousands of business enterprises the world over develop goodwill through successful operation. The role of goodwill, in such a situation, is no less important than that played by any other physical asset. Likewise, the more effective role played by management as a result of training and system improvement can hardly be denied in this competitive market place. The same is true in case of process development and product innovation. It is common knowledge that many companies win with innovative products and processes after a successful commercialisation. A first-to-market advantage is translated into a sustained competitive advantage which either creates a new earnings stream or enhances the existing one. Some popular examples are Pilkington (Float Glass), G.D. Searle (Nutra Sweet), Dupont (Teflon), W.L.Gore (Goretex). However, the product/process innovation cycle seems more suited to mass markets where customer tastes are relatively homogeneous (Teece, 2000). Similarly, improved supply-chain management and customer relation plays a very significant role in effective management of products and services. Should we not recognize these realities into the accounting process?

Peter Ferdinand Drucker, known as the 'Organisation and Systems man' [Clutterbuck and Crainer (1991)], in his book (1999) entitled *Management Challenges for the 21st Century*, dealt with some important issues in the context of such challenges. A reference to some of his observations in those context requires consideration by the accounting fraternity.

Management will increasingly have to be based on the assumption that neither technology nor end-use is a foundation

for management policy. They are limitations. The foundations have to be *customer values* and customer decisions on the distribution of their disposal income (p.29).

Core competencies are different for every organisation; they are, so to speak, part of an organisation's personality. Thus -

Every organisation - not just businesses - needs one core competencies: *innovation*. And every organisation needs a way to *record and appraise* its innovative performance" (p.119).

Drucker also addressed the role of 'knowledge workers' in enhancing the productivity and hence the value of an organisation. Can these be measured? It is surely a central problem for all - management, investors and capital markets. Even in the free markets knowledge governs rather than the money and hence knowledge workers are the true assets. Like other physical assets, they can neither be bought or sold and do not come with a merger or an acquisition. Practically, they represent greatest value although they have no market value and hence are not treated as 'assets' in the popular sense of the term. Drucker predicted:

... it is certain that the emergence of the knowledge worker and of the knowledge worker's productivity as key questions will, within a few decades, bring about fundamental changes in the very structure and nature of the economic system (p.159).

In view of the foregoing discussion, can we keep our eyes shut from accounting point of view simply because difficulties are involved in the measurement and reporting of intangible assets? Again, if we ignore the role of a significant part of the assets for difficulty involved in their measurement and reporting, can the financial statements satisfy the test of 'truthfulness, fairness and sustainability'? Accordingly, let there be honest attempts to make the financial statements representative of the ground reality.

7. MEASUREMENT AND VALUATION

What may be the possible methods of valuation of internally developed intangible assets? We briefly discuss the following.

(i) Cost Method

Costs that would currently be required to replace the asset are accumulated and form the basis of valuation of an intangible. The rationality of this method is that an investor would pay no more to purchase the asset than would be paid to reproduce the asset. Cost approach may be adopted when it is difficult to estimate the future income streams of the asset.

IAS 38 gives treatment of internally generated intangibles other than goodwill. It says that the expenditure incurred for developing such assets may be classified under (a) research phase, and (b) development phase. Costs incurred during research phase are to be expensed in the profit and loss account in the same year while that incurred during the development phase should be capitalised. Once capitalised, amortisation over the useful life is done. Impairment test comes into picture if the asset is more than 10 years or if the asset is not available

for use. Under the cost method, an intangible asset would be carried forward at cost less accumulated amortisation and any accumulated impairment losses.

(ii) Present Value Method

Under this method, future cash flows over the life of the asset would be converted into their present values using a risk-adjusted required rate of return and the present value of future cash flows would represent the value of the intangible assets. This approach is better than cost approach since it takes into consideration cash flows rather than income, uncertainty and time value of money. But there are difficulties in estimating future cash flow streams (in terms of amounts and their timing) and in selecting an appropriate risk-adjusted discount rate.

(iii) Market Value Method

Historically, assets and liabilities have been valued on cost in order to facilitate verification and stability of accounting numbers. However, the 'fair value' method of valuation is an outcome of recent developments.¹ Fair Value is defined (SFAS No.157) as "the price at which an asset or liability could be exchanged in a current transaction between knowledgeable, unrelated willing parties". Fair value method of valuation is based on the premise that fair values provide relevant measures of assets, liabilities, and earnings than historical costs. FASB provides three levels of fair value:

- Level 1: Fair value – quoted prices for identical assets and liabilities (applicable to those that are actively traded).
- Level 2: Fair value – quoted market prices of similar or related assets and liabilities.
- Level 3: Fair value – value as estimated by the company (applicable if level 1 or 2 estimates are not available).

Few other FASB standards require disclosure or recognition of financial statement amounts based on fair values. Similarly, both IASB and ASB of India have used more or less the same term in different standards. As for example, in India one finds its limited application in AS-10 (Accounting for Fixed Assets), AS-13 (Accounting for Investments), AS-15 (Accounting for Retirement Benefits in the Financial Statements of Employers), AS-19 (Leases), AS-22 (Accounting for Taxes on Income) and AS-28 (Impairment of Assets). But there is no doubt that more emphasis has recently been given on fair value method of measurement and valuation.

Fair value method has been much criticized for its role in the recent credit crunch. The following questions thus arise:

- How efficient is the market and hence reliable of its fair values?
- Is it possible to apply the concept totally in preparing financial statements?
- What will be the implications of adopting fair value accounting to the various parties – firm, auditors, users of accounts, etc.?

Thus, in the above context one has to examine the pros and cons [relevance vs. reliability (subjectivity), stability, and comparability vs. volatility]. Although the requirements of fair value measurement apply to all firms, focus has been significantly placed on financial

institutions, particularly banks, because “financial instruments” of these institutions are significant and they badly need fair value measurements.

When the fair value method is followed, the asset account is written up and the corresponding credit is given either to Equity Account (Capital reserve) or to Income Statement (Revenue) account. But two issues also need to be resolved in this context. First, the question of payment of tax on unrealised gain. Second, payment of dividend out of capital profit will violate the basic principles of accounting and relevant provisions of the Companies Act, 1956.

8. SUGGESTIONS AND CONCLUSIONS

It seems that application of each of the methods of valuation (section 7) has its own problems² and prospects. But such problems cannot be cited as adequate ground for ignoring the measurement and valuation of internally generated intangible assets which play an important role in driving the business wheel. The contemporary developments suggest use of market values for valuation and measurement of assets and liabilities. Accordingly, we venture to make the following suggestions for measurement and valuation of internally developed intangibles:

(1) *Valuing intangibles clubbing them with other assets, both tangible and purchased intangibles:*
Total market value of the firm less value of physical assets and acquired intangibles.

This will be a sort of indirect or ‘derived’ method of determining value of internally developed intangible assets.

(2) *To be valued as stand alone intangibles:*

The market value should be arrived at for each type of intangible, or group of similar intangibles, as suggested in the standard issued by FASB and adopted by IASB and ICAI. We suggest that such values should preferably be determined by ‘technical persons’ rather than by management. In doing this, two important issues need to be considered:

(a) Costs vs. risks: Additional costs to be incurred for hiring technical persons for valuation should be compared with additional risks to be taken by managers and auditors by ignoring the value determined by the technical persons or by them.

(b) Impact of fluctuation in market value, viz.-

- Inaccurate financial statements
- Fraudulent practices
- Extra liabilities of managers and auditors.

But can probability of fluctuation in values become an adequate excuse to ignore the values of potentially useful assets? If the answer is in the negative, then we have to adopt a rational approach toward recognition and reporting of internally developed intangibles. We therefore suggest that, to start with, the **appraised values** of the intangibles be published as **Notes** in the balance sheet. If such disclosure becomes useful to the investors and creditors, we should then recognise these values directly in the financial statements. Needless to mention,

adequate research is necessary to establish this hypothesis. What about formulating suitable accounting standard for them?

The standard setting bodies then need to issue a suitable standard of accounting for internally developed intangibles. There is enough evidence (Catanach & Brody, 1993) to suggest that accounting standards for intangibles can indirectly influence investment decision in a regulated economy. They also provide auditors and regulators with an increased understanding of how credit and liquidity risks are related to the existence of intangible assets.

REFERENCE

1. FASB promulgated in September 2006 the SFAS No. 157 on 'Fair Value Measurements'. In November 2006 IASB issued a discussion paper entirely based on SFAS No.157. ASB of ICAI followed IFRS in issuing its standards in India. These measures were taken with a view to facilitating convergence.
2. For example, linking cost to the asset, estimating ex-ante probability of success, establishing arm's length price benchmark due to lack of market, fuzzy control and inseparability (Joishy, 2008).

SELECT BIBLIOGRAPHY

- Basu, A.K. (2003), *Rediscovering the Balance Sheet – a corporate financial reporting theory perspective*, DSA in Commerce, University of Calcutta.
- Blair, M and Wallman, S. (2001), *Unseen Wealth: The Value of Corporate Intangible Assets*, Brookings Institution Press, USA.
- Boisot, M.H. (1998), *Knowledge Assets*, Oxford University Press.
- Catanach, Jr. Anthony H. and Brody, Richard G. (1993). "Intangible Assets, the Loan Portfolio and Deposit Mixes of Stock Savings & Loans", *Accounting Horizon*, June.
- Clutterbuck, David and Crainer, (1991), Stuart, *Makers of Management: men and women who changed the business world*, Rupa & Co.
- Deloitte. (2008), *IFRSs and US GAAP a pocket comparison*.
- Drucker, F. Peter. (1999), *Management Challenges for the 21st Century*, Butterworth-Heinemann.
- Joishy, Gurudutt N. (2008), "Valuation of Intangible Assets", *The Chartered Accountant*, February.
- Lev, Baruch. (2001), *Intangibles: Management, Measurement, and Reporting*, The Brookings Institution, Washington.
- Niven, P.R. (2005), *Balanced Scorecard Diagnostics: Maintaining Maximum Performance*, J.Wiley & Sons, N.J.
- Stobart, P. (1989), "Brand Valuation: A True and Fair View", *Accountancy*, October.
- Tearney, M.G. (1973), "Accounting for Goodwill: A Realistic Approach", *Journal of Accountancy*, July.
- Teece, D.J. (2000), *Managing Intellectual Capital*, Oxford University Press.

PERFORMANCE OF EXCHANGE TRADED FUNDS IN INDIA

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ABSTRACT

This study empirically examines the performance of Exchange Traded Funds in India in terms of their tracking ability and their effectiveness in replicating the underlying index returns over a given period of time. A sample of nine ETFs listed on the National Stock Exchange of India has been analyzed in this study over a period ranging from January 2003 to December 2008. Our study finds evidence of significant daily tracking errors for ETFs, however no significant bias in performance (in terms of under or out performance) is found over the half-yearly intervals analyzed. A comparative analysis of various ETFs reveals that though they differ in terms of their tracking abilities, they are all equally effective in replicating the returns of their underlying indices over the given time intervals. To the best of our knowledge there has been no previous published research study which empirically examines the performance of Exchange Traded Funds in India and this is the first such attempt in this direction.

In India, the first ETF was launched on National Stock Exchange in December 2001 by Benchmark Mutual Funds under the name Nifty Benchmark Exchange-traded Scheme (Nifty BeES) which tracks the S&P CNX Nifty index. Since then the ETF segment has grown slowly but steadily in India with a total of 18 ETFs being listed on Indian stock exchanges by July 2009. Of these, the ETFs that are gaining popularity among the Indian investors recently are the gold ETFs which attempt to replicate the returns of gold without requiring the physical trade of gold on the part of investors. Despite the increasing importance of ETFs market, literature on these products is still scarce. Moreover, most of the researches done on ETFs have concentrated on American markets. Thus, given the limited evidence on the performance of ETFs internationally, and the absence of empirical research in India, this study contributes to the literature by providing analysis of the performance and index tracking capability of a relatively new financial product available to Indian investors.

The objectives of the present study are to empirically examine the performance of Exchange Traded Funds in India in terms of their tracking ability and effectiveness in replicating the returns of their underlying indices, and to provide a comparison of performance of various

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Exchange Traded Funds in India. The paper provides a brief review of literature, research methodology and empirical findings.

A. LITERATURE REVIEW

Gastineau (2002) points out that a major source of tracking error for index funds are the transaction costs that occur when the composition of the underlying index changes. The transaction costs due to index changes stem from the increased volatility of the shares in question after there has been an announcement of an index rebalance. Agapova (2009) compares aggregate flows into conventional open-end index funds to those into ETFs for various underlying indexes. The study shows that conventional funds and ETFs are substitutes, but not perfect substitutes. Their coexistence can be explained by a clientele effect that segregates the two vehicles into different market niches. Huang and Guedj (2008) develop a theoretical model of equilibrium choice between ETFs and conventional index funds. In their equilibrium model, they show that conventional funds are beneficial to risk-averse investors due to the partial insurance against future liquidity shocks embedded in the conventional index fund structure. Gallagher and Segara (2004) examine the performance and trading characteristics of ETFs on the younger Australian market. The authors find evidence of significant tracking errors for ETFs, however no significant bias in performance is found over the year 2002 and 2003. A comparative analysis reveals significantly higher tracking errors of index funds relative to ETFs. Similarly, for the seven most important ETFs traded on the Italian market, Zanotti and Russo (2005) show that risk-adjusted return are higher on average than those observed for traditional mutual funds. Kuo and Mateus (2006) investigate the performance and persistence of 20 iShares MSCI country-specific ETFs in comparison with S&P 500 index over the period July 2001 to June 2006. The main findings of their study are at two levels: First, ETFs can beat the U.S. market index based on risk-adjusted performance measures. Second, there is evidence of ETFs performance persistence based on annual return. Turunen (2008) quantify the performance differences between Exchange-Traded Funds and mutual index funds tracking either S&P 500 or Dow Jones EuroStoxx 50 indices as their benchmarks. Based on total returns, tracking errors, Sharpe ratios and Jensen's alpha estimates he verify that both the ETFs and the index funds are on average, competent in mirroring their benchmark's performance. Moreover, the ETFs are on average, better than their corresponding index funds.

B. DATA

Our study analyses the performance of a sample of nine ETFs comprising of all the equity and gold ETFs listed on the National Stock Exchange of India (NSE) before 2008. Each of these ETFs is analyzed over a period beginning from the first full calendar year of its trading till the end of the year 2008¹ (Table 1). The study obtains secondary data in the form of daily closing prices of ETFs and their underlying indices. The closing prices of all ETFs under the study and the closing values of all equity indices have been taken from the official site of National Stock Exchange of India. For analyzing the performance of gold ETFs, the last traded

prices of gold on the Multi Commodity Exchange of India (MCX) have been taken to serve as the benchmark. Table 2 provides a profile of all the ETFs that are analyzed in this study.

C. RESEARCH METHODOLOGY

Earlier studies on ETFs have identified a number of different ways of measuring their performance. This study uses the methodology adopted by Gallagher and Segara (2004) and examines the performance of an ETF in terms of the following two criteria:

- (i) Tracking error
- (ii) Effectiveness

Tracking error is a quantitative measure of the difference in the performance of an ETF and its underlying index. This study measures tracking error using the following two methods.

Method 1

Here tracking error is calculated as the *absolute difference* in the returns of the ETF and its underlying index. The tracking error for day t is thus calculated as the absolute difference in return of the ETF portfolio 'p' and its benchmark index 'b' on day t and is denoted by $|e_{pt}|$. After calculating the daily tracking error, the mean absolute tracking error of n days ($TE_{1,p}$) is calculated as follows.

$$TE_{1,p} = \frac{\sum_{t=1}^n |e_{pt}|}{n}$$

where,

$$e_{pt} = R_{pt} - R_{bt}$$

R_{pt} = the percentage return of ETF portfolio p for day t

R_{bt} = the percentage return of underlying index b for day t

n = the number of observations in the period

Then, in order to test the significance of these tracking errors, two-tailed t-test are conducted using the SPSS software so as to determine whether these mean tracking errors ($TE_{1,p}$) significantly differ from zero. The null hypothesis is that $TE_{1,p}$ equals zero.

Method 2

Under this method tracking error is measured as the standard deviation of the arithmetic difference in return between the ETF portfolio and the underlying index. This measure of tracking ability thus quantifies the variability in daily tracking errors of an ETF over a period of time and can be expressed as follows:

$$TE_{2,p} = \sqrt{\frac{1}{n-1} \sum_{t=1}^n (e_{pt} - \bar{e}_p)^2}$$

It is important to note, however, if an ETF consistently underperforms the index by x percent per day, then the use of this method will result in zero tracking error over the period. The converse is also the case for fund out-performance.

To examine the effectiveness of ETFs, the present study partitions its sample period into half yearly intervals and calculates the mean e_{pt} values which are used to analyze whether an ETF underperformed or outperformed its underlying index over these half yearly intervals.

In order to test the significance of this under or out-performance of ETFs, two tailed t test are used to determine whether mean arithmetic differences significantly differ from zero. The null hypothesis is that mean e_{pt} equals zero i.e. there is no under or out-performance. An attempt has also been made to compare the performance of various ETFs in terms of their effectiveness and tracking errors over a common time horizon, which in the present study is taken to be the year 2008.

One-way Analysis of Variance (ANOVA) is used by applying the SPSS software so as to determine whether the mean absolute difference in return ($TE_{1,p}$) or the mean arithmetic difference in return (mean e_{pt}) for the year 2008 differ across various ETFs.

D. EMPIRICAL RESULTS

D.1 Tracking Errors

Table 3 documents the performance of each of the nine ETFs under the study, as measured by their tracking errors.

On examining the half yearly average absolute tracking error ($TE_{1,p}$), its magnitude ranges between 0.2891% to 2.4375% across all ETFs. The lowest half yearly average tracking error is recorded for NIFTYBEES and the highest is for KOTAKPSUBK. When tested for significance, the mean $TE_{1,p}$ for all the ETFs across all the time periods analyzed are found to be significantly different from zero since the p-values equals zero for all of them.

The results also show that there is considerable variability in daily tracking errors for each ETF through time. The maximum variability is found for KOTAKPSUBK for which the daily tracking error for the entire sample ranges from 0.0023% to 14.4351%. Similar results regarding the variability of tracking errors are obtained when the second method of tracking error namely $TE_{2,p}$ is used which measures the standard deviation of the arithmetic difference in returns between the ETF and the underlying index.

Frino and Gallagher (2001) found out that factor such as transaction cost, fund cash flows, dividends, benchmark volatility, corporate activity and index composition changes prevent index funds from perfectly replicating the performance of the benchmark index. These market frictions could also be the possible causes preventing the index linked ETFs in India from perfectly tracking the daily returns of the underlying indices.

D.2 Effectiveness

Table 4 documents the performance of various ETFs under study in terms of their effectiveness in achieving the index returns over half yearly intervals and over the entire sample period. An examination of the half yearly mean e_{pt} of various ETFs over the sample period

reveals that its magnitude ranges between -0.0481% (for RELGOLD) to 0.0741% (for KOTAKPSUBK) i.e. at one extreme, an ETF underperforms its underlying index by earning on an average 0.0481% lesser daily return than its index, and on the other extreme, another ETF outperforms its underlying index by earning on an average 0.0741% higher daily return than its index. On examining the significance, the under or out-performance of none of the ETFs is found to be statistically different from zero thereby indicating that they were all able to nearly replicate the average returns of their underlying index over a period of six months. This result suggests that investors investing through ETFs in India with a long term horizon will be able to achieve investment returns that are similar to the underlying index returns.

D.3 Comparison of the performance of various ETFs

Table 5 gives the magnitude of mean $|e_{pt}|$ and mean e_{pt} of all ETFs under the study over the comparison time period i.e. year 2008. In order to compare the tracking ability of various ETFs over the year 2008, one way Analysis of Variances (ANOVA) is conducted so as to determine whether the mean $|e_{pt}|$ of various ETFs significantly differ from each other. However, before conducting the ANOVA, it is necessary to test an important assumption of ANOVA regarding the homogeneity of variances of various populations. This is done by conducting the Levene test. The output of this test shows a significance or p-value of 0.00 indicating that the assumption is violated. As a result, the Welch and the Brown-Forsythe test are conducted which are considered to be robust test of equality of means in case the assumption of ANOVA is violated. The output of both these tests show a p-value of 0.00 which means that the null hypothesis cannot be accepted. This indicates that the mean tracking errors of various ETFs under the study are not statistically equal. It can be observed from table as well that the mean tracking errors of sectors specific ETFs like BANKBEES, PSUBNKBES and KOTAKPSUBK are substantially higher than that of other broad based and gold ETFs. Similarly, in order to compare the **effectiveness** of various ETFs over the year 2008, one way ANOVA is conducted so as to determine whether the mean e_{pt} of various ETFs significantly differ from each other. Again, due to the violation of the assumption of ANOVA, the Welch and the Brown-Forsythe test are conducted, both of which show a p-value of 1.00 thereby indicating that the null hypothesis cannot be rejected and thus the mean arithmetic difference in return of various ETFs are equal i.e. all the ETF under the study are equally effective in replicating the returns of their underlying indices over the year 2008.

Overall, the main empirical findings regarding the performance of ETFs under the study can be summarized by saying that, in terms of tracking ability, all the ETF under the study experience significant tracking errors and such tracking errors differ across the ETFs. However in terms of their effectiveness, all the ETFs are found to be equally effective in replicating the returns of their underlying indices over time and there is no significant under or out-performance for any ETF.

E. CONCLUSION

The study reports a number of important results. Firstly, a significant magnitude of mean absolute tracking error is found for all the ETFs over the various time periods analyzed.

This indicates the presence of some market frictions that are preventing the index linked ETFs in India from perfectly tracking the underlying indices on a daily basis.

Secondly, an examination of effectiveness of ETFs reveals no significant bias in the performance of ETFs since none of the ETFs significantly outperforms or underperforms its underlying indices over the half yearly windows analyzed. This result suggests that investor investing in ETFs in India with a long term horizon will be able to achieve investment returns that are similar to index returns.

Thirdly, a comparison of performance of various ETFs reveals that though various ETFs significantly differ from each other in terms of their magnitude of tracking errors, they are all equally effective in their performance over the year 2008.

The study thus reveals that though ETFs in India may not have been able to track their underlying indices perfectly on a daily basis, over a long time horizon of six months or more, they have been able to replicate the average returns of their underlying indices.

End Note

1. Due to the poor trading history, an ETF named SUNDER is excluded from the study. For the same reason, the first two full calendar years of trading of ETFs named BANKBEES and JUNIORBEES are also excluded. Moreover, the dates on which ETF price data or index value data are unavailable are not included in the analysis.

REFERENCES

- Agapova, A. 2009. Conventional Mutual Index Funds versus Exchange Traded Funds. *Accepted paper series, SSRN*
- Gallagher D. R. and R. Segara 2004. The Performance and Trading Characteristics of Exchange-Traded Funds. *Working paper, The University of New South Wales.*
- Gastineau, G. 2002. Equity Index Funds Have Lost Their Way. *Journal of Portfolio Management*, 28(2) : 55-64
- Gastineau, G. 2004. The Benchmark Index ETF Performance Problem. *Journal of Portfolio Management*, 30(2) : 96-104
- Huang J.C. and I. Guedj 2008. Are ETFs Replacing Index Mutual Funds? *Working paper series, SSRN*
- Kostovetsky, L. 2003. Index Mutual Funds and Exchange Traded Funds. *Journal of Portfolio Management*, 29(4) : 80-92
- Kuo T.W and C. Mateus 2006. The Performance and Persistence of Exchange-Traded Funds: Evidence for iShares MSCI country-specific ETFs. *Retrieved from www.fma.org.*
- Turunen, J. 2008. Equity index funds and ETFs: Performance comparison between passive investing alternatives. *Bachelor's thesis, Lappeenranta University of Technology.*
- Zanotti G. and C. Russo 2005. Exchange Traded Funds versus Traditional Mutual Funds: A Comparative Analysis on the Italian Market. *Working paper, Bocconi University.*

Table 1: Exchange Traded Funds in India

Name ETF	ETF Symbol	Fund House	Index Tracked and Exchange listed on	Inception Date	Price per unit	Expense Ratio (annualised)
Nifty BeES	NIFTYBEES	Benchmark Mutual Fund	S&P CNX Nifty, NSE	Dec-01	1/10 of index	0.50%
Sensex Prudential ICICI ETF	SPICE	ICICI Prudential Mutual Fund	Sensex, BSE	Jan-03	1/100 of index	0.80%
Junior Nifty BeES	JUNIORBEES	Benchmark Mutual Fund	CNX Nifty Junior, NSE	Feb-03	1/100 of index	1%
S&P CNX Nifty UTI National Depository Receipt Scheme	SUNDER	UTI Mutual Fund	S&P CNX Nifty, NSE	Jul-03	1/10 of index	0.50%
Liquid BeES	LIQUIDBEES	Benchmark Mutual Fund	Money market instruments, NSE	Jul-03	Face value = Rs.1000 per unit	0.60%
Bank BeES	BANKBEES	Benchmark Mutual Fund	CNX Bank Nifty, NSE	May-04	1/10 of index	0.50%
Gold BeES	GOLDBEES	Benchmark Mutual Fund	Domestic gold prices, NSE	Mar-07	1 gram gold	1%
UTI Gold ETF	GOLDSHARE	UTI Mutual Fund	Domestic gold prices, NSE	Apr-07	1 gram gold	1%
Kotak Gold ETF	KOTAKGOLD	Kotak Mutual Fund	Domestic gold prices, NSE	July-07	1 gram gold	1%
PSU Bank BeES	PSUBNKBEEES	Benchmark Mutual Fund	CNX PSU Bank, NSE	Oct-07	1/10 of index	0.75%

Contd....

Name ETF	ETF Symbol	Fund House	Index Tracked and Exchange listed on	Inception Date	Price per unit	Expense Ratio (annualised)
Kotak Reliance Gold ETF 1%		RELGOLD Mutual Fund	Reliance prices, NSE	Domestic gold	Oct-07	1 gram gold
PSU Bank ETF	KOTAKPSUBK	Kotak Mutual Fund	CNX PSU Bank, NSE	Nov-07	1/10 of index	0.65%
Quantum Gold ETF	QUANTUMGOLD	Quantum Mutual Fund	Domestic gold prices, NSE	Feb-08	1/2 gram gold	1%
Kotak Sensex ETF	KOTAKSENSEX	Kotak Mutual Fund	Sensex, BSE	June-08	1/100 of index	0.5%
Reliance Banking ETF	RELBANK	Reliance Mutual Fund	CNX Bank Nifty, NSE	June-08	1/10 of index	0.35%
Quantum Nifty ETF	QNIFTY	Quantum Mutual Fund	S&P CNX Nifty, NSE	July-08	1/10 of index	0.75%
Shariah BeES	SHARIABEES	Benchmark Mutual Fund	S&P CNX Nifty Shariah, NSE	Mar-09	1/10 of index	0.66%
SBI Gold ETS	SBIGETS	SBI Mutual Fund	Domestic gold prices, NSE	May-09	1 gram gold	NA

Table 2: ETFs analyzed in the study

ETF Symbol	Index Tracked	Date Of Inception	Period Under Study
NIFTYBEES	S&P CNX Nifty	Dec-01	1jan 03 - 31dec 08
JUNIORBEES	CNX Nifty Junior	Feb-03	1jan 06 - 31dec 08
BANKBEES	Bank Nifty	May-04	1jan 07 - 31dec 08
PSUBNKBEES	CNX PSU Bank	Oct-07	1jan 08 - 31dec 08
KOTAKPSUBK	CNX PSU Bank	Nov-07	1jan 08 - 31dec 08
GOLDBEES	Gold Prices	Mar-07	1jan 08 - 31dec 08
GOLDSHARE	Gold Prices	Apr-07	1jan 08 - 31dec 08
KOTAKGOLD	Gold Prices	July-07	1jan 08 - 31dec 08
RELGOLD	Gold Prices	Oct-07	1jan 08 - 31dec 08

Table 5: Comparison of performance of various ETFs

ETF	Period	n	Mean $ e_{pt} $ ($TE_{1,p}$)	Mean e_{pt}
NIFTYBEES	2008	246	0.4228	-0.0050
JUNIORBEES	2008	246	0.7889	0.0026
BANKBEES	2008	244	1.1602	0.0040
PSUBNKBEES	2008	239	1.5697	0.0171
KOTAKPSUBK	2008	229	2.1844	0.0355
GOLDBEES	2008	242	0.6953	-0.0018
GOLDSHARE	2008	242	0.7538	-0.0045
KOTAKGOLD	2008	242	0.7198	-0.0054
RELGOLD	2008	242	0.7794	-0.0115

Table 3: Performance of ETFs analyzed in terms of tracking error.

ETF	Period	n	Mean $ e_{pt} $ ($TE_{1,p}$)	t-stat.	p-value	min.	max.	Std. Dev. ($TE_{2,p}$)
NIFTYBEES	1stHalf,2003	123	0.2891	12.414	0.000	0.0019	1.2507	0.3886
	2ndHalf,2003	130	0.7207	15.200	0.000	0.0272	2.6749	0.9032
	1stHalf,2004	125	1.0442	12.679	0.000	0.0054	5.4213	1.3954
	2ndHalf,2004	128	0.6417	13.350	0.000	0.0057	2.7199	0.8434
	1stHalf,2005	126	0.6070	12.278	0.000	0.0000	3.4011	0.8243
	2ndHalf,2005	125	0.7470	12.260	0.000	0.0035	3.9290	1.0131
	1stHalf,2006	124	0.8101	9.917	0.000	0.0053	6.0991	1.2741
	2ndHalf,2006	126	0.4876	10.661	0.000	0.0086	4.3390	0.7093
	1stHalf,2007	122	0.4257	14.409	0.000	0.0035	1.7149	0.5376
	2ndHalf,2007	127	0.3611	12.657	0.000	0.0002	1.6126	0.4845
	1stHalf,2008	123	0.4326	11.642	0.000	0.0002	2.0637	0.5987
	2ndHalf,2008	123	0.4131	9.790	0.000	0.0057	2.7787	0.6252
	All	1502	0.5829	36.467	0.000	0.0000	6.0991	0.8507
JUNIORBEES	1stHalf,2006	109	1.2294	11.766	0.000	0.0081	5.7839	1.6479
	2ndHalf,2006	117	0.8375	12.395	0.000	0.0057	4.2023	1.1143
	1stHalf,2007	121	0.7626	15.349	0.000	0.0268	2.8385	0.9408
	2ndHalf,2007	127	0.7205	13.337	0.000	0.0139	3.4030	0.9454
	1stHalf,2008	123	0.8209	6.360	0.000	0.0087	11.0336	1.6517
	2ndHalf,2008	123	0.7570	6.648	0.000	0.0001	10.6759	1.4739
	All	720	0.8470	22.441	0.000	0.0001	11.0336	1.3207
BANKBEES	1stHalf,2007	98	1.1192	13.397	0.000	0.0232	2.9141	1.3962
	2ndHalf,2007	124	0.8461	9.930	0.000	0.0224	6.3539	1.2735
	1stHalf,2008	122	1.1359	10.419	0.000	0.0089	7.0179	1.6586
	2ndHalf,2008	122	1.1844	11.528	0.000	0.0052	8.3071	1.6439
	All	466	1.0680	21.866	0.000	0.0052	8.3071	1.5016
PSUBNBEEES	1stHalf,2008	120	1.2165	12.830	0.000	0.0072	5.5735	1.6001
	2ndHalf,2008	119	1.9258	11.988	0.000	0.0062	8.0860	2.6098
	All	239	1.5697	16.420	0.000	0.0062	8.0860	2.1582
KOTAKPSUBK	1stHalf,2008	116	1.9378	11.167	0.000	0.0023	14.4351	2.6972
	2ndHalf,2008	113	2.4375	13.317	0.000	0.0675	8.7215	3.1273
	All	229	2.1844	17.221	0.000	0.0023	14.4351	2.9112
GOLDBEES	1stHalf,2008	120	0.5895	15.505	0.000	0.0002	2.3185	0.7232
	2ndHalf,2008	122	0.7994	11.565	0.000	0.0050	4.1968	1.1074
	All	242	0.6953	17.334	0.000	0.0002	4.1968	0.9353
GOLDSHARE	1stHalf,2008	120	0.7325	11.104	0.000	0.0051	4.0571	1.0309
	2ndHalf,2008	122	0.7747	10.730	0.000	0.0032	4.1645	1.1136
	All	242	0.7538	15.429	0.000	0.0032	4.1645	1.0715
KOTAKGOLD	1stHalf,2008	120	0.6012	14.118	0.000	0.0011	2.3506	0.7628
	2ndHalf,2008	122	0.8364	10.197	0.000	0.0002	5.4630	1.2352
	All	242	0.7198	15.330	0.000	0.0002	5.4630	1.0265
RELGOLD	1stHalf,2008	120	0.7423	11.759	0.000	0.0293	3.9586	1.0165
	2ndHalf,2008	122	0.8158	11.058	0.000	0.0008	4.3166	1.1545
	All	242	0.7794	16.046	0.000	0.0008	4.3166	1.0866

Table 4: Performance of ETFs analyzed in terms of effectiveness.

ETF	Period	n	Mean ept	t-stat.	p-value
NIFTYBEES	1stHalf,2003	123	-0.0042	-0.119	0.905
	2ndHalf,2003	130	-0.0048	-0.061	0.951
	1stHalf,2004	125	0.0101	0.081	0.936
	2ndHalf,2004	128	-0.0004	-0.005	0.996
	1stHalf,2005	126	-0.0082	-0.111	0.912
	2ndHalf,2005	125	0.0145	0.160	0.873
	1stHalf,2006	124	0.0002	0.002	0.999
	2ndHalf,2006	126	0.0124	0.197	0.844
	1stHalf,2007	122	-0.0163	-0.334	0.739
	2ndHalf,2007	127	0.0032	0.075	0.941
	1stHalf,2008	123	0.0027	0.049	0.961
	2ndHalf,2008	123	-0.0127	-0.225	0.822
	All	1502	-0.0002	-0.011	0.991
	JUNIORBEES	1stHalf,2006	109	0.0059	0.037
2ndHalf,2006		117	0.0039	0.038	0.970
1stHalf,2007		121	-0.0017	-0.020	0.984
2ndHalf,2007		127	0.0007	0.009	0.993
1stHalf,2008		123	-0.0017	-0.011	0.991
2ndHalf,2008		123	0.0068	0.051	0.959
All		720	0.0022	0.046	0.964
BANKBEES	1stHalf,2007	98	0.0067	0.048	0.962
	2ndHalf,2007	124	-0.0004	-0.004	0.997
	1stHalf,2008	122	0.0017	0.012	0.991
	2ndHalf,2008	122	0.0063	0.042	0.967
	All	466	0.0034	0.049	0.961
PSUBNBEEES	1stHalf,2008	120	0.0445	0.304	0.761
	2ndHalf,2008	119	-0.0105	-0.044	0.965
	All	239	0.0171	0.122	0.903
KOTAKPSUBK	1stHalf,2008	116	0.0741	0.296	0.768
	2ndHalf,2008	113	-0.0042	-0.014	0.989
	All	229	0.0355	0.184	0.854
GOLDBEES	1stHalf,2008	120	0.0281	0.426	0.671
	2ndHalf,2008	122	-0.0312	-0.311	0.756
	All	242	-0.0018	-0.029	0.977
GOLDSHARE	1stHalf,2008	120	0.0219	0.232	0.817
	2ndHalf,2008	122	-0.0304	-0.302	0.763
	All	242	-0.0045	-0.065	0.948
KOTAKGOLD	1stHalf,2008	120	0.0137	0.197	0.844
	2ndHalf,2008	122	-0.0241	-0.215	0.830
	All	242	-0.0054	-0.081	0.935
RELGOLD	1stHalf,2008	120	0.0257	0.277	0.782
	2ndHalf,2008	122	-0.0481	-0.460	0.647
	All	242	-0.0115	-0.164	0.870

ACCOUNTING FOR NON-PROFIT ORGANISATIONS: AN EMPIRICAL STUDY OF THE INFORMATION NEEDS OF CONTRIBUTORS TO NON-PROFIT ORGANISATIONS

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ABSTRACT

The aim of this study is to identify, enumerate, classify and prioritize the main types of information into financial and non-financial and to recommend the disclosure of the prioritized information to the contributors. The contributors would be primarily interested in the past achievement of, and future plans regarding, non-profit organization's objectives. Based on the empirical results, this study has recommended the thirteen most important information types, which are classified into seven non-financial information types and six financial information types. This highlights the need for disclosure of non-financial information type along with financial information type to satisfy the information needs of contributors to non-profit organizations.

A general consensus exists that the disclosure of accounting information should be directed towards meeting the information needs of users (Henke, 1977; Larsen, 1975). There has been little empirical research work carried out to identify information needs of users, more specifically contributors. Hyndman (1989) conducted the first systematic empirical study of contributors' information needs. He developed an a priori model for meeting the information needs of contributors. The model was based on the premise that accounting was concerned with meeting the information needs of users. Few scholars have taken the time to examine empirically the information needs of contributors to non-profit organizations in Indian context. Shailesh Gandhi (2004) in his exploratory study, titled "Gaps in GAAP: Issues in Non-profit Accounting and Reporting in India", documented the current status on requirements of accounting and reporting vis-a vis the current practices of non-profit organizations, without studying the information needs of contributors with empirical support. Hence, this study is undertaken to fill this research gap in accounting for non-profit organizations in India.

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OBJECTIVES OF THE STUDY

The specific objectives of the study are:

- To identify the information needs of the contributors to non-profit organizations in India.
- To enumerate the main types of information, which are relevant to the information needs of contributors.
- To classify and prioritize the main types of information into financial and non-financial information type.
- To recommend the disclosure of the prioritized financial and non-financial Information type to the contributors.

HYPOTHESES OF THE STUDY

The following two hypotheses were formulated for testing in this study.

- H₁: The Information Needs of Contributors to Non-profit Organization include both Financial and Non-financial information type.
- H₂: The Contributors to Non-profit Organizations give more priority to non- financial Information type than financial information type

METHODOLOGY

The methodology used for this study consists of research model, research instrument, sample, data collection and analysis procedures.

Research Model

Hyndman's (1989) a priori model was used for enumeration and prioritization of the main types of information, which were relevant to the information needs of contributors to non-profit organizations in India. Hyndman's a priori model for meeting the information needs of contributors contained ten separate information types. They were:

- Statement of goals
- Statement of objectives
- Problem /Need area information
- Measures of output
- Measures of efficiency
- Administration costs to total expense information
- Simplified operating statement
- Simplified balance sheet
- Statement of Future objectives
- Budget information for the next year

The additional five information types were also added were:

- Audited operating statement
- Audited funds flow statement
- Notes to account.
- Audited balance sheet
- A list of the office bearers

Research Instrument

A reliable and valid research instrument was developed by incorporating the ten information types identified as per Hyndman's a priori model and the additional five information types identified in this study. Respondents were asked to indicate the extent of information needs of contributors to non-profit organizations using a five-point Likert-type scale ranging from "Not Important=1" to "Of Vital Important=5" permitting rational interpretation of scale scores. Respondents were also asked ten open-ended questions relating to their name, address and demographic details; the name and address of non-profit organization to which they have contributed; mode of contribution such as contribution in cash, in kind, through service or all, regularity of their contributions, contributions made on an average per year in cash, in kind and through service besides receipt and readership of annual report of non-profit organization.

Sample

Sample of Non-profit Organizations

The 'Ten Mid-sized Non-profit Organizations in South India' were used as the sample of non-profit organizations for the purpose of this study. The profile of sampled non-profit organizations is given in Table 1.

All the ten non-profit organizations were registered - seven under Society's Registration Act and three under Indian Trust Act. Majority of the non-profit organizations were involved in community service (five), followed by blind and deaf training (two) and unemployed youth training, rural development and promotion of art & culture (one each).

Table 1. Organizational Profile of Non-profit Organizations

1. On the basis of Registration				2. On the basis of Act	
Registered	10			Indian Trust Act	3
Unregistered	0			Society's Registration Act	7
Sum	10			Sum	10
3. On the basis of registration under FCR Act				4. On the basis of functioning age	
Yes	3			<i>Average 17 years</i>	
No	7			Range: 31 years to 6 years	
Sum	10			Year of Registration: 1974 to 1999	
5. On the basis of mode of Contributions received				6. On the basis of nature of activities	
	Yes	No	Total		
Rupee Contributions	10	0	10	Unemployed youth training	1
Contributed Services	7	3	10	Blind and deaf training	2
Foreign Contributions	3	7	10	Community service	5
				Rural development	1
				Art & Culture	1
				Sum	10

Sample of Contributors

The population surveyed was all individual contributors to the ten sampled non-profit organizations. The actual size of this population is unknown because of the confidential nature of contributors' lists. To make the sample as representative as possible it was decided to draw a random sample of 60 individual contributors from ten different non-profit organizations reflecting the range of activities. Such an approach was used to avoid the possibility of drawing a large proportion of contributors from one particular area of non-profit organizations activity. The demographics of the sampled respondents are given in the Table 2.

Table 2. Demographic Characteristics of Individual Respondents [n=60, in %]

1. Sex		2. Age	
Male	80%	Below 30 years	5%
Female	20%	31 to 60 years	68%
		61 years & above	27%
3. Education		4. Nationality	
Below-SSLC	11.7%	Indian	100%
SSLC	3.3%		
PUC	6.7%		
Graduate	28.3%		
Postgraduate	46.7%		
Doctorate	3.3%		

The majority of respondents were male and were graduates, postgraduates and above. They belong to age group of 31-60 years.

Data collection and analysis

Simple descriptive statistics were computed and presented in the form of tables to understand the importance of fifteen information types used in this study. Descriptive statistics include frequency percentages of responses classified into five categories - 1=Not Important, 2=Slightly Important, 3=Moderately Important, 4=Very Important, and 5=Of Vital Important. Using "Statistical Package for Social Sciences (SPSS) for Windows - Version 9.5", the statistical analysis of responses was carried out.

RESULTS

The study was related to the rating of fifteen information types reported in Table 3 and 4. Table 3 shows the scores and percentages of fifteen information types.

From Table 4, it can be seen that information relating to the efficiency of non-profit organization, information type 5, occupied the first rank with the highest mean score, indicating that it was considered the most important of the fifteen information types. The budgeted information for the next year, information type 10, occupied tenth rank in the overall ranking.

Table 3. Descriptive Statistics of Information Types [n=60]

Info. Type	Brief Description		Not Important	Slightly Important	Moderately Important	Very Important	Of Vital Important	Total
1	Goals	No	3	6	4	20	27	60
		%	5.0	10.0	6.7	33.3	45.0	100
2	Specific Objective	No	4	3	10	30	13	60
		%	6.7	5	16.7	50.0	21.7	100
3	Problem/Need area	No	2	4	11	26	17	60
		%	3.3	6.7	18.3	43.3	28.3	100
4	Output/Achievements	No	0	2	14	25	19	60
		%	0	3.3	23.3	41.7	31.7	100
5	Efficiency	No	0	2	10	25	23	60
		%	0	3.3	16.7	41.7	38.3	100
6	Administration cost as percentage of total cost	No	2	4	11	23	20	60
		%	3.3	6.7	18.3	38.3	33.3	100
7	Simplified operating statement	No	4	13	17	13	13	60
		%	6.7	21.7	28.3	21.7	21.7	100
8	Simplified Balance Sheet	No	6	10	13	18	13	60
		%	10.0	16.6	21.7	30.0	21.7	100
9	Future Objectives	No	0	8	7	26	19	60
		%	0	13.3	11.7	43.3	31.7	100
10	Budget Information for next year	No	4	2	10	32	12	60
		%	6.7	3.3	16.7	53.3	20.0	100
11	Audited Operating Statement	No	0	4	12	22	22	60
		%	0	6.6	20.0	36.7	36.7	100
12	Audited Balance Sheet	No	0	3	9	26	22	60
		%	0	5.0	15.0	43.3	36.7	100
13	Audited Fund Flow Statement	No	4	7	6	22	21	60
		%	6.7	11.6	10.0	36.7	35.0	100
14	Notes to accounts	No	2	6	23	22	7	60
		%	3.3	10.0	38.3	36.7	11.7	100
15	Office Bearers	No	6	6	9	18	21	60
		%	10.0	10.0	15.0	30.0	35.0	100

Table 4. Mean Scores and Ranking of Information Types [n=60]

Info Type	Brief Description	Mean Score	Rank Position
1	Efficiency	4.15	1
2	Audited Balance Sheet	4.12	2
3	Audited Operating Statement	4.03	3.5
4	Goals	4.03	3.5
5	Output/ Achievements	4.02	5
6	Future Objectives	3.93	6
7	Administration cost as percentage of total cost	3.92	7
8	Problem/Need area	3.87	8
9	Audited Fund Flow Statement	3.82	9
10	Budget Information for next year	3.77	10
11	Specific Objectives	3.75	11
12	Office Bearers	3.70	12
13	Notes to accounts	3.43	13
14	Simplified Balance Sheet.	3.37	14
15	Simplified operating statement	3.30	15

Note: Average rank is given for Tied Rank [$3+4=7/2=3.5$]

Table 5. Ten Information Types classified into Non-Financial and Financial Information Types

Non-Financial Information Types	Mean Score	Rank	Financial Information Types	Mean Score	Rank
1. Efficiency	4.15	1	1. Audited Balance Sheet	4.12	2
2. Goals	4.03	3.5	2. Audited Operating Statement	4.03	3.5
3. Output/ Achievements	4.02	5	3. Administration cost as percentage of total cost	3.92	7
4. Future Objectives	3.93	6	4. Audited Fund Flow Statement	3.82	9
5. Problem/Need area	3.87	8	5. Budget Information for next year	3.77	10
6. Specific Objectives	3.75	11	6. Notes to Accounts	3.43	13
7. Office Bearers	3.70	12	7. Simplified Balance Sheet	3.37	14
			8. Simplified operating Statement	3.30	15
Average	3.92	6.64	Average	3.73	9.19

Table 5 shows the classified results of these fifteen information types into non-financial information types (seven) and financial information types (eight). These results support the

hypothesis 1 of this study i.e., "The Information Needs of Contributors to Non-profit Organization include both financial and Non-financial information types".

According to Table 5, The contributors have given more priority to non-financial information types with highest mean score of 3.92 and lowest average rank of 6.64 in comparison with the financial information types with low mean score of 3.73 and high mean rank of 9.19. The difference between the two means is statistically significant with p-value of 0.003 as shown in Table 9. The t-test results support the hypothesis 2 i.e. "The Contributors to Non-profit Organizations give more priority to Non-financial Information type than financial information type".

Table 6 Results of t-test for the Difference between two means

Information Type	Mean	S.D.	Mean Difference	S.D	t-value	P-value
Non-Financial	3.92	0.56	0.198	0.49	3.136	0.003*
Financial	3.72	0.64				

*a < 0.05

The findings of the empirical study show that the non-profit organizations should provide both financial and non-financial information with more priority to the later.

DISCUSSION AND RECOMMENDATIONS

This study has recommended the thirteen most important information types, which occupied the first thirteen ranks. These thirteen information types are classified into seven non-financial information types and six financial information types, which are as follows:

Non-Financial Information Type

- Measures of efficiency
- Statement of goals
- Measures of output
- Statement of future objectives
- Problem /need area information
- Statement of specific objectives
- List of office bearers

Financial Information Type

- Audited balance sheet
- Audited operating statement
- Administration costs to total expense information
- Audited funds flow statement
- Budget information for the next year
- Notes to accounts

Simplified balance sheet and simplified operating statement information types of Hyndman's a priori model are not recommended as the respondents of this study preferred audited financial statements rather than simplified financial statements.

Hyndman's a priori model for reporting to contributors, which is validated with some modifications in the Indian context by this study, provides an appropriate basis for reporting to contributors of non-profit organizations. Although it predominantly contains a general statement of the types of information that are considered relevant to the information needs of contributors, the adopting of such a framework for non-profit sector reporting would improve the present situation. The model does not concern itself with the manner in which information is disclosed and research into the effectiveness of various presentations of information could lead to further improvement. Many of the most important types of information sought by contributors are non-financial, while the most usual information disclosed is predominantly financial. This highlights the need for disclosure of non-financial information type along with financial information type to satisfy the information needs of contributors to non-profit organizations.

REFERENCES

- American Accounting Association (AAA) (1966), *A Statement of Basic Accounting Theory*, AAA, Illinois.
- Henke, O.E. (1977) *Accounting For Nonprofit Organizations*, Wadsworth Publishing Company, Inc., Belmont, California.
- Hyndman, N.S. (1989), *Charity Accounting: A Comparison of Contributors' Information Needs and the ASC Approach*, Paper presented at the Irish Accounting Association Annual Conference.
- Larsen, John, E (2000) *Modern Advanced Accounting*, Irwin McGraw-Hill, New Delhi.
- Morris, S (2000) *Defining the Nonprofit Sector: Some Lessons from History*, *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, Vol.11, No. 1.
- Shailesh Gandhi (2005) *Gaps in "GAAP: Issues in Nonprofit Accounting and Reporting in India"* Working Paper, Indian Institute of Management, Ahmedabad, India.

INTANGIBLE ASSETS REPORTING PRACTICES: EVIDENCE FROM SELECTED LISTED COMPANIES IN SRI LANKA

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ABSTRACT

Stakeholders are strongly interested in knowing the real value of the organization and organizational intangible assets information. Sri Lankan companies present intangible assets in their financial statement which is required by the Sri Lankan accounting standard on intangible assets. Identifying qualitative and quantitative intangible information disclosure practices in the companies' annual report is one of the important aspects in the area of intangible assets reporting. The purpose of this study is to examine the intangible assets disclosure practices used in selected listed companies in Sri Lanka using multiple methods identified through the review of literature. This study used two methods to identify the sample companies as based on market capitalization and based on calculated hidden value using the 224 companies listed in Colombo stock exchange. Also this study reviewed the annual reports on the basis of intellectual capital related statement provided in the annual report on as suggested by the Guthrie, Petty, Yongvanich and Ricceri (2003). Analysis was conducted to identify the more value creation companies using content analysis and framework for intellectual capital elements, in-depth analysis through reviewing selected companies' annual reports and their disclosure practices. The data and information for studies were gathered from company annual reports, hand books of listed company issued by the Colombo Stock Exchange (CSE) and from the internet sources.

Keywords: *Intangibles Assets, Intellectual Capital, Knowledge Capital, Qualitative & Quantitative Reporting, Disclosure*

1. INTRODUCTION

Movement of the knowledge-based economy has led to changes in the business mind set, as all are moving towards questioning and finding the ways to present their organizational value in appropriate way. Recognition and disclosure of intangibles is an important contemporary issue in the accounting and finance literature (Avery, 1942, Lev & Schwartz, 1971, Hall, 1992, 1993, Lev, 2003, Guthrie, Petty, Yongvanich & Ricceri 2003). Intangible assets are the assets having no physical existence and the value of intangible assets depend on the rights and benefits that the possession confers to the owner. In fact, there is no clear definition

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for intangibles assets. Various researchers define and use different term for intangible assets at different point of time. Intellectual Capital(IC) and knowledge Capital (KC) are the other common term used by the companies and researchers to define the similar term intangible assets. However, most of the business used the generic term “knowledge” for their intangible assets. In recent decades, the knowledge has been identified as main value generator (Stewart, 1997 as cited in Oliveras & Kasperskaya, 2004) in the business. So, intangibles asset are anything which add value to the organization without any physical existence.

Stakeholders are strongly interested in knowing the real value of the organization and organizational intangible assets information. Hence identifying and valuing the intangible resources and providing that information to stakeholders can be considered as important activity within any organization. There is a need of finding out, how Sri Lankan companies identify their intangible assets in the company and how they report those values. In fact, Sri Lankan companies report only statutory requirements as desired by the accounting standards. In Sri Lanka, there are no standards or rules established for reporting knowledge capital. Hence, identifying qualitative and quantitative information reporting practices on knowledge capital in the companies’ annual report is one of the important aspects in the area of intangible assets reporting in Sri Lankan Companies. The purpose of this study is to examine the intangible assets reporting practices used in selected listed companies in Sri Lanka and to understand the differences and similarities of intangible reporting practices.

2. REVIEW OF LITERATURE

Knowledge based organizations are rapidly growing exponentially in the current knowledge based economy situation and demand for the knowledge based products and services is growing (Romer, 1998, King & Ranft, 2001 as cited in Abeysekera & Guthrie, 2002). Organizational knowledge is explained using different term; “intellectual capital” and “intangible assets” are most common term used in the business world. According to formalized definition provided by Itami (1994, as cited in Oliveras & Kasperskaya, 2004), intangible Assets is “*the result of incorporating information and know-how into a organization’s productive activities, including that tacit and explicit knowledge which generates economic value for the company*”.

Intellectual capital or knowledge capital or intangible assets valuation and reporting is still an ongoing discussion topic in the accounting and finance literature and most of the researchers are still trying to find best methods to value intellectual capital. As per accounting point of view, intellectual capital can be defined as the difference between the value of its tangible net assets and its market capitalization. However, market capitalization value often fluctuates and this definition can be problematic in identifying and recognizing intellectual capital. At the same time without such recognition or identification it would be difficult to identify what intellectual capital issues companies are and how they addressing those capital in their annual reports (Petty & Guthrie, 2000, Striukova, Unerman & Guthrie, 2006). Hence, most of the researchers had given main attention towards identifying intellectual capital reporting practices in the different countries using method of content analysis. Content analysis is widely used and most of the researchers conducted their research through review of annual

report and other reports. Guthrie, Petty, Yongvanich and Ricceri (2003) in their paper review the use of content analysis in understanding intellectual capital reporting and observed the practical utility of the methods. They suggested some development issues that they have found when using content analysis to examine the voluntary disclosure of intellectual capital items by various organizations in their annual reports. The framework for intellectual capital elements that was developed by Brooking (1996) and adopted and modified by the Australian Society of CPAs and the Society of Management Accountants of Canada was combined with the petty and Guthrie (2002) framework to produce a slightly modified structure (Guthrie, Petty, Yongvanich and Ricceri, 2003).

Oliveras & Kasperskaya (2004) in their study used 14 annual reports from listed companies in Spain over a five year period from 1998-2002. They analysis the reports in two aspects as using value based approach and content based analysis. Findings from their research revealed that there is a general decrease in the hidden value of Spain companies and level of disclosure has increased over time. However they pointed out that the overall disclosure of intellectual capital remains low in Spain companies.

Ali Mohobbot (2008) examined 22 Bangladesh companies listed in Dhaka stock exchange to investigate the level of awareness of Bangladesh companies about Intellectual capital and their disclosures in the annual reports. His findings revealed that the companies do not have positive approach in reporting and interpreting the intellectual capital and reporting is limited to qualitative form rather than in quantitative form.

Abeysekara & Guthrie (2002) conducted a study using data from 30 companies listed in Colombo Stock Exchange during year 1998/1999. Companies were selected based on the highest market capitalization to examine the intellectual reporting practices on the basis of content analysis. 45 intellectual capital items in the categories of internal, external and human capital were identified. They found that only small proportion of intellectual capital reported was quantified and the findings were different from the developed countries. Abeysekara & Guthrie (2004) conducted another research to identify the human capital disclosure patterns in Sri Lankan companies using the method of content analysis and at the same time to compare the differences in disclosure patterns between Sri Lanka and developed nations.

Early research conducted in Sri Lanka included only the large companies based on the market capitalization value. The purpose of this study is to examine the intangible assets reporting practices used in selected listed companies in Sri Lanka using the multiple methods identified through the review of literature. This study used two methods to identify the sample companies as based on market capitalization and based on calculated hidden value using the 224 companies listed in Colombo stock exchange. Also this study reviewed the annual reports on the basis of intellectual capital related statement provided in the annual report on as suggested by the Guthrie, Petty, Yongvanich and Ricceri (2003).

3. METHODOLOGY

Sri Lankan Colombo Stock Exchange (CSE) has approximately two hundred and thirty five listed companies representing twenty business sectors (hand book of listed companies,

2007). Sri Lankan companies follow the accounting reporting time as year end of either 31st December or 31st March. The data and information for the study was gathered from hand book of listed companies issued by CSE and audited annual reports of the selected companies. This study is divided into five parts:

- 1) The analysis was conducted to identify the intangible assets reporting in the financial statement which is required by the Sri Lankan accounting standard 37 on intangible assets issued by the Institute of Chartered Accountants of Sri Lanka. Financial statements of 224 firms listed in the Colombo Stock Exchange (CSE) during year 2007 were reviewed.
- 2) The analysis was conducted to identify intangible assets created companies in Sri Lanka based on market value and book value to identify and compare the amount of “hidden” value not explained in the financial statements.
- 3) The analysis was conducted to identify more value creation companies’ using the value of market capitalization in the period of 2005 and 2006.
- 4) Using the framework for intellectual capital elements presented by Guthrie, Petty, Yongvanich and Ricceri (2003), analysis was conducted to identify intellectual capital elements used in selected companies with special reference to sentences or statement related to intellectual capital. This framework consisted of three main categories of intellectual capital as internal (structural/organizational) capital, external (relational/customer) capital and human capital. Table 1 identified 18 sub elements and three additional elements (Know-how, social responsibility, suppliers relations).

Table 1
Intellectual Capital Elements

Internal Capital	External Capital	Human Capital
Intellectual property	Brands	Know-How
Management philosophy	Customers	Employee
Corporate culture	Customer satisfaction	Education
Management process	Company name	Training
Information/networking systems	Distribution channels	Work related knowledge
Financial Relations	Business collaborations	Entrepreneurial Spirit
	Licensing agreements	
	Social responsibility	
	Suppliers relations	

Source: Guthrie., Petty, R., Yongvanich, K., and Ricceri, F. (2003), *Intellectual Capital Reporting: Content approaches to data collection.p.*

- 5) Finally, the qualitative analysis was conducted through in-depth analysis of annual reports and their intangible assets reporting practices in the aspect of identifying quantitative and qualitative intangible assets reporting practices.

4. DATA ANALYSIS AND DISCUSSION

Sri Lankan Accounting standard 37 issued by the Institute of Chartered Accountants of Sri Lanka (ICASL) defines intangible assets as “an identifiable non-monetary asset without physical substance held for use in the production or supply of goods or services, for rental to others, or for administrative purposes”. This asset is a resource controlled by an enterprise as a result of past events and from which future economic benefits are expected to flow to the enterprise. According to Sri Lankan Accounting Standard 37 requires an enterprise to recognize an intangible asset (at cost) if, and only if it is probable that the future economic benefits that are attributable to the asset will flow to the enterprise and the cost of the asset can be measured reliably. Also requirement applies whether an intangible asset is acquired externally or generated internally. SLAS 37 includes additional recognition criteria for internally generated intangible assets.

All Sri Lankan listed companies should identify value and present their intangible assets according to the guideline given by the accounting standard. Twenty business sectors are listed in the Colombo Stock Exchange (CSE) and findings revealed that 30% of the total companies included in the study (64 out of 224) are reporting intangible assets in their financial statements according to the requirement of Sri Lanka accounting standards 37 (see table 2).

The types of intangible assets reported in the financial statement are goodwill, computer software, copy rights, license and R & D. Most of the companies in the sectors of health care, hotels & travels, manufacturing are including the value of their goodwill. Banking, insurance & finance, beverage food & tobacco, diversified holdings, telecommunication, information technology and power & energy companies are showing goodwill, computer software, copy rights, license or R&D.

Findings revealed that only 16% of the total companies included in the study (36 out of 224) are having an unrecognized intangible asset (when compare book value with the market value) and percentage of hidden value varied from 0 to 78% in these 36 companies. Eighty three percent (83%) of the companies included in the study presents intangible liabilities (188 out of 224) and percentage varied from 0 to -96% (see table 2).

Table 2
Sector Wise Comparisons of Study Companies

Sector	(1)	(2)	(3)	(4)
Banking , Insurance and Finance	31	16	1	30
Beverage Food & Tobacco	17	10	3	14
Chemicals & Pharmaceuticals	9	4	3	6
Construction and Engineering	3	0	1	2
Diversified Holdings	10	10	2	8
Footwear and Textiles	3	0	0	3
Health Care	6	1	3	3
Hotels and Travels	32	5	7	25
Information Technology	1	1	1	0
Investment Trust	5	0	1	4
Land & Property	20	2	3	17
Manufacturing	29	8	3	26
Motors	7	1	1	6
Oil Palms	5	1	2	3
Plantations	18	0	0	18
Power and Energy	4	2	2	2
services	5	0	1	4
Stores & Supplies	6	1	0	6
Telecommunications	2	2	1	1
Trading	11	1	1	10
Total	224	64	36	188

Source: Data compiled from Hand Book of Listed Companies 2006 & 2007

- (1) Total Number of companies included in the study.
- (2) Numbers of companies reporting intangibles in the financial statements as required by the accounting standard e.g. Goodwill, Software, License, Copy Rights, R& D. etc.
- (3) Number of companies hidden their intangible assets - calculating the difference between the value of assets and market capitalization.
- (4) Number of companies having intangible liabilities - calculating the difference between the value of assets and market capitalization.

Table 3
Comparison of Book Value and Market Value of Selected Companies

Company	Business Sector	Market Value* (Rs 000)	Book Value* (Rs 000)	R**	H#
Dialog Telecom Limited (DIAL)	Telecommunications	196,191,025	43,425,968	1	78
John Keels Holdings Limited (JKH)	Diversified Holdings	97,944,550	65,946,449	2	33
Nestle Lanka Limited (NEST)	Beverage Food & Tobacco	14,761,070	3,705,685	9	75
Ceylon Tobacco Company (CTC)	Beverage Food & Tobacco	12,925,338	6,870,039	11	47
Asiri Surgical Hospital Limited (AMSL)	Health Care	3,875,354	1,331,851	47	66
Asiri Hospital Limited (ASIR)	Health Care	4,624,167	2,516,874	35	46
The Lighthouse Hotel Limited (LHL)	Hotels and Travels	2,288,500	590,807	57	74
Hotel Services (Ceylon) Limited (SERV)	Hotels and Travels	2,006,400	668,249	43	67
Bogala Graphite Lanka Plc (BOGA)	Manufacturing	903,834,750	365,364,930	108	60
Lankem Development Plc (LDEV)	Construction and Engineering	96,000,000	39,990,113	216	58
Watapota Investments Plc (WAPO)	Investment Trust	335,504,000	77,915,000	163	77
e-channelling Plc (ECL)	Information Technology	226,815,485	101,304,001	176	55
Singalanka Standard Chemicals Plc (SING)	Chemicals & Pharmaceuticals	31,859,761	8,399,391	230	74

Source: Data compiled from Hand Book on Listed Companies 2006 and 2007, Colombo Stock Exchange, Sri Lanka

* Value as at 31st Dec. 2006 or 31st.March. 2007

** as at 31st December 2006

H- calculated hidden value percentage

Table 3 presents the comparison of book value and market value in the selected 13 companies based on the gap between market value & book value, percentage of hidden value in the specific date and market rank as at 31st December 2006. Market capitalization value often fluctuates and this can be problematic in identifying and recognizing intellectual capital. At the same time without such recognition or identification it would be difficult to identify what intellectual capital issues companies are and how they addressing those capital in their annual reports (Petty & Guthrie, 2000, Striukova, Unerman & Guthrie, 2006).

The findings from this analysis revealed that Sri Lankan listed companies have a high level of unrecognized intangible assets and the percentage varied from 33% to 78% in selected companies. Based on the literature and other researchers findings supported this evidence. Lev (2001 as cited in Oliveras & Kasperskaya, 2004) pointed out intangible assets might represent 60% to 75% of business assets and Oliveras & Kasperskaya (2004) findings in Spain companies similar to these findings.

Table 4
Companies Analysis: Ten Largest Companies in term of Market Value

Company	Sector	Market Value Rank			Hidden Value %
		2005*	2006*	2007 [#]	
Dialog Telecom Limited (DIAL)	Telecommunications	1	1	1	78
John Keels Holdings Limited (JKH)	Diversified Holdings	2	2	2	33
Sri Lanka Telecom Limited (SLTL)	Telecommunications	3	3	3	-1
Distilleries Co. of Sri Lanka Limited (DIST)	Beverage Food & Tobacco	11	4	4	-1
Commercial Bank of Ceylon Limited (COMB)	Banking, Insurance & Finance	4	5	5	-8
National Development Bank Limited (NDB)	Banking, Insurance & Finance	8	6	9	-3
Development Finance Corporation of Ceylon (DFCC)	Banking, Insurance & Finance	7	7	8	-3
Lanka IOC Limited (LIOC)	Power and Energy	5	8	10	0
Nestle Lanka Limited (NEST)	Beverage Food & Tobacco	21	9	11	75
Hatton National Bank (HNB)	Banking, Insurance & Finance	10	10	7	-13

Source: Data compiled from Hand Book on Listed Companies 2006, Colombo Stock Exchange, Sri Lanka.

* as at 31st Dec. # as at 31st March

Again another ten companies were selected on the basis on market capitalization value presented in the stock exchange hand book in the year 2006. Table 4 specifies the companies' studies, their nature of the businesses, and market rank in year 2005- 2006 - 2007 and hidden value percentage. The findings from this analysis revealed that out of ten companies included in the study, seven companies present a market value lower than its book value, which would mean intangible liabilities. However, this liability percentage is too low.

A content analysis of the annual reports of eight selected companies was carried out, using the framework for intellectual capital elements presented by Guthrie, Petty, Yongvanich and Ricceri (2003). With the purpose of identifying the use of intellectual capital wording in the Sri Lankan companies annual reports, same wording were used in the content analysis as mentioned in the intellectual capital framework. Twenty one (21) full form of wording in the categories of internal capital, external capital and human capital are used and findings are presented in the table 5.

Table 5
Reporting Specific Intellectual Capital Elements in Selected Eight Companies in Sri Lanka

Internal Capital	W	S	External Capital	W	S
1. Intellectual Property	3	2	13. Brands	18	17
2. Management Philosophy	1	1	14. Customers	317	180
3. Corporate Culture	1	1	15. Customer satisfaction	13	10
4. Management process	20	16	16. Company name		
5. Information/networking systems	11	6	17. Distribution channels	8	7
6. Financial Relations			18. Business collaborations		
			19. Licensing agreements		
Human Capital	W	S	20. Social responsibility	51	44
7. Know-How	7	6	21. Supplier Relations	7	7
8. Employee	579	191			
9. Education	88	73			
10. Training	186	85			
11. Work related knowledge					
12. Entrepreneurial Spirit	3	3			

W - Same word

S - Statement related to intellectual capital

Table 6 presents the sector comparison on use of specific statements related to intellectual capital on their annual report. Findings revealed that most of the companies given more attention towards disclosure of human capital and external capital and least attention towards internal capital reporting. When comparing the sector wise similarities and differences also supporting to this evidence.

Table 6
Sector Comparison

Sector	No. of companies	Type Intellectual Capital			Total
		Internal	External	Human	
Telecommunications	2	8	75	142	225
Diversified Holdings	1	6	30	59	95
Beverage Food & Tobacco	1	2	25	40	67
Banking, Insurance & Finance	4	8	135	117	260
Total	8	24	265	358	647

Findings from the above analysis shows that Sri Lankan companies do not use most specific intellectual capital term to disclose their internal, external and human capital. Financial relations, work related knowledge, company name, business collaborations and licensing agreements words are not found through out the report observed. Companies used the word "organizational culture", "work culture" or "culture" instead of corporate culture, word "organizational philosophy" or "philosophy" instead of management philosophy, "skills" or "capability" or "competencies" instead of work related knowledge, word "structured process", or "work process", or " process", instead of management process.

The above analysis was conducted only using 8 companies based on the highest market capitalization rank in year 2006. The review of other companies annual report revealed that one company which is ranked as 52 in year 2006 is provided detail intellectual capital report in their annual report in year 2007 name as "Intellectual Capital Report". This report has presented all categories of human capital, internal capital and external capital in detailed with qualitative and quantitative information. The word use in the report is some what similar to the wording in the intellectual capital framework (see table 7).

Table 7
Example of intellectual capital elements use in the intellectual capital report

Internal Capital encompasses both the organizational framework and technical infrastructure designed to ensure.	External Capital illustrates the company's focus on its business, customers, partners and its dealing with the public.
Organizational framework	Brand Building
Branch Network/ Distribution network	Corporate image building
Technical Infrastructure	Business partnering
Philosophy and culture	Distribution channels
Financial Relations	Market share
	Focus on customer satisfaction
	Addressing customer complaints
	Service enhancement

Human Capital comprises staff structures as well as the human resource skills applied to business processes.

- Training and Development
 - Employee relations
 - Employee welfare
 - Employee know-how
 - Number of internal awards winners
-

Source: *Information compiled from Union Assurance Company intellectual capital report - 2007 annual report.*

Findings also revealed that Sri Lankan company's information disclosure practices and content of annual report varied from one year to another year. In year 2007, one company presented "Knowledge Management Report" (see table 8) and in year 2008 the company has changed their reporting practices and presented two reports as "Management report" and "sustainability supplement".

Table 8
Example of Knowledge Management report

Knowledge Capital consists of the intangibles of company's business: customer relationships, business practices, know-how, technical infrastructure, corporate culture, work ethics, and the other soft factors that create value.

Human Capital

Human Capital or walking capital consists of the skills and experiences of the employees and management, business routines, work ethics and organizational culture and factors that 'leave' everyday when employee and managers step out of the organization. It consists of the skills, capabilities, attitudes, mindsets and emotions of employee and manager

Structural Capital

Structural Capital consists of those intangible assets that are relatively 'fixed' to the organization and include a company's software, databases, and customers, patents, product portfolios, organizational memory. It consists of the capabilities, competencies, orientation, emphasis and focus of the organization that endures and grows beyond the lifetime of employee, manager and shareholder

Source: *Information compiled from Commercial Bank of Ceylon Limited Knowledge Management Report - 2007 annual report*

From the twenty companies analyzed, none of the companies provide specific "intellectual capital" report in their annual report. These findings are similar with Abeysekara & Guthrie (2002) study. Abeysekara & Guthrie (2002) conducted a study using data from the 30 companies listed in Colombo Stock Exchange during year 1998/1999. Hence, these

evidencing those Sri Lankan companies which are having more market capitalization value are still not given attention towards using term “intellectual capital” in their annual report over the last nine years.

Human resource valuation and accounting is not popular within Sri Lankan companies and only one company use Lev & Schwartz model to value the human capital over the past few years and presents that value in details in their report. This company is owner of the best annual report award during last few years reflecting the quality of reporting. However, Sri Lankan listed companies (in term of gap between book value and market value) have high level of unrecognized intangible assets within their companies. Ten companies out of the 13 companies identified under this category are not providing intellectual capital information in their annual report. Hence, this is clear that knowledge based companies are not yet disclosing their knowledge capital at least using qualitative information. However, stakeholders in these companies failed to find more information from the companies’ annual report in order to make their decision.

5. CONCLUSION

Term Intellectual capital is still not much popular within the business sector in Sri Lanka and it is clear from our study that companies, which are holding highest market capitalization even do not use the word “Intellectual capital” to identify their internal, external and human capital. One company, whose market rank is 52 in year 2006, provided detailed intellectual capital report in their annual report in year 2007 name as “Intellectual Capital Report”. This report presented all categories of human capital, internal capital and external capital in detail and with qualitative and quantitative information. Thus, Sri Lankan companies are moving towards using the word intellectual capital.

This study is limited to twenty companies and in depth analysis of their annual reports. Most of the Sri Lankan companies, included in the study, provide sustainability report in their annual report showing their value creation towards society, employees, customers, organizational culture, suppliers and government. Findings from the study revealed that, even though the few companies are bigger in term of their market capitalization value, disclosure practices of their intangible assets is low. Some companies with high percentage of hidden value are not presenting any type of intellectual capital information in their annual report. These companies provide only financial and governance information, required by the accounting standards.

This study used only 20 companies (10 with higher market rank, 10 with higher hidden value percentage and low market rank) and further research could be carried out focussing on other companies. This study is limited to specific term (same word from the framework presented by Guthrie, Petty, Yongvanich and Ricceri, 2003) in the content analysis and other related term could also be studied. This study only reviewed one annual report for each company and another analysis should be conducted through reviewing two to three years reports to see the differences in the disclosure. However, case study method can be taken as a better technique to identify the actual disclosure and reporting practices within the organization through covering all sources (eg, annual report, information presented through web, other report, interview, etc) and further research should be carried out using the case study method.

REFERENCES

- Abeysekera., I & Guthrie, J (2004), Human Capital Reporting in a Developing Nation. *The British Accounting Review* Vol.36 .pp 251-268
- Abeysekera., I & Guthrie, J (2002), Status of Intellectual Capital Reporting in Sri Lanka- A Research Note. Presented at Critical Perspectives on Accounting Conference, New York, USA, April 20, 2002, Available at SSRN: <http://ssrn.com/abstract=1362172>
- Ali, M.M (2008), Intellectual Capital (IC) Reporting Practices: a study on selected Companies in Bangladesh. *Journal of Business studies*, Vol 29 (1), pp 81-104
- Annual Reports of Selected companies on 2007, 2007/08, 2008/09
- Avery, H., G.(1942) . Accounting for Intangible Assets .*The Accounting Review*, Vol. 17, No. 4 pp. 354-363
- Guthrie., J Petty, R., Yongvanich, K and Ricceri, F. (2003). Intellectual capital reporting: content approaches to data collection, Performance Measurement Association Intellectual capital Symposium, 01-02.oct, 2003, Cranfield, UK. Available at SSRN: <http://ssrn.com/abstract=1362134>
- Guthrie, J, Petty, R. and Yongvanich, K. (2004) 'Using content analysis as a research method to inquire into intellectual capital reporting', *Journal of Intellectual Capital*, 5(2): 282-293.
- Hand book of Listed Company (2006, 2007). Published by Colombo Stock Exchange. Colombo Sri Lanka
- Hall, R (1993). A Framework Linking Intangible Resources and Capabilities to Sustainable Competitive Advantage, *Strategic Management Journal*, Vol. 14(8), pp. 607-618
- Lev, B., Schwartz, A., (1971). On the use of the economic concepts of human capital in financial statements. *The Accounting Review* January, pp.103-112.
- Lev, B. (2003).Remarks on the Measurement, valuation, and reporting of intangible. *Federal Reserve Bank of New York Economic Policy Review*.pp.17-22 Available at SSRN: <http://ssrn.com/abstract=788927>
- Oliveras, E. and Kasperskaya, Y. (2004), Reporting Intellectual Capital in Spain , Available at SSRN: <http://ssrn.com/abstract=848664>
- Sri Lanka Accounting Standards 37- Intangible Assets.
- Sri Lanka Accounting Standards No. 3, Presentation & Disclosures in Financial Statements
- Striukova., L, Unerman., J & Guthrie, J (2006). Corporate Reporting of Intellectual Capital: Evidence from UK Companies, Available at SSRN: <http://ssrn.com/abstract=1360537>
- Stewart, T.A. (1997) "Intellectual Capital: The New Wealth of Organizations" Doubleday/ Currency, New York.
- Unerman., J. & Guthrie., J. (2006), UK Preparers' Perspectives on intellectual Capital Reporting Media. Presented to the Global Accounting and Organisational Change Conference, 9-11 July, Melbourne Australia. Available at SSRN: <http://ssrn.com/abstract=1358762>
- www.cse.lk.

A COMPREHENSIVE STUDY OF CAUSES AND IMPACT OF FOREIGN DIRECT INVESTMENT IN INDIA

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ABSTRACT

The paper presents a comprehensive analysis of various determinants and their effects on foreign direct investment flows in India. It also draws useful inferences in the end.

Since liberalization there has been a marked shift in the level and channels of foreign investment flows. Foreign investment in India is allowed in two ways, viz. Foreign Direct Investment (FDI), and Foreign Portfolio Investment (FPI). FDI inflows to the country can be through automatic approval of the RBI, with prior clearance of the Government (i.e., FIPB or SIA), NRIs direct investment approved by RBI and through Acquisition of Shares. Foreign Portfolio Investment flows in India can take place through: Foreign Institution Investors (FII); Global Depository Receipts (GDRs), Euro Bonds, and the Off-shore funds. Presently, foreign direct investment is freely allowed in almost all the sectors, except a few sectors where the foreign investment policy restricts or does not permit foreign investment beyond a ceiling.

Statistical profile of foreign investment shows that in the last 17 years India has shown a marked increase in foreign capital inflows both in foreign direct investment and in portfolio investment though the proportion of FDI and FPI in the total flows has changed several times (Table 1).

In the post-liberalization period (i.e. from 1990-91 to 2006-07) foreign Investment inflows to India amounted to US \$ 132845 million. Foreign direct investment (FDI) during this period was US \$ 68,400 million while the foreign portfolio investment (FPI) amounted to US \$ 64,445 million accounting for 51.49% and 48.51% respectively of the total foreign investment flows. The most striking feature of capital flows to India is that foreign investment inflow in India has been positive since 1991 with some exceptions when sudden fall in foreign investment inflows were observed in the year 1998-99 (- 55.41%) and 2002-03 (- 26.22%).

Notably, Foreign direct investment (FDI) inflows too have been steady and positive since 1990-91 except during the period from 1998-99 to 1999-2000 and from 2002-03 to 2003-04. The major fluctuations in FDI flows were observed in the year 1993-94 and 1998-99 in which the proportion of FDI in total flows was declined suddenly to 14.1% and increased steadily to 102.5% of the total flows.

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Table 1: Foreign Investment Inflows

(US \$ Million)

Year	Direct Investment		Portfolio Investment		Total	
	Inflows #	Cumulative Inflows *	Inflows #	Cumulative Inflows *	Inflows #	Cumulative Inflows *
1990-91	97 (94.2)	97 (---)	6 (5.8)	6 (---)	103 (100)	103 (-----)
1991-92	129 (97.0)	226 (+ 32.99)	4 (3.0)	10 (- 33.33)	133 (100)	236 (+ 29.13)
1992-93	315 (56.4)	541 (+ 144.19)	244 (43.6)	254 (+ 6000)	559 (100)	795 (+ 320.30)
1993-94	586 (14.1)	1127 (+ 86.03)	3567 (85.9)	3821 (+ 236.19)	4153 (100)	4948 (+ 642.93)
1994-95	1314 (25.6)	2441 (+ 142.23)	3824 (74.4)	7645 (+ 7.20)	5138 (100)	10086 (+ 23.72)
1995-96	2144 (43.8)	4585 (+ 63.17)	2748 (56.2)	10393 (- 28.14)	4892 (100)	14978 (- 4.79)
1996-97	2821 (46.0)	7406 (+ 31.58)	3312 (54.0)	13705 (+ 20.52)	6133 (100)	21111 (+ 20.23)
1997-98	3557 (66.1)	10963 (+ 26.09)	1828 (33.9)	15533 (- 44.81)	5385 (100)	26496 (- 12.20)
1998-99	2462 (102.5)	13425 (- 30.78)	-61 (-2.5)	15472 (- 103.34)	2401 (100)	28897 (- 55.41)
1999-00	2155 (41.6)	15580 (- 12.47)	3026 (58.4)	18498 (+ 5061)	5181 (100)	34078 (+ 115.79)
2000-01	4029 (59.3)	19609 (+ 86.96)	2760 (40.7)	21258 (- 8.79)	6789 (100)	40867 (+ 31.04)
2001-02	6130 (75.2)	25739 (+ 52.15)	2021 (24.8)	23279 (- 26.78)	8151 (100)	49018 (+ 20.06)
2002-03	5035 (83.7)	30774 (- 17.86)	979 (16.3)	24258 (- 51.56)	6014 (100)	55032 (- 26.22)
2003-04	4322 (27.5)	35096 (- 14.16)	11377 (72.5)	35635 (+ 1062)	15699 (100)	70731 (+ 161.04)
2004-05	6051 (39.4)	41147 (+ 40.00)	9315 (60.6)	44950 (- 18.12)	15366 (100)	86097 (- 2.12)
2005-06^	7722 (38.2)	48869 (+ 27.62)	12492 (61.8)	57442 (+ 34.11)	20214 (100)	106311 (+ 31.55)
2006-07^	19531 (73.6)	68400 (+ 129.98)	7003 (26.4)	64445 (- 43.94)	26534 (100)	132845 (+ 31.26)

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Notes: # Figures in bracket indicate percentage to total.

* Figures in bracket indicate percentage increase over previous year.

^ Data for 2005-06 and 2006-07 are estimated as average of previous two years.

Data on FDI have been revised since 2000-01 with expanded coverage to approach international best practices. These data, therefore, are not comparable with FDI data for previous years.

Source: Compiled from Annual Report, RBI (Various Issues)

ANALYSIS

The analysis work is divided in two parts viz. (I) Analysis of determining elements of FDI, (II) Analysis of effects of FDI.

(I) ANALYSIS OF DETERMINING ELEMENTS OF FDI

It is assumed that FDI flows to India are influenced by various macro economic factors e.g. Gross Domestic Product (GDP), GDP Growth Rate, Foreign Exchange Reserves, Foreign Exchange Rate, Real Effective Exchange Rate, Wholesale Price Index, Current Account to GDP Ratio, Income Terms of Trade, External Debt to GDP Ratio, and the External Debt Service Ratio.

HYPOTHESIS

As null hypothesis (Ho) it is assumed that the variables mentioned above do not have significant effect on the FDI flows. However, for examining the effect of these factors on FDI flows following alternative hypothesis (H1) are also framed on the basis of first observation of relative data.

1. Level of Foreign exchange reserve (FORRES) is expected to have significant positive effect on FDI inflows.
2. Rate of inflation i.e. whole sale price index (WPI) is expected to have significant positive effect on FDI inflows.
3. Gross domestic product at factor cost (GDPFC) which shows strength of economy is expected to have significant positive effects on FDI inflows.
4. External indebtedness i.e. External Debt as % to GDP (EXBEBGDP) and the Debt Service Ratio (DEBTSERV) are expected to have significant negative effect on FDI inflows.
5. Terms of Trade i.e. Income terms of trade (INCTERMS) which show openness of economy are expected to have significant positive effect on FDI inflows.
6. GDP Growth Rate (GDPGROW) and the Ratio of Current Account to GDP (CURRGDP) are expected to have low degree positive effect on FDI inflows.
7. Real Effective Exchange Rate (REER) and the Rupee Dollar Exchange Rate (EXCHRATE) are expected to have low degree positive effect on FDI inflows.

The above hypotheses are tested with the help of Correlation analysis, Regression analysis, ANOVA, Coefficient of determination and the t value calculated for the purpose. The description of data along with their respective sources is shown in the following table

Table : Data Label and Sources of Determinants of FDI

Period: 1993-94 to 2006-07

Label	Variable	Data Source
FDI	Foreign Direct Investment (US \$ Millions)	RBI Annual Report 2007 & previous Issues
FORRES	Foreign Exchange Reserves (US \$ Millions)	Economic Survey 2008 & previous Issues
WPI	Whole Sale Price Index (Base 1993-94 = 100)	Economic Survey 2008 & previous Issues
REER	Indices of Real Effective Exch. Rate of Indian Rupee (36 Currency Bilateral Weights) (Base 1993-94 = 100)	Economic Survey 2008 & previous Issues
GDPFC	Gross Domestic Product at Factor Cost (In Rs. Crore)	Economic Survey 2008 & previous Issues
GDPGROW	Real GDP Growth Rate at Factor Cost	Economic Survey 2008 & previous Issues
EXDEBGDP	External Debt to GDP Ratio	RBI Annual Report 2007 & previous Issues
DEBTSERV	External Debt Service Ratio	RBI Annual Report 2007 & previous Issues
CURRGDP	Current Account to GDP Ratio	RBI Annual Report 2007 & previous Issues
EXCHRATE	Foreign Exchange Rate (US \$)	Economic Survey 2008 & previous Issues
INCOMTERM	Income Terms of Trade (Product of Net Terms of Trade and Volume Index of Export Expressed as a %) (Base: 1978-79 = 100)	DGCI&S, Kolkata

It is well known that the economic time series usually move together. So, all the variables mentioned above are included simultaneously for the period from 1993-94 to 2006-07. The correlation matrix of all the explanatory variables and the dependent variables and the results of simpler linear regression analysis are shown in table 2 and 3.

The results of correlation analysis contained in table 2 reveal high degree positive correlation between FDI and the Income terms of trade (0.951), followed by Forex reserves (0.851), GDP at factor cost (0.838), and the Whole sale price index (0.790). All these values are significant at 1% level of significance. Coefficient of determination (R²) for these variables is 0.819, 0.724, 0.702, and 0.624 respectively, which indicate that individually Income terms of trade, Forex reserves, GDP at factor cost, and the Whole sale price index have accounted for 81.9%, 72.4%, 70.2%, and 62.4% variations in FDI inflows.

significant at 1% level of significance and have proper signs. The coefficients of these variables Foreign exchange reserves, CDB as factor cost and Wholesale price index are statistically. The regression results contained in table 3 show that Terms of trade (Income terms of trade) Using ordinary least square linear equation the explanatory variables are regressed:

EXCHRATE, INFLATE, p: Determinant Variable: EDI (Constant) FOKBEZ, MYI, BEEK, CDBEC, CDBCKOM, EXDEBCDB, DEBIZBEKA, CUBKCDY, level (5-tailed). # H₀ \ H₁ accepted \ rejected at 2% level of confidence. a: Predictors: ** Correlation is significant at the 0.01 level (5-tailed). * Correlation is significant at the 0.02

INFLATE	0.812 0.002**	3028.55	21852222.55 534082222.58	(.000) 24.122	11.48 -3230.85	(.000) 2.325	H ¹ Accepted H ⁰ Rejected
EXCHRATE	0.120 0.400	444.12	540518445.52 4222224.52	(.122) 5.583	315.22 -2825.04	(.122) 1.211	H ₁ Rejected H ⁰ Accepted
CUBKCDY	0.001 0.030	4828.22	582222222.20 528431.80	(.212) 0.011	154.22 422.24	(.212) 0.104	H ¹ Rejected H ⁰ Accepted
DEBIZBEKA	0.251 -0.288**	3002.03	10843422.42 12242430.03	(.001) 12.241	-220.32 14225.22	(.001) 4.435	H ¹ Accepted H ⁰ Rejected
EXDEBCDB	0.412 -0.248*	3212.35	122000132.14 112213222.32	(.015) 8.222	-253.44 12254.02	(.015) 5.244	H ¹ Accepted H ⁰ Rejected
CDBCKOM	0.552 0.424	4522.81	551224312.85 2422222.22	(.082) 3.422	1551.33 -3524.38	(.082) 1.822	H ¹ Rejected H ⁰ Accepted
CDBEC	0.205 0.838**	5225.82	82220045.32 500853224.14	(.000) 58.355	2.23 -10020.42	(.000) 2.355	H ¹ Accepted H ⁰ Rejected
BEEK	0.005 0.043	4822.21	58232222.22 238102.23	(.883) .053	23.31 -5324.14	(.883) 0.120	H ¹ Rejected H ⁰ Accepted
MYI	0.254 0.220**	5224.82	10223222.82 128581333.22	(.001) 12.822	112.23 -15220.52	(.001) 4.428	H ¹ Accepted H ⁰ Rejected
FOKBEZ	0.254 0.821**	5222.22	2822222.18 502258315.35	(.000) 31.438	2.84 185.22	(.000) 2.202	H ¹ Accepted H ⁰ Rejected

Variables	B & F	Estimate SE of	Regression	(Sign.) F	and B Constant	(Sign.) T	Rejected # Accepted \ H ⁰ \ H ¹
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Table 3: Statistical Results of Correlation & Simple Linear Regression of Determinants of EDI

to CDB ratio have positive though low degree correlation with CDB. Exchange rate indices of real effective exchange rate of Indian rupee and the Current account significant at 2% level of significance. Other variables e.g. Real CDB growth rate, Foreign Ratio has moderate degree negative correlation (- 0.248) with EDI inflows and this is reverse ratio and the EDI flows at 1% level of significance. However, External Debt to CDB The results show high degree negative correlation (- 0.288) between External debt

are positive and highly significant in explaining the variations in FDI inflows. The coefficients of External debt service ratio and the External debt to GDP ratio are negative but statistically significant at 1% level of significance. Other variables such as REER, GDP growth, Current account to GDP ratio, and the Exchange rate are not statistically significant in explaining the variations in FDI inflows. The regression models of FDI individually with respect to explanatory variables are as follows:

$$\begin{aligned} \text{FDI} &= 182.66 + 6.84 X_F + \mu_F && \text{(Where } X_F = \text{FOREX Reserves)} \\ \text{FDI} &= -12680.25 + 115.73 X_W + \mu_W && \text{(Where } X_W = \text{Whole Sale Price Index)} \\ \text{FDI} &= -10050.47 + 7.93 X_G + \mu_G && \text{(Where } X_G = \text{Gross Domestic Product at Factor Cost)} \\ \text{FDI} &= 16924.06 - 523.44 X_E + \mu_E && \text{(Where } X_E = \text{External Debt to GDP Ratio)} \\ \text{FDI} &= 14252.99 - 560.39 X_D + \mu_D && \text{(Where } X_D = \text{External Debt Service Ratio)} \\ \text{FDI} &= -3930.82 + 11.48 X_I + \mu_I && \text{(Where } X_I = \text{Income Terms of Trade)} \end{aligned}$$

On the basis of above statistical results and individual regression models Correlation & Multiple linear regression of selected explanatory variables of FDI was also calculated. The results are presented in table 3.

Table 3: Statistical Results of Correlation & Multiple Linear Regression of Explanatory Variables of FDI

Variables	R & R Sq.	SE of Estimate	Regression SS & Residual	F (Sign.)	Constant And B	T (Sign.)
Constant	.950	2003.28	257822123.85	10.707 (.003)	3746.50	.139 (.894)
FORRES	.902		28091867.65		-2.89	-.600 (.567)
WPI					-4.04	-.017 (.987)
GDPFC					-7.83	-.381 (.714)
EXDEBGDP					373.70	.938 (.380)
DEBTSERV					-489.63	-1.581 (.158)
INCTERMS					23.58	-2.764 (.028)

a: Predictors: (Constant), FORRES, WPI, GDPFC, EXDEBGDP, DEBTSERV, INCTERMS.

b: Dependent Variable: FDI

The values of correlation and coefficient of determination of selected explanatory variables corroborate the theoretical predictions emanating from recent proposition in the theory of international finance and are able to explain 90.2% of variations in FDI in India. The model of FDI based on multiple regression analysis with respect to explanatory variables under consideration is as follows:

$$\text{CFDI} = 3746.50 - 2.89 X_F - 4.04 X_W - 7.83 X_G + 373.70 X_E - 489.63 X_D + 23.58 X_I + \mu$$

On the basis of above results, it can be concluded that liberalized policies towards foreign direct investment are not sufficient in themselves to attract large inflows. Since FDI is more sensitive with respect to GDP at Factor Cost, External Debt to GDP Ratio, External Debt Service Ratio, Whole Sale Price Index, Income Terms of Trade, and the FOREX Reserves, the economic parameters have to be set in order as well.

(II) ANALYSIS OF EFFECTS OF FDI FLOWS

It is quite relevant to analyze the effects of foreign direct investment under the liberalized economic framework in view of experience of over one and half decade that the country has with it. It is believed that FDI is the key variable for achieving economic growth in developing countries. It affects industrial output, exports, foreign exchange reserves, balance of payment, level of investment, technology, product quality etc. So, in order to analyze the impact of FDI, certain macro economic variables are taken. The description of data used in this study and the sources from which they are compiled are shown in table 4.

Table 4: Data Label and Source of Effects Of FDI

Period: 1993-94 to 2006-07

Label	Variable	Data Source
FDI	Foreign Direct Investment (US \$ Millions)	RBI Annual Report 2007 & previous Issues
GDPFC	GDP at Factor Cost (In Rs. Crore)	Economic Survey 2008 & previous Issues
INDPRDEX	Industrial Production Index	Economic Survey 2008 & previous Issues
EXPRT	Exports (US \$ Millions)	Handbook of Statistics on Indian Economy, RBI
FORRES	Foreign Exchange Reserves (US \$ Millions)	Economic Survey 2008 & previous Issues
BOP	Balance of Payment (US \$ Millions)	Annual Report, RBI 2007 & previous Issues
GFCF	Gross Fixed Capital Formation	Annual Report, RBI 2007 & previous Issues

HYPOTHESIS

As null hypothesis (Ho) it is assumed that there is no significant impact of FDI on the selected macro economic variables mentioned above. However, for impact analysis of FDI on these variables following alternative hypothesis (H1) are framed:

- 1 Gross domestic product (GDPFC) and the Industrial Production Index (INDPRDEX) which show strength of economy are expected to be significantly influenced by FDI inflows.

- 2 There is significant impact of FDI inflows on the investment level i.e. Gross Fixed Capital Formation (GFCF) of the country.
- 3 FDI inflows significantly boost the export performance (EXPRT) of India.
- 4 There is significant positive impact of FDI inflows on Foreign Exchange Reserves (FORRES), and the Balance of Payment (BOP)

The above hypotheses are verified by calculating the coefficient of correlation, coefficient of determination, and by estimating simple linear regression equations. The results of correlation and regression analysis are presented in table 5.

Table 5: Statistical Results of Correlation & Simple Linear Regression of Effects of FDI

Variables	R & R Sq.	SE of Estimate	Regression SS & Residual	F (Sign.)	Constant And B	T (Sign.)	H ₀ /H ₁ Accepted/ Rejected #
GDPFC	0.838** 0.702	281597.27	2245819718540.66 951564272168.27	28.322 (.000)	1452865.32 88.63	5.322 (.000)	H ₀ Rejected H ₁ Accepted
INDPRDEX	0.843** 0.710	23.91	16827.55 6859.26	29.439 (.000)	124.39 7.67	5.426 (.000)	H ₀ Rejected H ₁ Accepted
EXPRT	0.888** 0.789	14850.90	9908853901.46 2646591098.65	44.928 (.000)	23672.46 5.89	6.703 (.000)	H ₀ Rejected H ₁ Accepted
FORRES	0.851** 0.724	31916.30	32024176313.41 12223804891.44	31.438 (.000)	17198.30 10.58	5.607 (.000)	H ₀ Rejected H ₁ Accepted
BOP	0.748** 0.559	7779.42	920712502.95 726233294.76	15.213 (.002)	3950.59 1.79	3.900 (.002)	H ₀ Rejected H ₁ Accepted
GFCF	0.881** 0.777	147991.19	913352641750.44 262816713593.28	41.703 (.000)	260718.92 56.52	6.458 (.000)	H ₀ Rejected H ₁ Accepted

** Correlation is significant at the 0.01 level (2-tailed).

Ho / H₁ accepted / rejected at least at 95% level of confidence.

a: Predictors: (Constant), FDI

b: Dependent Variables: b1: GDPFC; b2: INDPRDEX; b3: EXPRT; b4: FORRES; b5: BOP; b6: GFCF

It is encouraging to note that all the dependent variables included in the above table have high degree positive correlation with FDI inflows. The coefficient of correlation of selected variables ranges between 0.748 and 0.881 which are significant at 1% level of significance. Further, the values of coefficient of determination shown in the table explain a fair proportion of the variation in the dependent variable as testified by the values R². The regression equations for various dependent variables are as follows.

$$\text{GDPFC} = 1452865.32 + 88.63 F_D + \mu_D$$

$$\text{GFCF} = 260718.92 + 56.52 F_D + \mu_D$$

$$\text{FORRES} = 17198.30 + 10.58 F_D + \mu_D$$

$$\text{INDPRDEX} = 124.39 + 7.67 F_D + \mu_D$$

$$\text{EXPRT} = 23672.46 + 5.89 F_D + \mu_D$$

$$\text{BOP} = 3950.59 + 1.79 F_D + \mu_D$$

(Where F_D = FDI)

In the above equations all the regression coefficients are positive and significant at 1% level of significance. This justifies FDI as a means of increasing investments, industrial production and the GDP. It is a major variable which boosts exports, foreign exchange reserves and bridges the gap in BOP in India. However it is noteworthy in this regard that export oriented FDI or high technology FDI may be very favorable for India rather than an attempt to maximize the magnitude of FDI irrespective of its composition.

REFERENCES

- Anand J. and Delios, A. (1996), "Competing globally: How Japanese MNCs have matched goals and strategies in India and China", *Journal of World Business*. 31, 3, pp.50-62
- Asiedu E. (2002), "On Determinants of Foreign Direct Investments to Developing Countries: Is Africa Different?", *World Development*, 30 (11), 107-119.
- Guasch Luis (2002), "The Experience of Latin America with Performance-Based Contracts." World Bank, Latin America and the Caribbean Region, Finance, Private Sector, and Infrastructure Unit, Washington, D.C.
- Harris Clive (2003), "Private Participation in Infrastructure in Developing Countries: Trends, Impacts, and Policy Lessons", World Bank Working Paper 5. Washington, D.C.
- Hoekman B. and Saggi K. (2000), "Assessing the Case for Extending WTO Disciplines on Investment Related Policies", World Bank Working Paper, Washington, D.C.
- Hymer, S (1976), "The International Operations of National Firms: A Study of Direct Investment", Ph. D. Thesis, MIT, 1960, Cambridge Mass, MIT Press.
- Kaminsky G. and Reinhart C. (1999), "The Twin Crises: The Causes of Banking and BoP Problems", *American Economic Review* 89(3).
- Kohli Renu, "Financial Flows and Domestic Financial Sectors in India, "Economic & Political Weekly, Feb. 22, 2003, PP. 765.
- Kokko (2002), "Globalization and Foreign direct investment Incentives", Paper Presented at Annual Bank Conference on development Economics in Europe, Oslo, Mimeo.
- Kumar N. (2002), "Globalization and the Quality of Foreign Direct Investment", Oxford University Press.
- Loree D. W. and Stephen E. Guisinger (1995), "Policy and Non Policy Determinants of U.S. Equity Foreign Direct Investment", *Journal of International Business Studies*, Second Quarter.
- Marwah K. and Klein L. (1998), "Economic Growth and Productivity Gains from Capital Inflow: Some Evidence for India", *Journal of Quantitative Economics*, January.
- Mazumdar T. (2005), "Capital Inflow into India: Implications for Economic Growth", *Economic and Political Weekly*, 21 May.
- Nair, K.R.S., "Experience of Financial Sector Reforms in Developing Countries: Lessons and Prospects for India," *State Bank of India - Monthly Review*, Dec. 1999, p.-1280.
- Neuhaus Marco (2005), "The Impact of FDI on Economic Growth: An analysis for the Transition Countries of Central and Eastern Europe", *Physica - Verlag: A Springer Co.*, 2005, p 154

- Nunnenkamp P. (2002), "Determinants of Foreign Direct Investment Inflows: How Globalization Changed the Rules of the Game?" Kiel Institute for World Economics, Working Paper No. 1122, Kiel.
- Rao K.S. Chalapati, Murthy M.R. and Ranganathan K.V.K. (1999), "Foreign Investment in India in the Post Liberalization Period: An Overview", *Journal of Indian School of Political Economy*, July-September, Vol. XI, No. 4.
- RBI - Annual Report 2006-07 and previous issues.
- Shanker O. (2001), "Cultural Distance Revisited: Towards a More Rigorous Conceptualization and Measurement of Cultural Differences", *Journal of International Business Studies*, 32, 3, pp. 519-535.
- Shapiro D. and S. Globerman (2001), "National Infrastructure and Foreign Direct Investment", *Mimeo*, Simon Fraser University (February).
- Suchak N.V., "Management of Global Financial Flows: Lessons for India," *Delhi Business Review*, Vol.1, Jan 2000, P.-109.
- Taylor C.T. (2000), "The Impact of Host Country Government Policy on US Multinational Investment Decisions", *World Economy*, Vol. 23, 635-648.
- Tesar Linda L., and Ingrid M. Werner (1995), "Home Bias and High Turnover", *Journal of International Money and Finance*, Vol. 14, (month), 1995, pp. 467-492.
- UNCTAD (1996), "Incentives and Foreign Direct Investment: Current Studies", Series A, No. 30. New York and Geneva: United Nations.
- Venkataramany Sivakumar, "Determinants of Foreign Direct Investment in India: An Empirical Analysis of Source Countries and Target Industries" Ashland University, USA
- Villela L. and Barreix A. (2002), "Taxation and Investment promotion", *Background Note for Global Economic Prospects 2003*, Washington: Inter American Development Bank
- Vincent Palmade and Andrea Anayiotas (2004), "Looking Beyond the Current Gloom in Developing Countries", *World bank Public Policy Journal*, Sept., No. 273.
- Virmani A., Goldar B., Veeramani C., and V. Bhatt (2004), "Impact of Tariff Reforms on Indian industry: Assessment Based on a Multi sector Econometric Model", *ICRIER Working Paper no. 135*.

PACT IN A TRACT: INTERFACE BETWEEN ICAI AND ACADEMIA

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ABSTRACT

The focus of the study is on improving the quality of accounting education and research in India. The study which is empirical in nature, proposes to know the perceptions of the Chartered Accountants and also those pursuing CA on interface between ICAI and Academia.

1.0 India, a large area of land bestowed with huge human resources and natural resources is trying to enhance the quality of higher education. The country has been a hub of accounting right from Kautilya's period. The apex bodies such as NAAC, UGC, and AICTE are working in this direction. However, the higher learning institutions in India are not able to meet the global standards due to:

- Lack of practical and industry orientation
- Low commitment levels of the stakeholders
- Weak conceptual based teaching and learning
- Poor infrastructure
- Lack of analytical thinking
- Lack of research orientation
- Poor communication skills
- Traditional methods of teaching
- Lacunae in examination system

Added to the above, non availability of data has become a hindrance for researchers in accounting. It is felt by many that there is a need for the universities in India to enter into agreements with professional bodies to enhance the quality of accounting education and research in India.

The chairman of ISRO Sri G.Madhavan Nair has expressed that he is not happy with the education system in the country. The bulk of applicants who applied for scientific and engineering jobs in 2009 are not able to get even 50% marks in entrance tests held by ISRO. The level of education and knowledge being imparted by many colleges is not up to the mark.

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Instead of concentrating on quantity, these institutions should concentrate on quality. If the quality level was not up to the mark, one would get people for clerical or routine jobs. (Source: The New Indian Express, Oct.17, 2009, pp.9)

Commerce and Accounting education are no exception to the observations made by Sri Madhavan Nair.

1.1 OBJECTIVE OF THE STUDY

The focus of the study is on interface between ICAI and academia in India with the following objective:

- To know the perceptions of CAs and students pursuing CA about the need and significance of interface between ICAI and universities offering Accounting education and research in India.

1.2 METHODOLOGY

The required data are collected by administering a structured questionnaire to the Chartered Accountants (20) and those who are pursuing CA Inter and final(100). The sample size is 120. Statistical tools such as Chi- square test, Mean Scores on five point and three point rating scales have been used. SPSS package has been used for data processing.

1.2.1 Hypothesis

Null hypothesis has been formulated for 1.4.1, 1.4.2, 1.4.3 and 1.4.4 which is as follows:

H_0 There is no significant difference in the opinions of the Chartered Accountants and those pursuing CA with regard to the need and significance of interface between ICAI and universities offering Accounting education and research in India.

1.3 ANALYSIS AND FINDINGS OF THE STUDY

The major findings of the study are listed in 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.3.5 and 1.3.6. Chi-square static has been used for the operationalisation of Data. The tables showing the calculation of chi square test are shown in the annexure.

1.3.1 The first part of the study deals with the perceptions of respondents with regard to the areas where educational institutions offering accounting education and ICAI may come together for improvement in the quality of accounting education and research. The data have been collected on five point rating scale by assigning 5,4,3,2 and 1 respectively for Totally agree, Partially agree, No opinion, Partially disagree and Totally disagree. The mean scores and Chi square values have been calculated accordingly. The chi square test has been used for the operationalisation of hypothesis.

Table 1: Areas Requiring Interface between ICAI and Academia

Area where collaboration or interface is necessary	Chi-Square value	df	Asymp. signi	H ₀	Mean Score	Interpretation
1. Designing of curriculum	.681	3	.878	Accepted	4.39	Totally Agree
2. Granting of exemptions to the students of CA in degree courses and vice versa	5.040	4	.283	Accepted	4.38	Totally Agree
3. Conduct of practical exams	1.221	4	.875	Accepted	3.90	Partially Agree
4. Arranging lecturers	5.845	4	.211	Accepted	3.88	Partially Agree
5. Infrastructure (usage of halls, LCD...)	3.360	4	.499	Accepted	3.71	Partially Agree
6. Dissemination of information pertaining to the courses	8.331	4	.080	Accepted	3.53	Partially Agree
7. Add on courses	11.511	4	.021	Rejected	3.48	Partially Agree
8. Practical and industry orientation	11.650	4	.020	Rejected	4.42	Totally Agree
9. Quality assurance	2.621	4	.623	Accepted	4.51	Totally Agree
10. Introduction of new courses	5.188	4	.269	Accepted	3.57	Partially Agree
11. Sharing of responsibilities in respect of seminars and workshops	16.984	4	.002	Rejected	3.90	Partially Agree
12. Study material	4.542	4	.338	Accepted	4.24	Totally Agree
13. e-content generation	6.864	3	.076	Accepted	3.95	Partially Agree
14. e- learning	2.856	3	.414	Accepted	4.07	Totally Agree
15. Orientation to the paper presenters in national seminars and conferences to have better idea about the technical session	7.472	4	.113	Accepted	4.30	Totally Agree

There is a significant difference in the opinions of CAs and the students of CA with regard to the collaboration in respect of add-on courses, practical and industry orientation and sharing of responsibilities in respect of seminars and workshops. 42% of the students do not have any idea about the add-on courses as against 15% in case of CAs. In case of sharing of responsibilities, 47% of the students have totally agreed that these institutions should come together as against 15% of the CAs.

The areas where the respondents of both the categories have very strongly agreed are:

- Designing of curriculum
- Conduct of practical exams
- Quality assurance
- Infrastructure (usage of halls, LCD...)
- e- learning

1.3.2 The second part of the study discusses about the degree of awareness of the respondents about the joint programmes offered by ICAI and select universities. The data have been collected on three point rating scale by assigning 3,2 and 1 respectively for Fully aware, aware and Not aware. The mean scores and Chi square values have been calculated accordingly. The chi square test has been used for the operationalisation of hypothesis.

Table 2: Awareness regarding the Joint Educational Programmes.

Joint education programme of	Chi-Square value	df	Asymp. signi	H ₀	Mean Score	Interpretation
ICAI - IGNOU						
1. Special B.Com	3.127	2	.209	Accepted	1.33	Not Aware
2. Special M.Com	2.667	2	.264	Accepted	1.13	Not Aware
ICAI - Bharathiar University						
1. B.Com	.678	2	.712	Accepted	1.04	Not Aware
2. BBA	.065	2	.968	Accepted	1.00	Not Aware
3. M.Com	.042	1	.838	Accepted	1.04	Not Aware
4. MBA	.020	1	.887	Accepted	1.09	Not Aware
ICAI - Guru Jhambheswar University						
1. BBA	1.487	1	.223	Accepted	1.06	Not Aware
2. MBA	2.182	1	.140	Accepted	1.08	Not Aware

It is evident from the responses that all the respondents are not aware about the joint education programmes as highlighted in the table above.

1.3.3 This part of the study deals with the expectations in respect of exemptions at Degree and PG level. Chi-square test has been applied.

Table 3: Opinion about certain exemptions at UG and PG level

Stage of completion	Exemption may be granted in	Chi-Square value	df	Asymp. signi	H ₀
Foundation- CA (Certain Exemptions in BBA/ B.Com in....)	Financial Accounting I	22.110	1	.000	Rejected
	Business Law	14.170	1	.000	Rejected
	Business statistics	2.880	1	.090	Accepted
	Business Economics	12.921	1	.000	Rejected
Inter CA (Certain Exemptions in BBA/ B.Com in....)	Financial Accounting I	15.218	2	.000	Rejected
	Business Law	24.144	1	.000	Rejected
	Business statistics	5.880	1	.015	Rejected
	Business Economics	12.964	1	.000	Rejected
	Financial Accounting II	7.741	1	.005	Rejected
	Corporate Accounting	3.879	1	.049	Rejected
	Business organisation and management	9.444	1	.002	Rejected
	Company Law	14.830	1	.000	Rejected
	Management Accounting	5.232	1	.022	Rejected
	Auditing	15.515	1	.000	Rejected
	Secretarial Practice	6.000	1	.014	Rejected
	Taxation	12.330	1	.000	Rejected
	Final CA (Certain Exemptions in MBA/ M.Com in...)	Cost Accountancy	4.872	1	.027
Financial Management and Investment Analysis		13.534	1	.000	Rejected
Taxation		10.165	1	.001	Rejected
Advanced Management Accounting		2.679	1	.102	Accepted
Higher Accounting		2.423	1	.120	Accepted
	Business statistics/ Quantitative Techniques	4.000	1	.046	Rejected

There is no significant difference in the opinions of the respondents with respect to the exemptions to be given to Business Statistics, Advance Management Accounting and Higher Accounting. In case of other subjects it is found that there is a significant difference in the opinions of the two groups as majority of the students wanted exemption in most of the papers which is quite opposite in case of CAs.

1.3.4 An attempt has been made to know the perceptions of the respondents about the degree of effectiveness of the interface between ICAI and other apex bodies. The data have been collected on three point rating scale by assigning 3,2 and 1 respectively for Most effective, Effective and Not effective. The mean scores and Chi square values have been calculated accordingly. The chi square test has been used for the operationalisation of hypothesis.

Table 4: Perceptions about Effectiveness of Interface

Details	Chi-Square value	df	Asymp. signi	H ₀	Mean Score	Interpretation
1. Interface between ICAI and Universities	4.800	2	.091	Accepted	1.64	Effective
2. Interface between ICAI and ICWAI	5.889	2	.053	Accepted	1.76	Effective
3. Interface between ICAI and ICSI	1.724	2	.422	Accepted	1.79	Effective
4. Interface between ICAI and Industry	11.726	2	.003	Rejected	1.75	Effective
5. Interface between ICAI and Indian Accounting Association	1.300	2	.522	Accepted	1.90	Effective
6. Interface between ICAI and Indian Commerce Association	1.863	2	.394	Accepted	1.68	Effective
7. Interface between ICAI and Indian Chambers of Commerce	.315	2	.854	Accepted	1.83	Effective

There is no significant difference in the opinions of the respondents about the interface between ICAI and other bodies except industry. 44% of the CAs felt the interface is Most effective as against 19% of the students in case of ICAI and Industry interface. There is high degree of association between the opinions regarding the interface between ICAI and ICA, IAA and Indian Chambers of Commerce.

1.3.5 The last part of the study deals with the need for introduction of special B.Com course exclusively for CA students. Most of the CAs (60%) felt that there is no need for such programme. The students (83%) welcomed the move. The respondents expressed that they expect the following in order of their preference from the course:

- Flexibility in timings
- Degree with an option to choose the papers
- Quality of the programme
- Lateral entry programmes

1.3.6 60% of the respondents from both the groups stated that there is a need for ICAI to take initiatives in promoting Accounting Education and Research in India

1.4 SUGGESTIONS

The institute of chartered Accountants of India is doing a commendable job in promoting the quality of accounting education in India through its efforts. The slogan of the ICAI now is "catch them young". The registration level is 10th standard now. The following are some of the fresh initiatives of ICAI.

- Huge sums are spent on advertisements.
- The students on completion of certain stages of the course would be awarded Diploma in Accounting.
- Certificate courses in valuation, insurance; risk management, FOREX and treasury management have been introduced.
- The institute (ICAI) has launched a special training programme for auditors.

However, the respondents felt that the interface between ICAI and academia is just effective and certain measures have to be taken to make it most effective. Taking these factors into consideration the following suggestions are made in order to be ahead in the global market.

- There is a great need to disseminate information regarding joint education programmes. It is a matter of concern as the majority of the students pursuing CA have no idea about these courses
- Universities and ICAI shall discuss on granting of exemptions in certain subjects
- Meeting may be conducted at regular intervals to strengthen the interface between ICAI and other apex bodies
- There is a need for furtherance of interface between ICAI and Indian Commerce Association, Indian Accounting Association and Indian Chambers of Commerce as majority of the respondents felt that the interface is just 'effective' and not 'most effective'
- Introduction of special B.Com course for CA students may be considered with flexible timings and option to choose the papers
- ICAI to take initiative in promoting Accounting education and research in India. The following initiatives are necessary for such interface:
 - Direct admission into PhD for CAs
 - On-line tests by ICAI for UG and PG students at regular intervals (similar to the merit talent test conducted by Indian Accounting Association))
 - Seminars at chapter level
 - Establishment of branches at rural areas
 - Guest lectures for students and staff
 - Articles in news papers and web-sites
 - May think of integrated B.Com - CA course
 - PG course in Accounting
 - Orientation to school students about Accountancy & Commerce (Many organisations such as School of Accounting, Bhubaneswar are working in this direction. There is a need for such orientation course at national level)

1.5 SUMMARY STATEMENT (*SCA - Students of CA)

I. Area where collaboration or interface is necessary	CA	SCA
1. Designing of curriculum	✓	✓
2. Granting of exemptions to the students of CA in degree courses & vice versa	-	✓
3. Conduct of practical exams	-	-
4. Arranging lecturers	-	-
5. Infrastructure	-	-
6. Dissemination of information pertaining to the courses	-	-
7. Add on courses	-	-
8. Practical and industry orientation	✓	✓
9. Quality assurance	✓	✓
10. Introduction of new courses	-	-
11. Sharing of responsibilities	-	✓
12. Study material	✓	✓
13. e-content generation	✓	-
14. e- learning	✓	✓
15. Orientation to the paper presenters in national seminars and conferences to have better idea about the technical session	-	✓
II. Joint education programmes	CA	SCA
ICAI - IGNOU (B.Com)	✓	✓
ICAI - Bharathiar University	-	-
ICAI - Guru Jhambheswar University	-	-
III. Granting of exemptions in certain papers at UG and PG level	-	✓
IV. Special B.Com exclusively for CA students by ICAI	CA	SCA
Flexibility in timings	-	✓
Quality of the programme	-	-
Degree with an option to choose the papers	-	✓
Lateral entry programmes	-	✓
V. Need for ICAI to take initiatives in promoting Accounting Education and Research in India	✓	✓

SUBPRIME LENDING: USA PERSPECTIVE

*P. Chakraborty

ABSTRACT

Subprime lending has become a burning issue today. Limitless subprime mortgage lending in the USA and the consequent steep rise in the rate of subprime mortgage default led to an adverse impact on the US real estate market and has had a far reaching adverse effect on the global economy as a whole. In this back drop, a number of questions may arise in our minds relating to the character of subprime lending, such lending, role of securitization in offsetting such risks, factors behind the growth of subprime mortgage market in the USA and bursting of Subprime bubbles in that country, subprime lending in Indian scenario and the ways to shield the Indian banking system from the subprime threats in future. A modest attempt has been made in the present article to throw some light on the aforementioned issues.

In case of subprime lending the financier is very much liberal in granting loan to a borrower even without verification of any proof relating to his income and net worth. That is why the other names of such loan are Stated Income Loan, NINA (i.e., No Income No Asset) or NINJA (i.e. No Income No Job and Asset) Loan. This character of subprime lending system makes a person too much greedy to obtain loan for which he is not worthy otherwise and provokes him to resort to dishonest practices like providing false statement of income, fake certification of assets and suppressing existing loans in order to get loans which should otherwise not be available to him. Subprime lending tempts one with low income and assets to go by the principle "Reenam Kritwa Ghritam Peebet" and thereby to be the owner of houses, cars and other valuable assets which he could never dream of.

With a view to hedging the risks as well as overcoming the capital inadequacy problem, the banks may resort to securitization technique. Securitization is a process through which a lender (called "Originator") sells the loan receivables (called "Underlying Assets" or "Underlying Collaterals") to an entity, popularly known as "Special Purpose Vehicle" or SPV (in the USA it is called "Special Purpose Entity" or SPE). To make ready cash payment to the originator against such buying of the loans, the SPV / SPE raises fund by issuing fixed interest bearing securities or debt instruments (called "Securitized Instruments") to the investors. In the capital market securitization is well-known as "structured finance" as the securities are structured according to the type of their underlying collaterals and their pattern of cash flows. Securitization may be mortgage-based securitization or asset-based securitization depending on the nature of the underlying assets/collaterals and accordingly the securities may be mortgage-backed securities

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(MBS) or asset-backed securities (ABS). The securitization technique is used by the lending institutions as an effective and sophisticated tool for shifting the risks of subprime loans to the SPVs/ SPEs.

BOOM OF THE US SUBPRIME MORTGAGE MARKET

In the USA the origin of subprime lending can be dated back to the last decade. Then the interest rate was very low, rate of inflation was also very low, employment rate was high, the Americans had considerable amount of disposable income in their hands, and Federal Government extended immense tax benefit on housing loan. All these factors led to rising demand for houses and housing loans in the USA. Then although a few banks started to provide subprime loan, the extent of such loan was not too much. The housing loan market became more vibrant in 1999 when the Clinton Administration put pressure on the banks for relaxation of the eligibility norms for housing loan in order to increase the availability of such loan for the minority and low- income families and required the banks to maintain at least 50 per cent of their portfolios in loans to low and moderate-income borrowers. This had given rise to the growth of subprime mortgage lending in the market.

In early 2000s, there was a consistent rise in home ownership rate in the USA (from 64% in 1994 to 69.2% in 2004) and increasing demand for houses led to surge in house prices (between 1997 and 2006 the prices of American houses increased by 85% as per assessment of Standard & Poor's). These two phenomena made the banks and other mortgage lending companies believe that the demand for houses and its prices would continue to appreciate and such a belief motivated them to lessen their credit standards and start lending to the persons with no credit history and low FICO¹ score. The magnitude of subprime mortgage loan increased from \$190 billion in 2001 to \$625 billion in 2005 i.e., more than three times growth over a period of 5 years. The subprime lenders did not hesitate at all in increasing the volume of such risky loans because they believed that in the event of default, the resulting losses could be recovered through foreclosure or sale of the mortgaged properties as their market prices would continue to go up. This view had also increased the loan to value ratio from 78% in 2000 to 86.5% in 2007 which had intensified the subprime mortgage practice.

Proliferation in subprime lending was augmented by introduction of various special and creative loans schemes by the banks. Some of these are Interest Only Payment Scheme, Pay Options Loan Scheme, No-Doc Loan, Piggyback Loan, Hybrid Mortgage and so on. Hybrid mortgage loan has become more attractive to the borrowers since the last decade. This loan offers a low fixed interest rate (generally 4% p.a. or even below that) for the initial 2/3 years after which the loan resets to a higher adjustable rate (a reference rate plus a spread, e.g., Federal fund rate + 5%) for its remaining life. This type of mortgage loan is also called Adjustable Rate Mortgage (ARM). The initial lower rate is called "Teaser rate" as it aims at attracting new borrowers by offering them with lower rate and lower amount of EMI. This has lured a record number of subprime borrowers to take ARM. Moreover there was a declining trend in Federal fund rate in early 2000s which made them believe that the ARM would be cheaper in future.

That's why about 80% of subprime mortgages were ARMs. Mortgage brokers were also responsible for the growth of subprime ARMs. They were paid commission on the basis of the volume of loans originated by them rather than the quality of those loans. In accomplishment of their objective of earning as much commission as possible, the mortgage brokers took a drive to sale ARM to the people at a high rate even without considering their ability to sustain such loans.

On the other hand, those who had previously borrowed fixed rate loan and had been facing difficulty in making payment of higher EMI found it more comfortable to refinance their mortgages at lower interest rate. In view of the spiraling rise in home prices, the banks were also interested in providing refinancing facility. About 66% of the mortgage loans originated in 2003 was refinanced and this practice continued till 2007 when 52% of the mortgage loan was refinanced.

In consequence of the above forces, subprime lending became a serious concern to the US economy. A decade ago, 5% of mortgage loan originations were subprime and the figure jumped to 21% by 2006. The amount of outstanding subprime loans touched the peak level of \$1.3 trillion in 2007. The USA household debt as a percentage of annual disposable personal income registered a sharp rise from 77% in 1990 to 127% at the end of 2007. Since 2005 more than 99.5% of disposable personal income of the American households has been spent on consumption and EMI payments.

ROLE OF SECURITIZATION ON SUBPRIME LENDING

The boom in subprime mortgage market in the USA was fuelled by easy availability of securitization facility. A number of Government Sponsored Entities (GSE) like Fannie Mae and Freddie Mac became very much active in performing the role of SPE in respect of securitization of the subprime mortgages. This indicates the indirect support of the US government in stimulating the subprime mortgage movement. The banks were selling mortgage loans to the GSEs in order to provide more new mortgage loans to the home owners without raising additional capital and incurring any additional cost of capital. The GSEs, in turn, aggregated and packaged such mortgage loans into highly rated and attractive MBS, sold them to the investors and used the sale proceeds to make payment to the mortgage selling banks. A number of investment banks also were found to set up SPEs for securitization of mortgage loans. Based on securitization of mortgage loans, another type of instrument called Collateralized Debt Obligations (CDOs) was introduced. CDO is a type of asset-backed security the value and payment of which are derived from a portfolio of underlying assets like MBS, commercial real estate bonds and corporate loans. The SPEs acquired the portfolios of underlying assets and issued CDOs of different risk classes. These MBSs and CDOs were purchased mainly by the sophisticated investors like banks and FIs, corporate bodies, hedge funds, mutual funds, investment banks, etc. of not only the USA but also of other countries in Europe and Asia. The soar in home prices and boom in housing loan market created a buying spree for these securities among the investors all over the world. In order to enhance the safety and credibility of the securities and to protect the investors against default risk, a number of insurance companies like AIG offered new insurance products called Credit Default Swaps (CDS). During the period from 2001 to 2006, with the rise in subprime mortgages, a craze was witnessed in respect of securitization of subprime mortgages. In 2001 54% of subprime mortgages in the USA were securitized and the figures were 81% in 2005 and 75% in 2006.

BURST OF BUBBLES IN THE US SUBPRIME MORTGAGE MARKET

The alarm bell in the US subprime market rang for the first time in February 2007 when HSBC sacked its Head of Operations, North America, for its \$6.8 billion of bad debt loss mainly arising from the subprime piggyback loans. The situation was further aggravated when New Century Financial, one of the premier subprime lending institutions of America, got totally collapsed with its non-performing subprime loans to the tune of \$23 billion. In December 2007 Morgan Stanley disclosed a \$9.4 billion write down on their subprime asset which was mainly due to its purchase of a subprime mortgage lender, Saxon Capital, in 2006. In January 2008 Merrill Lynch reported a net loss of \$8.6 billion because of significant writing off of its subprime investments. There are many more US victims of subprime crisis including Countrywide Financial, Citigroup, Lehman Brothers, Bear Stearns and so on.

The bursting of bubbles in the US Subprime mortgage market may be attributed to a number of factors. The first damaging factor was hike in oil and commodity prices leading to high price inflation and rise in interest rate in the US economy from mid-2004 onwards. The US industries were suffering from high cost of production and in their drive to reduce such cost,

many companies resorted to man power down sizing. This situation brought about a drastic fall in demand in the housing market. On the other side, there was redundant supply of houses in the market as the house builders, looking at increasing profits through selling more houses, had already built up a large inventory of houses. Thus due to low demand and high supply forces in the market, the housing prices started to drop sharply in many parts of the USA. By September 2008, the average house prices in the USA had declined by 20% from their peak level in mid-2006. Such decline in house prices caused zero or negative equity in mortgaged property for many borrowers. In this situation, the subprime borrowers had no problem to default their dues as they had nothing to loose in consequence of such default. Moreover, most of the mortgage loans were basically of non-recourse nature. So when the borrowers default, the lender's recovery was limited to the mortgaged property only and it had no right to touch any other property of the defaulting borrowers. All these factors provided an incentive to the borrows to default on their loans.

Moreover, with the gradual increase in Fed fund rate since mid- 2004 onwards, ARM interest rate became higher in the cases where initial period of low fixed interest rate was already over. EMIs became too high to be paid by the borrowers. They could not resort to refinancing facility to overcome their hardship since the banks increasingly became reluctant to provide such facility due to drastic fall in home prices since 2006. So the borrowers had no other way out but to default EMI payments. When more and more borrowers stop paying their EMIs, the lending institutions were compelled to apply foreclosure. Since 2006 the lenders started foreclosure proceeding in an increasing rate; there was a 79% rise in foreclosure in 2007 compared to 2006 and an 81% rise in 2008 compared to 2007. Increasing foreclosure rate caused trouble upon trouble as it resulted in increasing supply of houses for sale that in turn led to further decline in house prices. The lending institutions failed to realize a considerable portion of their receivables against mortgages through foreclosure and had to face tremendous bad debt losses.

Once the Subprime borrowers failed to pay the EMIs of mortgage loans, the default risk of MBS and CDOs went up. As mortgage default rose, the investors rushed to the issuers of CDS and lodged their claims for compensation. In most of the cases the CDS issuers failed to honour their commitments. In consequence thereof, the prices of MBS and CDOs in the market fell down considerably leading to vast erosion of net worth of those who had invested heavily in those securities.

SUBPRIME LENDING IN INDIAN SCENARIO

Indian banking system is still in a stable condition amidst the subprime crisis in the USA and other countries of the world. None of the PSU banks in India is understood to have any direct exposure to the US subprime mortgage market, nor do those banks had much investment in subprime MBS and CDOs in the USA. However, ICICI Bank is an exception which lost as much as \$264 million till January 2008 due to its huge investment in the overseas credit derivatives markets. The Indian banking system is under close supervision of Reserve Bank of India (RBI) as regard credit control and management. Most of the PSU banks exercise

due diligence in extending loans to the borrowers and are very much careful in maintaining the quality of the loans. However, in 2007 India had witnessed some opening of subprime market particularly in the field of credit card and personal loans and that was basically dominated by a few private sector banks and financial companies like Citi Financial, GE Money, Pragati Finance (a subsidiary of HSBC), Prime Financial (a subsidiary of Stan Chart), DBS Choramandalm, etc. However, no instance came to our notice regarding subprime mortgage loan mainly because mortgage-based securitization is still in a primary stage of development in India and so the banks are very much reluctant in providing subprime loans in this area.

But Indian banks and other lending institutions are suffering from certain fundamental deficiencies in their retail lending system which may invite subprime crisis at any time in future. Some of the important deficiencies are highlighted below:

- There are no uniform norms and criteria for rating the credit worthiness of the retail borrowers. Retail loan proposals are appraised by the banks on the basis of their internal credit policies and risk perception. This may lead to increasing quantum of poor quality loans and collapse the total financial system of the country.
- No specific criterion is there in India to ascertain whether a borrower is a subprime borrower or not. No standard credit score model has been developed as yet in India that can be uniformly followed by all banks and lending institutions.
- No effective agency is there in India to provide complete database regarding the credit history of an individual. There is CIBIL but the extent of its database is limited to a few particular types of loans and a few locations.
- While providing personal loans and business loans, the Indian banks follow the surrogate lending system. Under such system before sanctioning a loan to a borrower, the bank reviews his repayment track records of past loans taken from other banks, credit card limits, etc. But there is no system to get ensured whether the applicant has disclosed all of his previous loans.
- Moreover, most of the banks are involved in a blind competition of capturing a substantial share of the loan market. In this situation when a customer approaches a number of banks for a loan, most of the banks being driven by the surrogate programme sanction such loan to the customer. Thus a customer being worthy for one loan gets more than one loan and ultimately becomes defaulter in many cases.
- In some parts of India, sometimes the lending decisions of the banks are influenced by the policy of the ruling political parties who, with a view to achieving cheap popularity from the low income people, insist the banks to relax the eligibility norms in respect of retail loans and also to provide such loans at easy terms and conditions.

CONCLUSION

The growth of an economy is stimulated by increasing consumption expenditure and investment by the households and the financial sector plays a key role in augmenting such expenditure and investment through increasing the flow of credit at soft terms and conditions. But reckless lending without considering the credit worthiness of the borrowers should never

be encouraged as it may severely damage the basic foundation of an economy as we have witnessed in the USA. However, too much stringent credit policy may hamper the flow of liquidity in the market and impair the steady growth of the economy. Therefore, it is expected that the banks should be neither too much conservative nor too much liberal in their credit practices. Rather the banks should lend money to those who really need and deserve credit and not to those who want credit but not merit it.

END NOTE

1. In USA, a borrower is considered as a Subprime borrower if his FICO score is below 640. FICO is a credit score developed by Fair Issac Corporation and widely used by the banks and institutions in USA in their lending decision as to whether to allow or deny a credit, charge higher / lower rate of interest, demand more / less collateral and require extensive income and asset verification.

REFERENCES

1. Badami, S. (2008), "Subprime Mortgage Crisis", The Management Accountant, Vol. 43, No. 8.
2. Narayan, V.G. and Brem Lisa (2008), "The Credit Crisis of 2008: Causes, Consequences and Implications for India", The Chartered Accountant, Vol. 57, No. 6.
3. "US Subprime Crisis : An Overview in Indian Context", Compiled by Journal Section of ICAI, The Chartered Accountant, March 2008, Vol. 56, No. 9.
4. Liu, H.C.K. (2007), "Liquidity Crisis and Looming Boom", Asia Times, May 9.
5. Liu, H.C.K. (2007), "Why the Subprime Bust will Spread", Asia Times, March 17.

WEBSITE REFERENCES

1. Chiranjeevi, C.V. and Gonela, S.K. (2008), "US Financial Crisis: The Role of Subprime Mortgages", <http://www.ibscdc.org/case-studies/Economics/Economic%20crisis/ECC0032.htm> (accessed on 25-04-2009)
2. "Why a US Subprime Mortgage Crisis is Felt Around the World", The New York Times, <http://www.nytimes.com/2007/08/31/business/worldbusiness/3/derivatives.html> (accessed on 25-04-2009)
3. "Subprime Loan Report Omaha", Federal Reserve Bank of Kansas City, July 2008, <http://www.kansascityfed.org/comaffrs/subprime/omaha.07.02.08.pdf>. (accessed on 29-04-2009).
4. Kimberly Blanton, "Dark Side of Subprime Loans", <http://www.boston.com/business/personalfinance/articles/2005/08/03/dark-side-of-subprime-loans> (accessed on 01-05-2009).
5. <http://www.cityowninfo.com/mortgage-articles/speciality-mortgages/subprime-loan> (accessed on 01-05-2009).
6. <http://www.economywatch.com/us-subprime/crisis.html> (accessed on 01-05-2009)

IAA NEWS

Recommendations of IFRS Committee

Chairman N.M. Khandelwal

Local chapters of IAA should be motivated to undertake the following activities related to International Financial Reporting Standards (IFRS):

- Preparation of study material/books on financial accountings based on IFRS.
- Organize faculty development programmes and executive development Programmes related to IFRS.
- Conduct seminars for members on IFRS.
- Conduct research on IFRS or advise M.Phil, Ph.D scholars to undertake research IFRS.
- Consider steps taken by other professional bodies in India and abroad on IFRS and explore possibilities of collaboration.
- represent IAA at Govt-Level, at SEBI, ICAI etc. on various issues pertaining to successful introduction of IFRS in India by April 2011.
- interact with and provide consulting & Training support to corporate units located in their area in switching Over to IFRS.

Report on the XXXII All India Accounting Conference and International Seminar of the Indian Accounting Association Gwalior, November 14-15, 2009

The XXXII All India Accounting Conference and International Seminar on Accounting Education and Research was held at Jiwaji Univesity-Gwalior, during Nov 14-15, 2009, under the auspices of IAA Gwalior Branch and Jiwaji Univesity's Faculty of Commerce & Management. The Conference was inaugurated by the Vice-Chancellor of Jiwaji University on 14th Nov-09. Prof. R P Srivasthava of Kansas University, USA., delivered the Key Note Address. Prof. Shirin Rathore delivered the Presidential address with a number of key issues in Accounting Education and Research. Prof. GL Dave presented the recommendations of Accounting Standards Committee submitted by Prof. NM Khandelwal. Prof. G Soral announced the names of the prize winners and top ten rankers in the National Accounting Search Examination.

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. Then the three technical sessions took place concurrently on both days of the conference with rich deliberations.

Prof. Prof. GL Dave has become the President of IAA while Prof. Harish S Ozah and Prof. Umesh Holani have become the Sr.VicePresident and Jr. Vice President respectively.

DR G. Simon, Dr.G.S Rathore, Dr. PK Pradhan, Dr.SK Singh and Prof. Malayendu Saha are elected to the Executive for a period of three years.

Dr. Lalit Gupta; Dr.KChAVSN Murthy; Dr. Anil Kumar, Dr. PK Bhandgar, Prof. M.Sulochana, Dr.Sanjay Bhayani, Prof. NC Tripathy, Prof. G Soral and Prof. Sasi Kumar (the 33rd Conference Secretary) are coopted to the EC for a period of one year. Dr. Bhavesh A Lakhani and Prof. Apparao are also coopted to the EC as special invitees.

The proposal of Kerala Branch was accepted to host the 33rd Annual Conference with the following topics:

International Seminar on Accounting Education and Research

With Prof. Bhabatosh Banerjee as Chairman

Technical Session-I: Convergence of Accounting Standards

With Prof. Shirin Rathore as Chairman

Technical Session - II: Goods and Service Tax

With Dr. K.V.S.N. Murthy as Chairman

Technical Session - III: Corporate Governance and Business Ethics

With Prof. Ranjan K Bal as Chairman

As a whole the 32nd 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. Umesh Holani , the Organizing Secretary and his team.

Prof. D. Prabhakara Rao
General Secretary, IAA

Proposals for Young Researcher Award - 2010

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 31-12-2009, for the consideration of IAA Young Researcher Award-2010. Proposals are invited only from the life members of IAA. Proposals may be submitted on or before 31st October 2010, to Dr. D. Prabhakara Rao, Professor & Chairman-BOD(PG), Faculty of Commerce & Management Studies, Andhra University, Visakhapatnam-530003. email: drdpr_2009@yahoo.co.in, Phone: 09440131863

Minutes of Executive Meeting of IAA held at Gwalior on 14th Nov. 09 with Prof. Shirin Rathore in the Chair

1. Considered and approved the minutes of AGM held at Ahmedabad
2. Considered and approved the accounts of the association.
3. Considered the proposals of Kerala University, Dr BR Ambedkar University, SV University, Utkal University and Rajasthan University to host the 33rd Conference. Resolved to recommend for Approval in the AGM, the proposal of Kerala Branch to host 33rd Conference, with Prof. Sasi Kumar as Conference Secretary.
4. Resolved to nominate Prof Ranjan Bal, Prof. Suman Chand Jain and Prof.MB Shukla to form EC panel to nominate Junior Vice-President as per IAA Constitution
5. Resolved to coopt Prof. M.Sulochana; Dr. Lalit Gupta; Dr.KChAVSN Murthy; Dr. Anil Kumar, Dr. PK Bhandgar, Prof. G.Soral, Dr.Sanjay Bhayani, Prof. NC Tripathy, to the Executive, besides the 33rd Conference Secretary for a period of one year. Dr. Bhavesh A Lakhani and Prof. Apparao are also coopted to the EC as special invitees.
6. Resolved to report five vacancies of Executive Members in the AGM for election.
7. Resolved to place on record for the excellent work done by Prof. Suman Chand Jain in obtaining PAN card for IAA .

The meeting was concluded with a vote of thanks.

Prof. Shirin Rathore
President

Prof. D. Prabhakara Rao
General Secretary

Minutes of Annual General Meeting of IAA held at Gwalior on 15th Nov. 09 with Prof. Shirin Rathore in the Chair

1. Considered and approved the minutes of AGM held at Ahmedabad
2. Considered and approved the accounts of IAA.
3. Considered the proposals of Kerala University, Dr BR Ambedkar University, SV University, Utkal University and Rajasthan University to host the 33rd Conference. Resolved to recommend for Approval in the AGM, the proposal of Kerala Branch to host 33rd Conference, with Prof. Sasi Kumar as Conference Secretary.
4. Resolved to approve the following topics for the 33rd Annual Conference:
International Seminar on Accounting Education and Research:
With Prof. Bhabatosh Banerjee as Chairman
Technical Session-I: Convergence of Accounting Standards
With Prof. Shirin Rathore as Chairman
Technical Session - II: Goods and Service Tax
With Dr. K.V.S.N. Murthy as Chairman
Technical Session - III: Corporate Governance & Business Ethics
With Prof. Ranjan K Bal as Chairman
5. The general house elected Prof. KV Achalapathy and Prof. B.Banerjee for the panel to nominate Jr.Vice President, u/s 9(C) of IAA Constitution. On the nomination of the House panel, the house unanimously elected Prof. Umesh Holani as the Jr. Vice President. Consequently, Prof. Harish S Ozah has become the Sr.VicePresident and Prof. GL Dave has become the President of IAA u/s 9.
6. The general house elected Dr.Pradyukt Kr Pradhan, Dr. Malayendu Saha, Dr. G. Simon, Dr. SK. Singh and Dr. GS Rathore to the Executive for a period of three years.
The meeting concluded with a vote of thanks to the Chair.

Prof. Shirin Rathore
President

Prof. D. Prabhakara Rao
General Secretary

Report of an International Conference on

New Dimensions in Management-Striving for Business Excellence

An International Conference was organized by Prof. G.L. Dave at Rajkot on 6th and 7th Feb. 2010. Shri Dipchand Bhai Gardi our Chief Patron was in Chair. Inaugural speech was delivered by Prof. Kamlesh P. Joshipura, VC, Saurashtra University, Rajkot. Shri D.V. Mehta introduced the Growth and Development of Gardi Vidhyapith. Prof. G.L. Dave, Director, Gardi School of Mgmt. and Conference Director gave the welcome speech. Prof. Bhabatosh Bannerjee, Kolkota spoke on Corporate Governance. Prof. R.C. Sharma Ex-VC, M.G. Kashi Vidhyapith, Varanasi spoke on Role of Independent Director. Prof. P.K. Singh of IIM, Indore spoke on Leadership Wisdom-Indian Insight. Prof. Nawal Kishore of IGNOU, New Delhi spoke on Recent trends in International Trade. Prof. Kayur Thakar of IIM, Indore presented his paper on New Dimensions in Corporate Performance Measurement. On 7th Feb. there were 7 concurrent Technical Sessions. In which delegates presented papers. 400 delegates participated in this conference. The delegates came from every corner of India Foreign delegates came from Kenya, Bangladesh and from other countries of the Globe. Prasant Mehta, gave vote of thanks.

Prof. (Dr) G.L. Dave

INDIAN ACCOUNTING ASSOCIATION

PAST SECRETARIES

Late Prof. H.S. Kulshreshtha
(1969-78)

Late Prof. Mukund Lal
(1978-1993)

Dr. S.K. Singh
(1993-94)

BRANCH SECRETARIES

AHMEDABAD BRANCH

Prof. Ajay Soni
Faculty, M.M. Gandhi
Arts & Commerce College
Kalol

BARREILY BRANCH

Dr. N.L. Sharma
Dept. of Commerce
Barreily College, Barreily (U.P.)

CHANDIGARH BRANCH

Dr. Karamjeet Singh
House No. 837, Phase - 7
Mohali (Punjab)

GOA BRANCH

Dr. B. Ramesh
Staff Quarters
Goa University, Goa

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SALEM BRANCH

Prof. S.S. Sundaram
Commerce Dept., Madras University
P.G. Center, Salem - 636 011 (TN)

VARANASI BRANCH

Dr. M.B. Shukla
Director and Dean
Institute of Management
M.G. Kashi Vidyapeeth, Varanasi

AJMER BRANCH

Dr. N.M. Singhvi
HCM Rajasthan State
Institute of Public Admn.
Jaipur - 302 017

BHUSAWAL BRANCH

Dr. A.M. Agrawal
North Mahl Branch
Bhusawal (Maharashtra)

DELHI BRANCH

Dr. J.L. Gupta
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