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**Stock Market in India and Foreign Institutional
Investments: An Appraisal**
MALAYENDU SAHA

Industrialisation Led Development
ANJAN MAJUMDAR

ESOP Account

SATYAJIT DHAR and SUBHABRATA DE

Guanxi Marketing : An Urge of 21st C

INDRANI MAJUMDEI

Stock Selection Performance

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ABHJIT KUNDI



A Publication of
Barrackpore Rastraguru Surendranath College

Department of Commerce

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EDITORIAL

Welcome to the first issue of the 'Journal of Business and Economic Issues'.

It gives me great pleasure to write this editorial for this maiden issue of the journal that is brought to you with great pride by the Department of Commerce of our college. We are immensely optimistic to start this new venture, since we believe that "the secret of getting ahead is getting started".

The field of business and economics has grown rapidly in recent years and has broadened its scope of research. Against this background, this is perhaps the right time to launch a new journal focusing on the contemporary issues pertaining to the field of accounting, finance, business laws, management, economics and allied areas. This multi-disciplinary peer-reviewed journal endeavours to promote a platform for thoughtful analysis, and disseminate knowledge in the context of business and economics so as to stimulate new research interests and aims to publish quality articles of theoretical concept and empirical research on the subjects.

I thank the editorial board for their enthusiastic assistance and devotion all through. With an energetic editorial team and with the indispensable support of the faculty members of the Department of Commerce, the idea of launching a new journal blossoms into a first issue. The Journal is blessed with an esteemed Advisory Board with representation from various universities and institutions. We are indebted to all the members thereof for their support by lending their names and giving valuable advice. I also thank the reviewers who contributed their valuable time to complete reviews in a timely manner.

It is indeed a great honour for me to present the first issue of this new journal to its readers. The issue contains nine articles on various issues relating to capital market, economics, accounting, marketing, commerce education, corporate governance, and fisheries. We hope that readers will find the content of this issue both interesting and readable.

We look forward to receiving your continuous support. For this, submit quality papers to the journal and feel free to send your feedback & suggestions. With your unvarying encouragement, the journal is sure to cross many milestones and achieve greater benchmarks in terms of quality and standards.

With good wishes for the remaining months of 2009.

Dr. Ajoy Kumar Mukherjee
Chief Editor



लक्ष्यं विश्वमानम्

West Bengal State University

(Barasat, North 24 Parganas)

Prof. Ashoke Ranjan Thakur

Vice Chancellor

Ref. VC/RSCB/01/08-09

Date 24th Feb 2009

Message

I am delighted to know that Department of Commerce, Barrackpore Rastraguru Surendranath College, is starting a peer-reviewed journal, 'Journal of Business and Economic Issues' with this issue.

I convey my best wishes for the commendable efforts of the Editorial Board in publishing such a journal and sincerely hope it will sustain in future and will give directions to research in business and economics.

With my best wishes

(Ashoke Ranjan Thakur)



West Bengal State University

(Barasat, North 24 Parganas)

Prof. Kamales Bhaumik

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Message

It is indeed a great pleasure to learn that the Department of Commerce, Barrackpore Rastraguru Surendranath College is soon bringing out a peer-reviewed journal – 'Journal of Business and Economic Issues'.

I convey my heartfelt wishes to the people involved in its publication and hope to see more & more issues of the journal in the future since it can be a guiding light to research in the related arena.

With Regards,

K. Bhaumik

(Kamales Bhaumik)

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Stock Market in India and Foreign Institutional Investments: An Appraisal

*Malayendu Saha**

ABSTRACT: In developing countries, like India, there is a great need of foreign capital, not only to increase productivity of labour but also to build foreign exchange reserves to meet trade deficit. After the opening up of the borders for capital movement, foreign investments in India have grown enormously. Industrial deregulation, a more flexible exchange rate, stronger debt and equity markets, and lower trade barriers have injected buoyancy to the Indian economy and dramatically strengthened her external position. The pace of growth has become more stable compared with the past and with other fast growing economies. Foreign institutional investors (FIIs) are now allowed to invest in equity, bonds and derivative instruments subject to the limits of foreign ownership. India has emerged as one of the most favoured destinations for global investment. Against this backdrop, this paper attempts to investigate the participation of foreign institutional investors and the other financial institutions in India and the performance of the Indian stock markets.

Key Words : *Liberalization, Industrial deregulation, Investment, Foreign institutional inflows, Stock market and economy.*

1. INTRODUCTION

Foreign investments in India have been increasing enormously after the opening up of the borders for capital movement. Foreign capital, which lends a hand to the developing countries in increasing productivity of labour and building up exchange reserve to meet the

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current account deficit, is comprised of foreign direct investment (FDI) and foreign portfolio investment (FPI). While the former creates capacity in the form of physical and intellectual infrastructure, the later, generally of short-term, is invested in domestic financial markets like money market, capital market, foreign exchange market etc. In an environment of strong global growth, the Indian economy is experiencing robust development during 2006-07. Real GDP growth has accelerated to 9.3 percent in the first quarter of 2007-08 from 9.0 percent in 2005-06, boosted by the double-digit growth in the services and industrial sectors. The increasing growth of economy indicates that India is one of the fastest growing economies in the world. A number of steps covering the various sectors of the economy – real, fiscal, external, monetary and financial sectors – are taken into account in recent years to sustain the current growth momentum, and make it more inclusive in an environment of macroeconomic and financial stability.

India has emerged as one of the most favoured destinations for global investment. This is reflected in the number of foreign institutional investors (FIIs) registered with SEBI. The number has increased from 18 in 1993 to 882 by March 2006 and reached 1,066 in July 2007. This is due to relaxation of FII regulations and lowering of barriers for foreign investments in the recent years. Matching the economic growth rate, India has also seen an incredible flow of investment by FIIs since April 2003. According to SEBI, the cumulative net investment into India in March 2006 was amounted to around \$47bn and rose to over \$52bn till April 2007. Stock market in India shows buoyant; the market cap rises to 91 percent of GDP. The Sensex moved from 5,000 (October 11, 1999) to 10,000 (February 7, 2006) and subsequently crossed 20,000 on October 29, 2007. In fact, the FIIs have been playing a key role ever since their entry into the country during the early 1990s. According to Global Development Finance Report, 2006 FIIs formed nearly 70 percent of foreign investment (FDI plus net portfolio equity flows) in India, whereas in China and Brazil the percent was 26 and 30 respectively for 2005. According to MSCI index, India is the ninth best performing market in the global emerging markets. The Boston-based Emerging Market Portfolio Research rates India as the third biggest recipient of FII inflows in India after Taiwan and Korea.

In this paper an attempt has been made to investigate in detail the participation of different investor groups, particularly the FIIs, and their impact on the performance of the Indian stock markets. The remainder of this article is organized as follows. In Section II, an appraisal on some of the various literatures relating to the issue is made. Section III gives an overall picture of the Indian stock market to have an overall idea about its behaviour. In the fourth section, the rules and regulations framed by SEBI to control the operations and management of FIIs are discussed. The performance of FIIs in other emerging economies is considered in section five. Section VI analyses the participation of FIIs in the Indian stock market. Contributions of Indian mutual funds in the stock market are also considered here to make a comparative analysis of performance of FIIs and mutual funds in this arena. Lastly in the seventh section we conclude by giving the most important results of this paper and we raise some issues for future discussions.

2. REVIEW OF LITERATURE

Industrial deregulation, a more flexible exchange rate, stronger debt and equity markets, and lower trade barriers have injected resilience to the Indian economy and dramatically strengthened its external position. The pace of growth has become more stable compared with the past and with other fast growing economies. Foreign investment provides a channel through which the developing countries can have access to foreign capital that helps in increasing the labour productivity and building the foreign exchange reserves to meet the trade deficit. After smoothening of the restrictions for capital movement foreign investments have grown in leaps and bounds in India. The FIIs, given their short-term nature, have bi-directional causation with the returns of other domestic financial markets like money market, stock market, foreign exchange market, etc. (Brenan and Henery 1997). For developing countries, foreign portfolio equity investment has different characteristics and implications compared to FDI. Besides supplementing domestic savings, FDI is expected to facilitate transfer of technology, introduce new management and marketing skills, and helps expand host country markets and foreign trade. FPI, it is expected, can help achieve a higher degree of liquidity at stock markets, increase price-earning (PE) ratios and consequently reduce cost of capital for investment (World Bank 1997, p.31). In India, though initially restricted to investing only in listed company stocks, the foreign institutions are now allowed to invest in equity, bonds and derivative instruments subject to limits of foreign ownership for various sectors as well as ceilings on total investment per FII. Over the last few years, a number of researches have been performed to throw some lights on some important features of FII flows in India. The key question has, therefore, been to enquire whether there is any relationship between FII flows and returns from the Indian stock markets. Chakrabarti (2001) concludes that in the post-Asian crisis period, stock market performance has been the sole driver of FII flows, though monthly data in the pre-Asian crisis period may suggest some reverse causality. With the accelerating trends of reforms, Indian stock market has witnessed more accretion of institutional investors, particularly foreign investors with increasing size of money under their control to play a major role in the markets. This is not unusual with India, as the second best developed economies of today, might have seen a similar trend in the past. The increasing role of institutional investors has brought both quantitative and qualitative developments in the stock market viz., expansion of securities business, increased depth and breadth of the market, and above all their dominant investment philosophy of emphasizing the fundamentals has rendered efficient pricing of the stocks (Khanna 2002). Rangarajan (2000) suggested that foreign portfolio investments would help the stock markets directly through widening investor base and indirectly by compelling local authorities to improve the trading system. Chakraborty (2006), however, argues that FII flows should be viewed not in isolation but as part of an integrated policy package for all capital receipts keeping in mind their role in the overall microeconomic structure.

Any investments, either domestic or foreign, depend heavily on the risk factors. Hence, while studying the behaviour of FIIs, it is important to consider the risk variable. Pal (1998) has considered this factor in their article. Trivedi and Nair (2006) investigate the determinants

of FII flows in India, and the causal relationship between FII investment inflows and the risk-returns in the Indian stock markets. Bandopadhyay (2006) has found that portfolio capital helps many developing economies in mitigating their balance of payments deficits as well as maintaining liquidity in the financial markets. It is also observed in another study that both returns in the source country stock market and the inflation rate do not find any impact on the FII. Agarwal (1997) has, however, found that world stock market capitalization has a favourable impact on the FPI in India.

All the existing studies found that the equity return has a significant and positive impact on the FII (Agarwal 1997; Chakrabarti 2001; Trivedi and Nair 2003). But given the huge volume of investments, foreign investors could play a role of market makers and book their profits, i.e., they can buy financial assets when the prices are declining thereby jacking-up the asset prices and sell when the asset prices are increasing (Gordon and Gupta 2003). Hence, there is a possibility of bi-directional relationship between FII and the equity returns.

3. INDIAN STOCK MARKET

With small beginnings in the early nineteenth century, India's stock market has risen to great heights. The Bombay stock exchange (BSE), originated in 1800, is the oldest in Asia, even older than the Tokyo stock exchange. At present there are 23 small stock exchanges in the cash market and two exchanges for derivative markets and the two accounts for 90 percent of the trade. Apart from the BSE, two other stock exchanges are, namely National stock exchange (NSE) and Over-the Counter-Exchange of India Ltd. (OTCEI). NSE (India's National Stock Exchange) is the third largest in the world in the number of trades after NYSE and NASDAQ.

The liberalization of FII flows into the Indian capital market since 1993, opening of the economy, moves to modernize the equity markets and promoting transparency have had a considerable impact on market practices, say analysts. The regulatory and supervisory structure has been overhauled with most of the powers for regulating the capital market having been vested with the Securities and Exchange Board of India (SEBI). For instance, FII investment in the Indian market only took off after paperless trading was introduced in the late 1990s. Earlier, most funds were scared to punt in the market because of fake shares and transfer. To make the process of share transfer and delivery easier and quicker, the regulator, SEBI introduced dematerialization of shares where the shareholders were compulsorily asked to trade shares in the demat form.

Moreover, changes in the fundamental factors, information asymmetries and the associated constraints to efficient price discovery remain at the heart of the volatile movements in the stock prices. In India, two most important factors that have a significant bearing on the behaviour of the stock prices during this period are the net investments by FIIs and the trends in the international stock exchanges. Apart from the traditional investors the capital market is experiencing new class of investors in the form of hedge funds, sovereign funds, pension funds, insurance funds and India dedicated funds. They have a long investment

horizon. The acceptance of India as a viable investment destination has obliged them to assemble here.

Table 1: The Surging Sensex

Date	Sensex	Date	Sensex	Date	Sensex
July 25, 1990	1,000	September 8, 2005	8,000	July 6, 2007	15,000
January 15, 1992	2,000	December 9, 2005	9,000	September 19, 2007	16,000
February 29, 1992	3,000	February 7, 2006	10,000	September 26, 2007	17,000
March 30, 1992	4,000	March 27, 2006	11,000	October 9, 2007	18,000
October 8, 1999	5,000	April 20, 2006	12,000	October 15, 2007	19,000
February 11, 2000	6,000	October 30, 2006	13,000	October 29, 2007	20,000
June 21, 2005	7,000	December 5, 2006	14,000		

Source: Economic Times, Calcutta Edition

The BSE Sensex took little over twenty years to reach the first 10,000 mark; but just a little over twenty months to double the score (ET, Oct 30, 2007). The Sensex, which crossed the 16,000 on September 19, 2007 took only five trading sessions to cross 17,000 on September 26 and peaked to 20,000 on October 29, 2007 (Table 1). The spurt in the performance of the market is due to strong corporate profitability and continued liquidity support from FIIs and domestic mutual funds. During this period the market witnessed sharp corrections on a few occasions in consonance with the trends in global equity markets. The FIIs also made continuous blending of their portfolios to reap benefits from the market. Though the net investments by FIIs showed a decline than a year ago, their gross purchases and gross sales, however, were higher during this period. The turnover in the major stock exchanges also increased sharply during the second quarter of 2007-08. While the combined turnover of the BSE and the NSE in the cash segment increased by 21.6 percent during 2006-07, the derivatives segment rose by 53.7 percent. The rally in domestic stock market during 2006-07 was mainly concentrated in the index heavyweights, although there were some episodes of volatility, especially during the last fortnight of March 2007. Interest rates edged up in the various market segments – the money market, the Government securities market and the credit market during the year, broadly mirroring the trend in the Reserve Bank's policy rates. The yield curve flattened and the foreign exchange market witnessed two-way movements during the year.

The gross financial assets as well as financial liabilities of the household sector rose by 1.7 percent of GDP each during 2006-07. Household financial savings underwent some changes in the preference pattern vis-à-vis 2005-06. Saving in the form of 'currency', 'deposits', 'investment in shares and debentures' and 'contractual savings' as percent of GDP, increased in 2006-07. Investment in shares and debentures increased, from Rs.4967cr in 2004-

05 to Rs.29268cr in 2005-06 and reached Rs.47918cr in 2006-07. The contribution as a percent of GDP is 0.2 in 2004-05 and went up to 1.2 in 2006-07.

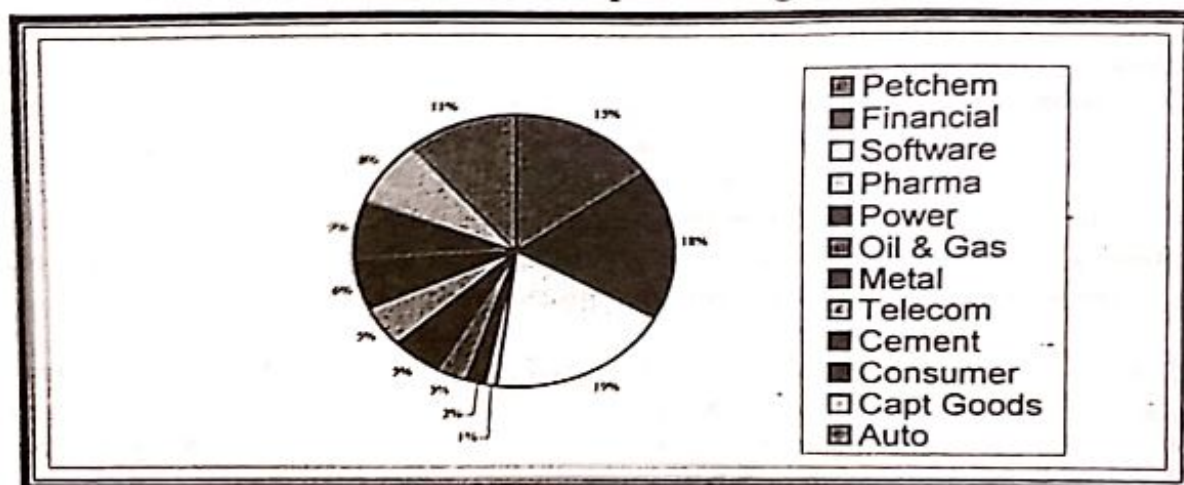
Table 2: A View of the domestic stock market indices

Indicator	Bombay Stock Exchange			National Stock Exchange		
	2004-05	2005-06	2006-07	2004-05	2005-06	2006-07
1. BSE Sensex/S&P CNX Nifty						
(i) End-period	6493	11280	13072	2036	3403	3822
(ii) Average	5741	8280	12277	1805	2513	3572
2. Co-efficient of Variation	11.2	16.7	11.1	11.3	15.6	10.4
3. P-E Ratio	15.6	20.9	20.3	14.6	20.3	18.4
4. Yield (% per annum)	1.7	1.2	1.3	2	1.3	1.3
4. Listed companies	4,731	4,781	4,821	970	1,069	1,228
5. Cash segment turnover (Rs.Cr.)	5,18,716	8,16,074	9,56,185	11,40,071	15,69,556	19,45,285
6. Derivative segment turnover (Rs. Cr.)	16,112	9	59,007	25,46,982	48,24,174	73,56,242
7. Market Capitalisation	16,98,429	30,22,191	35,45,041	15,85,585	28,13,201	33,67,350

Source: BSE and NSE

India is ninth in the world with \$1.58 trillion market capitalization and the total market capitalization raised to Rs.35,45,041 cr at BSE and Rs.33,67,350cr at NSE as on March 31, 2007 (Table 2). The market capitalisation of the BSE, as percent to GDP, rose from 84.7 at end-March 2006 to 85.9 percent during the same period of 2007. The price-earnings (P/E) ratio of BSE Sensex scripts was 24.85 on October 9, 2007 as compared with 20.9 at end-March 2006. From a point of view of overall Sensex earnings growth, in FY07, the factors to watch for will be any big swings in earnings in financials (17% of incremental growth in FY07), petrochem (15%), autos (11%), pharma (8%). Software is actually the biggest contributor (18%) to earnings growth in the market (Table 3).

Table 3: Break-up of EPS growth in 2007



Source: CLSA Asia-Pacific Markets

4. SEBI REGULATIONS ON FII INVESTMENT

Entities like pension funds, endowment funds, investment trusts, mutual funds, insurance or reinsurance companies, university funds, foundation or charitable trusts/societies and banks, established or incorporated outside India are eligible to be registered as FIIs. FIIs are required to obtain an initial registration with SEBI and also to obtain approval from the Reserve Bank of India (RBI) under the Foreign Exchange Regulation Act (FERA) to buy and sell securities, open foreign currency and rupee bank accounts, and to remit and repatriate funds. FIIs have been permitted to invest in all the securities traded in the primary and secondary markets, including the equity and other securities/instruments of companies, which are listed in the SEs in India. FIIs have been allowed to invest in the Indian securities market since September 1992 when the Government of India issued the guidelines for FIIs. The SEBI (Foreign Institutional Investors) Regulations were enforced in November 1995, largely based on these guidelines. Once SEBI registration has been obtained, a FII does not require any further permission to buy or sell securities or to transfer funds in and out of the country, subject to payment of applicable tax. Foreign investors, whether registered as FIIs or not, may also invest in Indian securities outside the FII process. Such investment requires case-by-case approval from the Foreign Investment Promotion Board (FIPB) in the Ministry of Industry and RBI, or only from RBI depending on the size of investment and the industry in which the investment is to be made. Investment in Indian securities is also possible through the purchase of GDRs. As per the amendments made to FII regulations in February 2000, FIIs can also invest on behalf of sub-accounts. Like in other countries, the restrictions on FII investment have been progressively liberalized. FIIs have been allowed to invest also in dated Government securities.

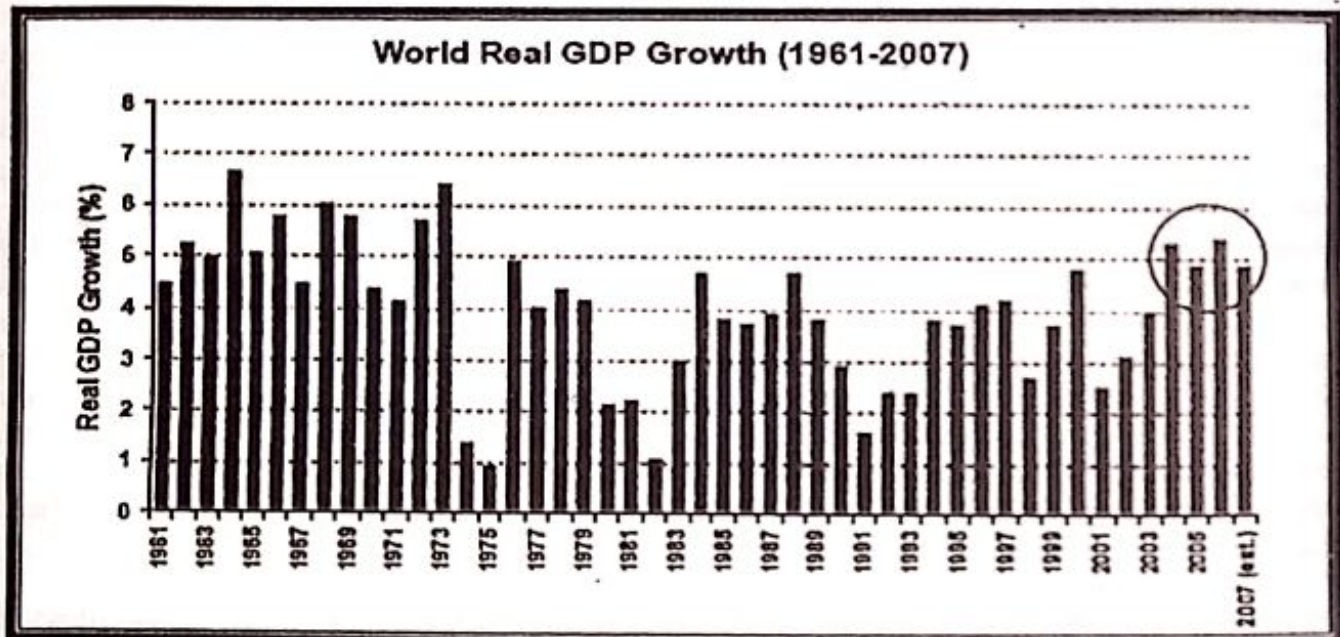
In encouraging FII flows while reducing the financial sector's vulnerability to speculative capital flows, an expert group was set up in 2004 to suggest ways to accomplish this goal. The group submitted its report in November 2005 and commented that to further stimulate FII flows, investment caps, over and above the FDI sectoral limits, should be set. In cases where the limits have to be combined, they should be set at sufficiently high levels. Another recommendation was to increase the supply of 'good quality equity' through disinvestment in the public sector and to encourage companies with large projects like those in infrastructure and telecom sector to raise money in the domestic market.

5. TRENDS IN GLOBAL CAPITAL FLOWS IN DEVELOPING COUNTRIES

The worldwide trends towards globalization and improved economic performance by emerging economies have attracted cross-border capital flows over the past decades. Foreign institutional investment is one of the very important sources of the portfolio capital. Between 1942 and 1970, the capital flows were only among industrialised economy and the flows towards the developing economies were only marginal. But, after the first oil price shock in 1973, capital started flowing averaging around US\$163bn per annum (1973-1982). The net capital flows were at the peak at US\$325bn representing 5.5 per cent of GDP of developing

countries. The year 1997, however, experienced a sharp decline in capital flows due to various reasons like Asian crisis in 1997-98, turmoil in the global fixed income markets, and the spate of corporate failures and accounting irregularities in US in 2002. Global economic growth however, remained robust, with the current cycle (2004-2007) the strongest in almost four decades (Table 4). Growth in the developing country, particularly in China and India, remained rapid. For the first quarter of 2007, China and India reported year-over-year increase in economic growth of 11% and 9%, respectively.

Table 4



Source: Bloomberg

The stellar growth in corporate profits across the world led to the boom in global equity markets since the end of 2002. Corporations around the world have benefited through domestic, economic and financial reforms, trade liberalization, outsourcing trends and improvements in global communications. According to RBI Annual Report, since the beginning of the 21st century, emerging markets have reached a kind of nirvana. The global search for higher returns led to record inflows of liquidity into dedicated emerging markets' bond and equity funds. In 2005, emerging market equity funds absorbed more than \$20 billion on net inflows, five times more than the previous year and beating the record of 2003, according to data from *Emerging Portfolio Fund Research*, a US company that tracks fund flows around the world. Emerging bond markets also soared, breaking the previous record of inflows as more than \$10 billion flew to these funds in 2005 against a meagre \$3 billion in 2004. The year 2006 saw an even more impressive turn of events: in January, global net inflows into emerging markets equities topped more than \$11 billion, more than half of last year's total in a single month. According to the report, 2006-07, global economic activity remained buoyant for the fourth successive year during 2006. Global economic growth

accelerated from 4.9 per cent during 2005 to 5.5 per cent during 2006, and has averaged 4.9 per cent per annum during the four-year period 2003-2006. The positive feature of the global economic activity during 2006 was the broadening of growth across major countries. Asian equity markets continued to perform well through early 2007, notwithstanding the correction that began in late February. Solid growth trends, still favourable liquidity conditions, and mostly sound fundamentals have guided the sharp rise since mid - 2006. Despite some slowing in net foreign equity inflows into emerging Asia since the second half of 2006, relatively strong domestic buying propelled many markets to record-highs earlier this year (Table 5).

Table 5:
Net Capital Flows to Emerging Markets and Developing Economies (US \$ bn.)

Year	2004	2005	2006	2007 P	2008 P
Private Capital Flows	238.6	257.2	255.8	252.7	259.3
Direct Investment	190	266.3	266.9	283.7	288.9
Portfolio Investment	25	29.4	-76.3	-62	-52.2
Others	23.6	-38.5	65.2	30.9	22.6
Official Capital Flows	-57.8	-122.6	-143.8	-96.4	-116.6

P: IMF Projection

Source: World Economic Outlook, IMF, April 2007;
Global Development Finance, World Bank, 2007

FDI has historically been the most stable component of cross-border private capital flows. The levels of FDI have been particularly high over the past couple of years, buoyed by strong economic growth and improvements in the investment climate in a number of countries. A number of developing countries have also attracted FDI through privatizations, mergers and acquisitions (M&As). While the inflow of FDI has been strong in a number of countries, the increase has been especially noticeable in emerging Europe.

Indian equities market has netted more FII inflows in 2007, beating traditional favourites like Korea, Thailand, Taiwan and Indonesia at their own game. While markets like Korea and Taiwan are witnessing lesser foreign flows compared to last year, Philippines and Indonesia have been receiving more investments. Over the past nine months during 2007-08, Indian market has received net inflows of \$14.33 bn., about 182% more than last year this time around. A string of huge public issues during the middle of the year, an appreciating rupee and the perceived insulation of the Indian market to US subprime mortgage market have contributed to India emerging numero uno in Asia. Even the historically very conservative Japanese investors are viewing investment opportunities in India with keen interest. Fund flows from Japan have increased sufficiently over the past few years. India's high ranking as a good investment destination by rating agencies like S & P's and Moody's have instilled confidence among Japanese investors who have subsequently also welcomed select Indian credits in the rather exclusive Samurai bond market (ET 2007).

6. FII INFLOWS AND INDIAN STOCK MARKET

The proceedings of the stock market since 2000 have found a place in the history book of the Indian economy. It becomes a common fact that the Indian stock market is reaching new highs on every trading session, barring some occasional corrections. As number of reasons may be cited behind such behaviour, the role of the FIIs may be cited as the pivot. In fact, the FIIs have been playing a key role in the Indian financial markets since their entry into this country in the early 1990s. The brainchild, however, being the present Prime Minister Dr. Manmohan Singh, who was the then Finance Minister under the Prime Ministerial tenure of Shri P.V. Narasimha Rao, who in his budget speech for the year 1992-93 announced a proposal to invite FIIs to invest in India. Since then, FIIs started playing a significant role in the Indian capital market. Irrespective of political uncertainty, infrastructure bottlenecks and bureaucratic hassles, India has become an attractive destination for the FIIs. One outcome of the efforts of the Indian government at liberalizing the country's capital market has been the increased integration of the Indian stock market with international markets, through various channels like foreign portfolio investments, participatory notes (PNs), and the ADR/GDR route, whereby Indian shares are listed and traded on the US and other international stock exchanges.

The rising prominence of inflows of foreign direct investment (FDI) into India is the outcome of several significant changes taking place in international capital flows (Table 6). With substantial policy changes and harmonisation efforts across the globe at the national, regional and multilateral levels there is an increasing prominence of FDI across the countries and in an increasing number of sectors and industries. It is also widely acknowledged that one of the dominant changes in the global structure of FDI flows has been the increasing role of brown-field investment compared to green-field investment, particularly among FDI flows between developed countries.

According to RBI annual report 2006-06, FDI to India increased sharply from US \$ 7.7 billion during 2005-06 to US \$ 19.5 billion during 2006-07 on the strength of expansion in domestic activity, positive investment climate, progressive liberalisation of the FDI policy regime, and simplification of procedures. The rising pace of mergers and acquisitions (M&A) in sectors such as financial services, manufacturing, banking services, information technology and construction also boosted FDI inflows. FDI flows into India during 2006-07 were significantly higher than portfolio flows. FDI to and by India up to 1999-2000 comprise mainly equity capital. Country-wise, Mauritius and the UK are the major FDI investors followed by the US, the Netherlands and Singapore in Indian market during 2006-07. Sector-wise, manufacturing industries and services, particularly finance and business services, remained the major beneficiary of FDI inflows. The services sector attracted US \$ 6.1 billion in 2006-07 as compared with US \$ 1.4 billion in 2005-06. FDI inflows into the construction sector and 'financing, real estate, and business services' increased substantially during 2006-07. Overseas direct investment from India also exhibited a significant rise during the year - from US \$ 4.5 billion during 2005-06 to US \$ 11.0 billion during 2006-07 - reflecting

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Table 6: FDI Inflows in India

Financial year	Amount of FDI Inflows (Rs. Cr.) (with adv)	Amount of FDI Inflows (US \$mn.) (with adv)	Amount of FDI Inflows (Rs. Cr.) (without adv)	Amount of FDI Inflows (US \$ mn.) (without adv)	% of growth over previous year
1991-00	60,605	16,702	59,698	16,485	-
2000-01	12,645	2,908	10,733	2,463	-
2001-02	19,361	4,222	18,654	4,065	+ 65.04
2002-03	14,932	3,134	12,955	2,722	- 33.04
2003-04	12,117	2,634	10,237	2,225	- 18.26
2004-05	17,138	3,755	14,653	3,219	+ 44.67
2005-06	24,613	5,546	24,613	5,546	+ 72.29
2006-07 (Jan)	53,734	11,888	53,734	11,888	
Cum. total	215,145	50,789	205,277	48,613	

Source: RBI Bulletin April, 2007-10-04

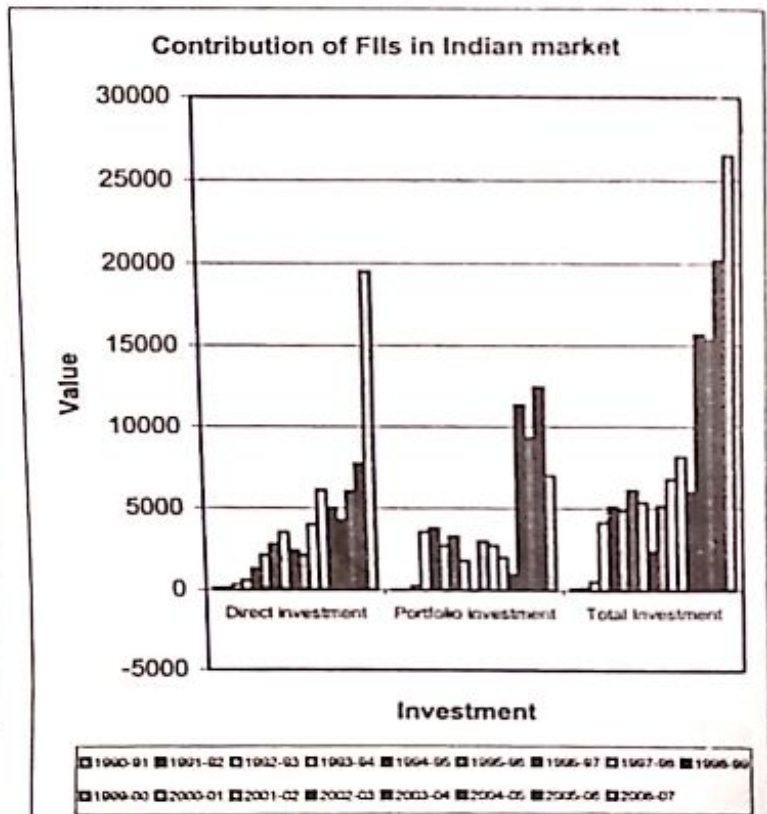
large overseas acquisition deals by Indian corporates to gain market shares and reap economies of scale. Due to global developments such as meltdown in global commodities and equity markets (May-July 2006), fall in Asian equity markets subsequent to the tightening of capital controls by Thailand (December 2006) and fall in Asian equity markets on account of concerns of slowdown in the US economy (late February 2007 till mid-March 2007) the FII investments were lower during 2006-07. However, FDI witnessed a major leap in the quantum of inflows in first four months of the current fiscal, surpassing the total inflow for the past two years. FDI inflows in April-July 2007 stood at \$627mn compared to \$38mn in fiscal 2005-06 and \$ 467mn in 2006-07. Resources raised by domestic corporates through the issuances of American depository receipts (ADRs)/global depository receipts (GDRs) at US \$ 3.8 billion during 2006-07 also remained higher than the previous year (US \$ 2.6 billion).

FII's were first allowed to make portfolio investment in India on September 14, 1992, initially with lots of restrictions. The regulations on them are liberalized over time and at minimal now. The FII's, which made a modest beginning in 1993-94 at Rs.3,567 cr, stood at Rs.12,492cr in 2005-06 and with a decline at Rs.7,003cr in 2006-07 (Table 7). FII's are the more predominant players in the equity market than the mutual funds. The total investment by the mutual funds in the Indian equity market is just Rs.9024 cr. during 2006-2007, whereas the same figure for FII's is Rs.25236 cr. However, their roles in the debt markets are reverse with MF's assuming a more important one than their counterparts. According to the data from RBI Annual Report 2006-07, liquidity support from FII's and mutual funds, buoyant growth and strong corporate profitability

provided support to the domestic stock markets. According to the data released by SEBI, FIIs have invested Rs.36,438 cr (US \$ 8.8 billion) in the Indian stock markets up to July 25, 2007 as against net sales of Rs.6,084cr (US \$ 1.3 billion). Mutual funds have made net investments of Rs.1,759 cr during the same period as compared with net investments of Rs.8,538cr during the corresponding period of the last year (Table 8). Reflecting the upward trend in stock prices, the price-earnings (P/E) ratios of the 30 scripts

Table 7: Contribution of Foreign Institutional Investors in Indian Capital Market

Year	Direct Investment	Portfolio Investment	Total Investment
1990-91	97	6	103
1991-92	129	4	133
1992-93	315	244	559
1993-94	586	3567	4153
1994-95	1314	3824	5138
1995-96	2144	2748	4892
1996-97	2821	3312	6133
1997-98	3557	1828	5385
1998-99	2462	-61	2401
1999-00	2155	3026	5181
2000-01	4029	2760	6789
2001-02	6130	2021	8151
2002-03	5035	979	6014
2003-04	4322	11377	15699
2004-05	6051	9315	15366
2005-06	7722	12492	20214
2006-07	19531	7003	26534



Source: RBI, Annual Report, 2006-07

included in the BSE Sensex rose from 20.3 at end-March 2007 to 21.1 by end-June 2007. The combined turnover of BSE and NSE in the cash and derivative segments during April-June 2007 was higher by 7.3 percent and 7.8 percent respectively, than the corresponding period of 2006.

The size and robustness of the FIIs role in Indian capital markets can be better understood by looking at the assets under their custody as compared to other institutions and participants. During 2006-07, the total assets held by the FIIs stood at Rs.547010cr as compared to Rs.290378cr with mutual funds and Rs.291030cr with financial institutions including banks (Table 9). However, with the three times rise in the Sensex between May 2003 and April 2006, driven by steady inflow from FIIs, including a large number of first time entrants, the direction of FII flows at a time of rising global risk aversion will be a crucial determinant of the Indian market. Although participation from domestic investors has picked-up significantly, this class of investor remains too small to

Table 8: Contributions by FIIs and Mutual Funds

Year	Financial Institutions		Mutual Funds	
	Net Investment in Equity (Rs. cr.)	Net Investment In Debt (Rs. cr.)	Net Investment in equity (Rs. In cr.)	Net Investment in Debt (Rs. In cr.)
2001-02	8,067	685	-3,796	10,959
2002-03	2,528	60	-2,067	12,604
2003-04	39,959	5,805	1,308	22,701
2004-05	44,123	1,759	448	16,987
2005-06	48,542	-7,065	14,306	36,801
2006-07	25,236	5,605	9,024	52,546

Source: RBI, Annual Report, 2006-07

Table 9: Assets under the Custody of Custodians

Period	FIIs / SAs		FIs		Mutual Funds	
	No. of Institutions	Amount (Rs. Cr.)	No. of Institutions	Amount (Rs. Cr.)	No. of Institutions	Amount (Rs. Cr.)
2001-02	1,354	61,753	26	110,824	458	32,570
2002-03	1,313	56,139	33	113,154	496	41,368
2003-04	1,493	159,397	41	151,655	551	90,338
2004-05	1,852	236,257	47	169,232	639	126,286
2005-06	2,491	453,636	64	260,697	831	204,518
2006-07	3,070	547,010	104	291,030	1,220	290,378

Source: RBI Annual Report, 2006-07

Various recent research studies have found that, there is a cause-effect relationship between the Indian stock market with FII investments. The FIIs, on the one hand, have an impact on foreign markets and capital markets and also effects foreign exchange rate and stock price movements. It is also observed that there is a positive correlation between net investment by FIIs and market movements. The sharp surge in FII inflows is a reflection of the growing confidence of the global community in the country's long-term growth story. This is due to the fact that, the stock markets have given a handsome return – averaging 24% - as compared to developed markets of the US with 9.5%, UK with 2.1%, Germany with 13.7%, France with 1.7% and Singapore at 12.3% return (as per the ASSOCHAM report). FIIs too have invested handsomely in the Indian stocks since September 18 this year when the US Fed Reserve cut its benchmark interest rates by 50 basic points to tackle the US economic slowdown and subprime crisis. This has led to the rupee breaching the psychological Rs.40 barrier against the dollar. The Sensex vaulted to a fresh peak of 20,024.87cr.on October 29 this year. All this points out that India, along with China, is fast becoming the engine of global growth. Though, rupee appreciation has had a tornado effect on Indian exporters and IT companies, it has turned out to be a 'money mining' opportunity for the foreign investors, as rupee appreciation allows FIIs to take back more dollars than what they bring in. Thus, appreciation in rupee enhances overall portfolio returns, market experts said. Moreover,

India's high-ranking as good investment destination by rating agencies like S&P and Moody's have initiated confidence among the FIIs.'

7. CONCLUSION

Indian market is regarded on par with the developed markets as so many developments have taken place in the stock market arena during the last fifteen years. The important feature of the developed markets is the growing dominance of institutional investors. In Indian market we find the combined potent force of the FIIs and MFs. Thus question generally arises on the market efficiency and the efficiency of the regulatory bodies to face the heat. As far as potential flows are concerned, they are called 'short-term hot money', which indicates that FII is meant for short-term gains, and immediately after making gain; they leave the market as quickly as they enter there. Availability of substantial financial strength enables them to become the major players in the market. Moreover, they are known to stampede out at the slightest hint of trouble in the host country, leaving an economic wreck in their wake. Political instability may also be a disturbing factor. In case of our country the situation is not so alarming till now. India, however, in recent times is regarded as one of the most favoured destinations due to the following reasons:

- Business Week says that of the 100 emerging market which are rapidly globalising, 21 are Indian firms
- Economists project India to become the third largest economy in the world by 2040
- Indian rupee is showing strong resilience over dollar
- Indian capital market regulator has acquired international credibility in the least possible time
- India has a disclosure-based regime of regulations
- India's accounting standards are closer to international standards
- India has a well laid down legal framework
- India has T+2 rolling settlement as opposed to T+3 in NYSE.
- In India the transactions are totally electronic on a real time basis.
- SEBI has made corporate governance guidelines mandatory for listed companies

Experts feel that Indian market offers reasonable safe returns in the emerging market space. Moreover, it has a very unique economic model and is based on strong economic growth with huge liquidity flows and unlike other economies it is not depended on the US economy for its GDP growth. Going ahead, inflows into the country are likely to increase further. The investors are realizing India to be a better investment destination. This realization and acceptance should encourage more and more funds in the Indian market in the days to come.

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Industrialisation Led Development

*Anjan Majumdar**

ABSTRACT: Considering industrial capital is exogenously given in a small open economy consisting of urban industrial sector and rural agricultural sector and assuming that there is no demand constraint and technological progress in rural agricultural sector is land augmenting and also assuming that the wage efficiency hypothesis works in the urban industrial sector, an increase in industrial capital will not only increase labour absorption in the industrial sector but also raise the wage rate in the urban sector and along with these the productivity of the labour and wage rate in the agricultural sector will increase.

Key Words : Small open economy, Land augmenting technological progress, Wage efficiency hypothesis

1. INTRODUCTION

A development strategy that can exploit all supply side possibilities of increasing per-capita output is always welcome. The different components of per-capita output are (i) the participation rate; (ii) the labour productivity in different sectors and (iii) the proportion of labour force in different sectors. Thus the strategy, which can exploit all sources of per-capita output can initiate and sustain economic development.

In a labour surplus economy an increase in participation rate implies a reduction in open and disguised unemployment. It is true that labour productivity in industrial sector is

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more than that of agricultural sector. Hence if the occupational distribution can be changed in favour of industrial sector then overall labour productivity of the economy must increase. Not only this the transfer of workers from agricultural sector to industrial sector will also increase the labour productivity in the agricultural sector itself.

The difference between national average labour productivity and labour productivity in the agricultural sector is more in developing countries than in developed countries. Hence the labour productivity gain for transferring workers from agricultural sector to industrial sector is more in case of developing countries (Bhaduri 1993). Moreover with more capital investment in industrial sector, overall employment facility will increase which implies an increase in participation rate. Thus the process of industrialization ensures both extensive growth and intensive growth.

Development policy differs in terms of exogeneity of a particular sector. As a policy variable a particular sector may be considered as exogenous and other sectors adjust accordingly. In Industrialisation led development strategy, industrial capital may be considered as exogenously given and an increase in industrial capital will increase industrial employment and side-by-side urban industrial wage rate. Along with this the agricultural sector will also be adjusted endogenously, which will increase the agricultural wage rate and labour productivity. If the adjustment process fails, the process of industrialization will be hampered.

This paper purports to highlight the importance of the effect of increase in capital investment in the industrial sector on industrial employment as well as agricultural labour productivity – the two important sources of per-capita output. For this we are going to develop a model consisting of urban industrial sector and rural agricultural sector.

2. THE MODEL

We assume a small open economy consisting of only two sectors: (i) urban sector (or industrial sector), and (ii) rural sector (or agricultural sector). The relative prices of goods produced in the two sectors are determined in the World market independently of local demand and supply. In both sectors Cobb- Douglas type of production functions are considered. In the rural sector technological progress is endogenised, by assuming that it comes through the inputs like fertilizer, insecticides, along with HYV seeds. In the urban sector output is a function of capital and labour. It is also assumed that output in the industrial sector depends on the number of efficiency units of labour used. It is assumed that efficiency is a function of wage rate and these two are directly related. In a less developed economy workers' productivity is directly related to his level of consumption. If we assume a direct relation between wages and consumption then we can say that worker's productivity depends on his wage. We also assume that there is no cross-country migration of labour.

Let the production function of the agricultural sector be

$$Q_1 = [A + f(N)]^\alpha \cdot L_1^\beta \text{-----(1)}$$

Here the technological progress function $f(N)$ has been incorporated in the production function in additive form to retain the special land-augmenting character of the innovation.

Where, Q_1 = Total agricultural output

A = Total land capital

N = Technological inputs in the agricultural sector.

$f(N)$ = Technological progress function with $f'(N) > 0$; $f''(N) < 0$

L_1 = Labour units used in the agricultural sector.

$\alpha, \beta > 0$ but less than unity.

The wage efficiency hypothesis can be incorporated in the industrial production function just as the technological progress function has been incorporated in the agricultural production function. A technological progress in the industrial sector generally raises labour productivity. An increase in efficiency of workers will raise actual labour supply and hence total production will increase.

The production function of the industrial sector is

$$Q_2 = K^a [L_2 + \phi(W_u)]^b \text{-----(2)}$$

Where, Q_2 = Total production in the industrial sector;

K = Capital in the industrial sector (which is treated as a parameter);

L_2 = Labour units used in the industrial sector;

W_u = Wage rate in the urban sector which is a variable and we here assume that it can rise only;

$\phi(W_u)$ = efficiency function (measured in terms of efficiency units);

$\phi'(W_u) > 0, 0 < a, b < 1$.

Here we have considered additive relationship between labour and wage-efficiency function just to indicate that wage-efficiency function is a type of technological progress, which is purely labour-augmenting in nature. A multiplicative relationship would obviously be an ideal one but consideration of this creates certain problems for a comparative static production function analysis. However, all the implications of additive relationship should not be interpreted in the strict sense, e.g., we do not want to mean that with zero land, a positive level of output can be obtained or with zero working hour and positive wage rate, labour input in efficiency unit can take positive value.

In the agricultural sector we have two variable inputs L_1 and N . In the industrial sector K is assumed to be a parameter and L_2 is a variable. Over time K increases through capital accumulation and we want to study its effects on L_2 , W_u and on L_1 .

The net output functions in two sectors are:

$$q_1 = [A + f(N)]^\alpha \cdot L_1^\beta - W_A \cdot L_1 - P_N \cdot N \text{ -----(3)}$$

$$q_2 = K^a [L_2 + \varphi(W_u)]^b - W_u \cdot L_2 \text{ -----(4)}$$

Where, W_A = wage rate in the agricultural sector;

P_N = price of N (given).

Following Harris-Todaro model W_A is assumed to be equal to the marginal product of labour in the agricultural sector. This implies that the wage rate in the rural sector (or agricultural sector) is flexible and there is no unemployment in the rural sector.

Total labour units available in the economy is fixed at L and

$$L_1 + L_2 \leq L \text{ -----(5)}$$

Thus we are allowing unemployment in the economy and this unemployment exists in the urban sector.

The marginal conditions are:

$$\partial q_1 / \partial L_1 = [A + f(N)]^\alpha \cdot \beta L_1^{\beta-1} - W_A = 0 \text{ -----(6)}$$

$$\partial q_1 / \partial N = \alpha [A + f(N)]^{\alpha-1} \cdot f'(N) \cdot L_1^\beta - P_N = 0 \text{ -----(7)}$$

$$\partial q_2 / \partial L_2 = K^a \cdot b [L_2 + \varphi(W_u)]^{b-1} - W_u = 0 \text{ -----(8)}$$

$$\partial q_2 / \partial W_u = K^a \cdot b [L_2 + \varphi(W_u)]^{b-1} \cdot \varphi'(W_u) - L_2 = 0 \text{ -----(9)}$$

From (8) and (9), we have

$$W_u = L_2 / \Phi'(W_u)$$

Or,

$$\Phi'(W_u) = L_2 / W_u$$

$$\Phi''(W_u) = -L_2 / W_u^2 < 0$$

Thus, we have $\Phi''(W_u) < 0$

Now, following Harris Todaro Model it is assumed that $W_u > W_A$. For the given capital stock the number of urban industrial jobs available is fixed. Total labour force in the urban industrial sector is $L - L_1$. The probability of a migrant finding urban industrial work finding (according to H-T model) is $L_2 / (L - L_1)$. Migration will continue so long as

$$W_A < [L_2 / (L - L_1)] W_u.$$

Following H - T model the migration equilibrium condition is given by

$$W_A = W_u \cdot [L_2 / (L - L_1)] \text{ -----(10)}$$

Putting the value of W_A from (10) in equation (6), we have

$$\partial q_1 / \partial L_1 = [A + f(N_1)]^\alpha \cdot \beta L_1^{\beta-1} - W_u \cdot [L_2 / (L - L_1)] \text{ -----(6)'}$$

From the four equations (6), (7), (8) and (9) we can find out the initial equilibrium values of the four variables L_1 , N_1 , L_2 and W_u when K is given. We are now interested to show the impact on L_2 , W_u , L_1 as K grows.

The above mentioned equations are independent if the Jacobian determinant is nonvanishing, i.e.,

$$|J| > 0.$$

$$\text{Here } |J| = \begin{vmatrix} a_{11} & a_{12} & a_{13} & a_{14} \\ a_{21} & a_{22} & a_{23} & a_{24} \\ a_{31} & a_{32} & a_{33} & a_{34} \\ a_{41} & a_{42} & a_{43} & a_{44} \end{vmatrix}$$

$$a_{11} = \partial / \partial L_1 (\partial q_1 / \partial L_1) = [A + f(N)]^\alpha \cdot \beta (\beta - 1) L_1^{\beta-2} - W_u \cdot L_2 / (L - L_1)^2 < 0$$

$$a_{12} = \partial / \partial N (\partial q_1 / \partial L_1) = \alpha [A + f(N)]^{\alpha-1} \cdot f'(N) \beta L_1^{\beta-1} > 0$$

$$a_{13} = \partial / \partial L_2 (\partial q_1 / \partial L_1) = -W_u / (L - L_1) < 0$$

$$a_{14} = \partial / \partial W_u (\partial q_1 / \partial L_1) = -L_2 / (L - L_1) < 0$$

$$a_{21} = \partial / \partial L_1 (\partial q_1 / \partial N) = \alpha [A + f(N)]^{\alpha-1} \cdot f'(N) \beta L_1^{\beta-1} > 0$$

a_{12} and a_{21} are positive due to the forces of complementarity between the two inputs L_1 and N

$$a_{22} = \partial / \partial N (\partial q_1 / \partial N) = \alpha (\alpha - 1) [A + f(N)]^{\alpha-2} \cdot [f'(N)]^2 L_1^\beta + \alpha [A + f(N)]^{\alpha-1} \cdot L_1^\beta f''(N) < 0$$

$a_{22} < 0$ due to the law of diminishing marginal productivity

$$a_{23} = \partial / \partial L_2 (\partial q_1 / \partial N) = 0$$

$$a_{24} = \partial / \partial W_u (\partial q_1 / \partial N) = 0$$

$$a_{31} = \partial / \partial L_1 (\partial q_2 / \partial L_2) = 0$$

$$a_{32} = \partial / \partial N (\partial q_2 / \partial L_2) = 0$$

$$a_{33} = \partial / \partial L_2 (\partial q_2 / \partial L_2) = K^\alpha b(b-1) [L_2 + \varphi(W_u)]^{b-2} \cdot 1 < 0$$

This shows that the force of diminishing marginal productivity is operating.

$$a_{34} = \partial / \partial W_u (\partial q_2 / \partial L_2)$$

$$= K^\alpha b(b-1) [L_2 + \varphi(W_u)]^{b-2} \varphi'(W_u) - 1 < 0$$

An increase in W_u will raise $\varphi(W_u)$ and hence labour supply in terms of efficiency unit will also increase and hence the law of diminishing return will operate. At the same time cost of production (wage cost) will also increase. On both grounds the sign of derivative will be negative.

$$a_{41} = \partial / \partial L_1 (\partial q_2 / \partial W_u) = 0$$

$$a_{42} = \partial / \partial N (\partial q_2 / \partial W_u) = 0$$

$$a_{43} = \partial / \partial L_2 (\partial q_2 / \partial W_u) = K^* b(b-1)[L_2 + \varphi(W_u)]^{b-2} \varphi'(W_u) \cdot 1 - 1 < 0$$

Therefore, $a_{34} = a_{43} < 0$

$$a_{44} = \partial / \partial W_u (\partial q_2 / \partial W_u) = K^* b(b-1)[L_2 + \varphi(W_u)]^{b-2} [\varphi'(W_u)]^2 + K^* b[L_2 + \varphi(W_u)]^{b-1} \varphi''(W_u) < 0$$

as we have already seen $\varphi''(W_u) < 0$.

Now,

$$|J| = \begin{vmatrix} a_{11} & a_{12} & a_{13} & a_{14} \\ a_{21} & a_{22} & 0 & 0 \\ 0 & 0 & a_{33} & a_{34} \\ 0 & 0 & a_{43} & a_{44} \end{vmatrix}$$

$$= (a_{33} a_{44} - a_{34} a_{43}) (a_{11} a_{22} - a_{12} a_{21})$$

For the part $(a_{11} a_{22} - a_{12} a_{21})$ if we assume that the forces of diminishing returns are stronger than those of complementarities then we have $(a_{11} a_{22} - a_{12} a_{21}) > 0$

Now, the question is what will be the sign of $(a_{33} a_{44} - a_{34} a_{43})$?

Let us try to find it out.

Putting the values of a_{33} , a_{44} , a_{34} and a_{43} , we have

$$(a_{33} a_{44} - a_{34} a_{43})$$

$$= K^* b(b-1)[L_2 + \varphi(W_u)]^{b-2} \{ K^* b [L_2 + \varphi(W_u)]^{b-1} \varphi''(W_u) + 2 \varphi'(W_u) \} - 1$$

Let us consider the term

$$\{ K^* b [L_2 + \varphi(W_u)]^{b-1} \varphi''(W_u) + 2 \varphi'(W_u) \}$$

$$= \{ W_u \cdot \varphi''(W_u) + 2 \varphi'(W_u) \} \text{ [From 8]}$$

$$\text{Now, } \{ W_u \cdot \varphi''(W_u) + 2 \varphi'(W_u) \} \geq 0$$

$$\text{according as } | W_u \varphi''(W_u) | \leq | 2 \varphi'(W_u) |$$

$$\text{Since } \varphi'(W_u) > 0 \text{ and } \varphi''(W_u) < 0$$

$$\text{or, } \left| \frac{\varphi''(W_u)}{\varphi'(W_u)/W_u} \right| \leq \left| 2 \right|$$

Where, $\{\varphi''(W_u) W_u\} / \varphi'(W_u)$ is nothing but the elasticity of $\varphi'(W_u)$ function marginal labour augmentation factor or marginal wage efficiency function with respect to W_u

The elasticity may be assumed less than unity. Hence,

$$\text{or, } \left| \frac{\varphi''(W_u) \cdot W_u}{\varphi'(W_u)} \right| < \left| 2 \right|$$

Therefore, $\{W_u \cdot \varphi''(W_u) + 2 \varphi'(W_u)\} > 0$

Hence, $K^2 b(b-1)[L_2 + \varphi(W_u)]^{b-2} \{W_u \varphi''(W_u) + 2 \varphi'(W_u)\} - 1 < 0$

i.e., $(a_{33} a_{44} - a_{34} a_{43}) < 0$

$|J| = (a_{11} a_{22} - a_{12} a_{21}) (a_{33} a_{44} - a_{34} a_{43}) < 0$

Proposition 1: Capital accumulation in the industrial sector will increase labour employment in the industrial sector.

Differentiating equations (6), (7), (8) and (9) totally with respect to K and arranging in matrix form, we get,

$$\begin{bmatrix} a_{11} & a_{12} & a_{13} & a_{14} \\ a_{21} & a_{22} & a_{23} & a_{24} \\ a_{31} & a_{32} & a_{33} & a_{34} \\ a_{41} & a_{42} & a_{43} & a_{44} \end{bmatrix} \begin{bmatrix} dL_1/dK \\ dN/dK \\ dL_2/dK \\ dW_u/dK \end{bmatrix} = \begin{bmatrix} b_1 \\ b_2 \\ b_3 \\ b_4 \end{bmatrix}$$

Where,

$$b_1 = -\partial / \partial K (\partial q_1 / \partial L_1) = 0$$

$$b_2 = -\partial / \partial K (\partial q_1 / \partial N) = 0$$

$$b_3 = -\partial / \partial K (\partial q_2 / \partial L_2)$$

$$b_4 = -\partial / \partial K (\partial q_2 / \partial W_u)$$

$$\text{Now, } \partial / \partial K (\partial q_2 / \partial L_2) = aK^{a-1} b[L_2 + \varphi(W_u)]^{b-1} > 0$$

$$\text{Therefore, } b_3 = - \partial / \partial K (\partial q_2 / \partial L_2) < 0$$

$$\partial / \partial K (\partial q_2 / \partial W_u) = aK^{a-1} b[L_2 + \varphi(W_u)]^{b-1} \varphi'(W_u) > 0$$

$$\text{Therefore, } b_4 = - \partial / \partial K (\partial q_2 / \partial L_2) < 0$$

Now,

$$dL_2/dK = \frac{1}{|J|} \begin{bmatrix} a_{11} & a_{12} & 0 & a_{14} \\ a_{21} & a_{22} & 0 & 0 \\ 0 & 0 & b_3 & a_{34} \\ 0 & 0 & b_4 & a_{44} \end{bmatrix}$$

$$= \{1/|J|\} (a_{11} a_{22} - a_{12} a_{21}) (b_3 a_{44} - b_4 a_{34})$$

We have already assumed $(a_{11} a_{22} - a_{12} a_{21}) > 0$. The sign of $(b_3 a_{44} - b_4 a_{34})$ is apparently indeterminate. Let us try to find it out.

Putting the values of b_3, b_4, a_{34}, a_{44} , we have

$$(b_3 a_{44} - b_4 a_{34}) = - aK^{a-1} b[L_2 + \varphi(W_u)]^{b-1} \{W_u \cdot \varphi''(W_u) + \varphi'(W_u)\}.$$

$$\text{Now, } \{W_u \cdot \varphi''(W_u) + \varphi'(W_u)\} \geq 0$$

according as $|W_u \cdot \varphi''(W_u)| \leq |\varphi'(W_u)|$

$$\text{or, } \left| \frac{\varphi''(W_u) \cdot W_u}{\varphi'(W_u)} \right| \leq 1$$

As we have already assumed that the absolute value of the elasticity of $\varphi'(W_u)$ function with respect to W_u is less than unity,

$$\{W_u \cdot \varphi''(W_u) + \varphi'(W_u)\} > 0 \text{ and}$$

$$\text{hence, } (b_3 a_{44} - b_4 a_{34}) = - aK^{a-1} b[L_2 + \varphi(W_u)]^{b-1} \{W_u \cdot \varphi''(W_u) + \varphi'(W_u)\} < 0$$

$$\text{As, } |J| < 0, (a_{11} a_{22} - a_{12} a_{21}) > 0$$

$$\text{and } (b_3 a_{44} - b_4 a_{34}) < 0$$

$$\text{Therefore, } dL_2/dK = \{1/|J|\} (a_{11} a_{22} - a_{12} a_{21}) (b_3 a_{44} - b_4 a_{34}) > 0$$

Thus, considering wage-efficiency hypothesis, capital accumulation in the industrial sector will raise urban (industrial) employment.

Proposition 2: Capital accumulation in the industrial sector will increase urban wage rate and the wage rate in the agricultural sector.

Now, let us try to find out the impact of capital accumulation in the industrial sector on urban wage rate.

$$dW_u/dK = \frac{1}{|J|} \begin{vmatrix} a_{11} & a_{12} & a_{13} & 0 \\ a_{21} & a_{22} & 0 & 0 \\ 0 & 0 & a_{33} & b_3 \\ 0 & 0 & a_4 & b_4 \end{vmatrix}$$

$$= \frac{1}{|J|} (a_{11} a_{22} - a_{12} a_{21}) (a_{33} b_4 - a_4 b_3)$$

Proceeding in the same way as before we can show that

$$(a_{33} b_4 - a_4 b_3) = -aK^{s-1} b[L_2 + \varphi(W_u)]^{s-1} < 0$$

$$dW_u/dK = \frac{1}{|J|} (a_{11} a_{22} - a_{12} a_{21}) (a_{33} b_4 - a_4 b_3) > 0$$

Thus, capital accumulation in the industrial sector will raise the urban wage rate also.

We know that $W_A = W_u \{L_2 / (L - L_1)\}$. Hence increase in W_u and L_2 will raise W_A .

As $W_A = MP_L$ in the rural sector, an increase in W_A implies that MP_L in agricultural sectors will also increase, i.e., the employment in the rural sector will decrease. Thus, $dL_1/dK < 0$

Algebraically, it can be shown that

$$dL_1/dK = \frac{1}{|J|} \begin{vmatrix} 0 & a_{12} & a_{13} & a_{14} \\ 0 & a_{22} & 0 & 0 \\ b_3 & 0 & a_{33} & a_{34} \\ b_4 & 0 & a_{43} & a_{44} \end{vmatrix}$$

$$= \frac{1}{|J|} \{ -a_{11} a_{22} (b_3 a_{44} - b_4 a_{34}) + a_{14} a_{22} (b_3 a_{43} - b_4 a_{33}) \} < 0$$

An increase in capital investment in the industrial sector increases urban industrial employment. Thus, the occupational distribution is going in favour of the industrial sector, which implies an increase in labour productivity. Side by side, the productivity of the agricultural workers who still remain in the agricultural sector also increases. Hence the intensive growth of the economy is ensured.

agricultural workers who still remain in the agricultural sector also increases. Hence the intensive growth of the economy is ensured.

3. CONCLUSION

Thus, a small open economy which consists of urban industrial sector and a rural agricultural sector with technological progress in the agricultural sector being of land-augmenting type and wage efficiency hypothesis assume to work in the industrial sector, with capital accumulation in the industrial sector urban employment and wage rate and likely to increase and hence the possibilities of migration from rural sector to urban sector will increase. Not only this, agricultural productivity and wage rate will also increase. Thus per capita output of the economy will increase that will lead the economy to a path of economic development. This is true subject to the restrictions that (a) the forces of diminishing marginal productivities are stronger than those of complementarities and (b) the elasticity of marginal labour augmentation factor with respect to urban wage rate must be less than unity.

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ESOP Accounting in India: Measurement and Disclosure Issues

Satyajit Dhar and Subhabrata De***

ABSTRACT: Accounting for Employee Stock Option Plan (ESOP) is a highly charged issue due to aggressive increase in the use of these plans by large corporate entities over the past two decades. An attempt has been made in this article to explore ESOP related issues from Indian perspective. The paper reports the results of the survey regarding the reporting practice of ESOP accounting related information in Annual Report by Indian companies. There is no mandatory standard issued by the Indian standard setting body, Institute of Chartered Accountant of India (ICAI) to force the companies to disclose the ESOP related information in a transparent manner. The provisions of the SEBI guidelines in this regard are not that effective as there is no audit requirement. It is observed that there exists a great diversity among the companies in respect of reporting of ESOP related information. The survey shows that managements of the sample companies appear to be treating mandatory requirements as voluntary, due to low levels of enforcement. This situation may change in 2011 when Indian companies will be required to adopt international accounting standards including IFRS 2 *Share based Payments*.

Key Words : *Employee compensation, Stock options, ESOP, Stock option accounting*

1. INTRODUCTION

A stock option plan gives employees the right to acquire shares of the company (Employee Stock Option Plan) in future at a pre-determined price, even if the fair market value of the stock is higher than the pre-determined price.

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increased from that option's grant price. Often, companies will require the employee to hold the allotted options for a period of time before being exercised. Several types of stock options plans are in vogue and a company selects plans based on several considerations including the ability of the plan to motivate employees, its tax implications, and the industry practices.

In developed countries the Employee Stock Option Plan (ESOP)¹ is seen as an important HRD (Human Resource Development) tool. But, companies in developing countries, mainly those in IT sector are including this type of compensation in their remuneration packages for their global linkages.

Any stock option programme conveys to the employees something of value, namely, the time to decide whether or not to purchase shares at a price that was fixed at the date of grant. However, preparers of the financial statements have shown strong sentiment against the recognition of compensation. On the other hand, standard setters and financial statement users have also voiced against the practice of non-recognition of compensation, as it does not reflect true economic reality. Thus, the accounting of ESOP has become a sensitive and controversial issue.

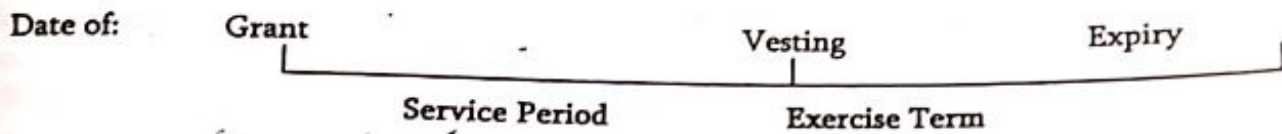
This paper attempts to give an overview of the issues involved in ESOP accounting. Also it analyses the ESOP accounting practices in India in the background of the lack of authoritative pronouncement from the accounting regulator, viz., the Institute of Chartered Accountants of India (ICAI).

The rest of the paper is structured as follows: Section 2 describes the basic features of ESOPs and different types of ESOP that are prevalent. Section 3 discusses the underlying benefits of ESOPs. Section 4 sketches the accounting issues involved. Section 5 presents ESOP accounting practices in India. Concluding observations are given in Section 6.

2. ESOPs: THE BASIC FEATURES & TYPES

2.1. Basic Features of ESOPs

Conventional stock option plans give an employee of a company the right (but not obligation) to buy i.e., option to buy a fixed number of shares of the company at a stated price during a specified period, often at a discount from the market price at the date of grant. The options under a plan vests over a period to an employee subject to fulfillment of certain employment related conditions e.g. continued employment for a specified period. In the case of performance-based plan, the employees have to meet specified goals in addition before vesting can occur. The options may vest on one date ('cliff vesting') or in stages over time ('gradual' vesting). After the vesting date, an employee may exercise his right to buy the share during a predefined period called exercise period. The options are forfeited for non-fulfillment of certain conditions (e.g., staying with the company). The key dates in a simple cliff-vesting share option plan are shown in the next page (Sutton 2000).



Clearly, employees hope that the share price will be above the exercise price at some point during exercise term.

2.2. Types of ESOPs

Broadly, ESOPs may be divided into two categories viz., non-compensatory plan and compensatory plan.

A *non-compensatory plan* is one that is not intended to compensate employee. The purpose of such a plan is usually to raise additional capital or to diversify share ownership to include employees. A plan is non-compensatory if the shares can be acquired in future at the market price on the date of exercise/vesting.

A *compensatory plan* is one in which services rendered by employees are partially compensated for by the issuance of shares. Compensatory plans are used to motivate employees and are particularly useful to fast growing knowledge based companies that normally do not pay large salaries.

Under US tax law, options are categorized as:

- Incentive Stock options (sometimes referred to as qualified options or statutory options) -- The options which do not result in either taxable income to the holder or tax deductions to the issuing company upon grant or exercise.
- Non-qualified options (Non-statutory options) -- The options which will result in taxable income to the employee and a tax deduction for the issuing company upon exercise.

Again options are categorized as *fixed* and *variable* plan on the basis of certainty of exercise price. In a fixed plan, exercise price is fixed at the time of grant itself. Thus, measurement date i.e., the date of measuring the compensation element and grant date is same. In a variable plan, exercise period is not known on the grant date at it is determined by applying future market price. Hence, measurement date follows grant date.

Apart from stock option plans there are other stock-based compensation plans. Such plans include, Employee Stock Purchase Plans (ESPPs), Restricted Stock Units (RSUs), Stock Appreciation Rights (SAR)/Phantom Shares. Choice of such plans depends on various factors like, industry practice, tax implications, share market condition, growth expectation of the company etc. Each of different stock option plans.

Exhibit 1

Different Stock-based Compensation Plans

Employee Stock Option Plan (ESOP): - ESOP is a stock option plan, which gives employees the right to acquire shares of the company in future at a pre-determined price, even if the fair market value of the stock has increased from that option's grant price. Often, companies will require the employee to hold the allotted options for a period of time before being exercised. Typically, the options are non-transferable, excepting in the event of death, etc. The company either allots fresh shares or buys them in the market by treasury operation. Any time after the exercise, the employee can sell the stock. In case of cashless option, the employee does not pay for the share but realizes the net gain on the date of exercise.

Starting as employee benefit pension plans, now ESOPs are used in different ways. Under compensation plan, employees are partly compensated by issuance of shares; whereas the objective of non-compensatory plan is to raise additional capital or to diversify share ownership to include employees. In a leveraged ESOP, companies borrow capital (through ESOP trust) from financial institution and often use the process as a vehicle for Leveraged Buyouts (LBOs). For external ESOPs an external trust or association is created to hold the 'ownership'. Internal ESOP runs with an internal workers' trust.

Employee Stock Purchase Plan (ESPP): - ESPPs are systematic investment plans where the employee acquires the shares after a specified period, upon contribution to the share price in monthly installments. At the end of the offering period, contributions are accumulated and used to purchase shares at a discount, say 10% of the lower of the market price on the opening or closing date of the offer period as per the plan. If the employee does not remain with the company till the date of allotment, he loses his right to acquire the shares and is eligible for refund of her contribution. The employee can sell the shares acquired under ESPP at any time after expiry of lock-in-period.

Restricted Stock Units (RSU): - Under this scheme, the employer company makes an unsecured promise to the employees to transfer shares free of cost at the end of a designated period and after fulfillment of certain conditions like, achieving the targets, continuation of employment etc. After allotment, the employee can sell the shares in the market.

Stock Appreciation Rights (SAR): - In SAR scheme, compensation is made in cash, based on the price increased of the share during a certain period. Actually, under SAR, appreciation in stock price between the date of grant and the date of exercise is delivered to the employee in cash.

There are some other less used frequently programmes like Performance Share Plan (PSP), Performance Unit Plan (PUP), Deferred Compensation System (DCS) etc.

3. ESOPs: THE UNDERLYING BENEFITS

The use of ESOP is becoming more and more popular in recent years as an incentive or compensation tool for a company. There are three possible benefits to the firms arising out of issuance of option to employees. The first reason is the incentives to the employees as it overcomes agency problem and motivate the employees to do best in the firm's interest. Second reason is that the option may bring on sorting as different employees have different expectation regarding employer company's future. It attracts the optimistic employees to invest and help the firm to reduce compensation cost. Third reason that is usually cited in favour of this practice is retention of employees. It is found through empirical research that retention and sorting may be most important determinants of a typical firm to adopt a broad based stock option plan (Oyer and Schaefer 2004). In any industry where switching loyalties is common, the grant of option would motivate the employees to hold on at least until their options mature.

The ESOPs are rewarding from the standpoint of employees also. They stand to gain in the same way as the owners or promoters of the company do. Thus, there is goal congruence between the objectives of shareholders and the employees; both are rewarded if the share price increases during stock option period. However, there is contrarian view that ESOPs have certain limitations in their ability to incentivize directors and other top-level employees to create shareholder value. These relate to dividend policy, holding costs, and appetite for risk taking. For example, there is no incentive for directors to pay higher dividend during the continuance of share option scheme. If excess funds are retained, price of the shares should increase to reflect the cash held, even though shareholder value may be diminished. Among these issues, risk aspect is most damaging. A stock option scheme represents one-sided bet for the employees. If the share price appreciates, they make potentially large gains; but if the share price declines, they do not loose anything; they simply allow such under water options to lapse unexercised. On the other hand, in such an instance, investors will have to incur loss due to decline in market value of the shares (Ward and Bender 2003).

By issuing ESOPs, the company may compensate its employee without taking a burden on bottom line. This is so because appreciation after the grant date is not usually recognized as a part of compensation. For example, an Indian company has issued shares under ESOP (without recognizing compensation cost in the accounts) at discount to market price ranging from 57 percent 12 percent during September 2003 to February 2004. (ICICI Bank 2004). This is a most debated accounting issue and is discussed in the subsequent section.

4. ESOPs: ACCOUNTING ISSUES

4.1. ESOP: Accounting Debate

It may be pointed out that accounting for employee stock option is still a highly charged issue. The debate revolves around recognition of ESOPs expense in the revenue statement instead of footnote disclosure. The proponents of foot note disclosure as an alternative to more transparent recognition, ...ly rely on a few recurring arguments, like, cost-benefit is

unreliable measurement parameter, readers' confusion and no demonstrated need to use such information by different user groups etc. Further, a forceful argument is that expensing stock option will mean the end of small, growth and start-up companies' ability to attract high quality managerial personnel and hence, the end of entrepreneurship. On the other hand, the proponents of fair value accounting of stock option compensation expenses argue that the purpose of financial reporting information is to provide the investors full and accurate information about a company's financial position and performance. Attracting and hiring high quality employees is a worthy and necessary objective for all companies. Designing compensation packages to do so is the necessary element in the process. Recognition and measurement of an expense in a company's income statement will not prevent it from using important stock options to compensate its employees. Rather, it will make the estimated value of those options explicit to the employees, company management, its shareholders and potential investors so that each can use that information in their respective decision-making (Walter 2004). Regarding the issue of measurement problem due to assumption involved, it is argued that estimating is inherent in most of the processes of accounting valuation. Moreover, new valuation models are developed to address the unique features of employee stock options that differentiate them from exchange traded options (Sinnott 2003).

4.2. Accounting Regulation on ESOP

It is a fact that US GAAP contains most comprehensive treatment regarding accounting of ESOPs. It may be due to the fact that ESOPs have their root in the USA. The International Accounting Standard Board (IASB) issued a new accounting standard, IFRS 2, on stock based compensation in 2004 that requires the use of a fair value based method of accounting to measure and expense all share-based payment transactions (IASB 2004). In the meantime, in October 2002, the Financial Accounting Standard Board (FASB) in the US issued a memorandum of understanding (MOU) (Norwalk Agreement) to formally commit themselves and their resources to the convergence of U.S. and international accounting standards. Pursuant to that MOU, the IASB has now agreed to move to the US position to converge with the US GAAP (Chandra 2003). Thus, discussing the US GAAP will give a good international perspective. How does India compare with the international scenario may be another point of interest. Accordingly, we discuss the issue under three heads: US GAAP, IASB position and Indian GAAP.

4.2.1. US GAAP

Although, it is evident that highly prized and sought after employee or executive stock options convey economic value, US GAAP had traditionally provided a mechanism whereby compensation cost was often not given financial statement recognition. The sources on US GAAP may be traced in four pronouncements issued at different point in time:

- APB Opinion 25 issued in 1972.
- SFAS 123 issued in 1993.
- SFAS 148 issued in 2002.
- SFAS 123 (R) issued in 2004.

APB 25 – Intrinsic Value Method

APB 25 measures compensation associated with issuance of stock options by the intrinsic value method. Under APB 25, the ESOP has no intrinsic value where the exercise price is set equal to or greater than the market price at the date of grant. Should the market price at the date of grant exceeds the exercise price, the company must recognize the intrinsic value of options as compensation. Hence, the compensation cost is limited to the excess of the quoted market price of the stock at the measurement date (generally, grant date) over the exercise price. Such compensation cost should be recognized in the periods in which services being compensated are performed. Generally, an ESOP is planned in such a way that it represents compensation for future service during vesting period. Hence, compensation cost is recognized proportionately over the vesting period on a straight-line basis.

Since most US plans are organized in such a manner that the exercise price is set equal to or greater than the market price on the date of grant, US companies rarely report compensation cost from ESOPs in their accounts regardless of whatever valuable attributes the options carried (Dealaney et al. 2001, p. 753).

SFAS 123 – Fair Value Method (Optional)

The growing popularity of share based compensation arrangements, arguably encouraged by the favorable accounting treatment, and made the standard setters and financial statement user community increasingly uncomfortable with APB 25 treatment. With the intent of conforming financial reporting to economic reality, the Financial Accounting Standard Board (FASB) issued SFAS 123 in 1993.

It provides guidelines to calculate the compensation cost of an option based on its fair value on the grant date. This gives recognition to the fact that value of options consists of three elements: intrinsic value (identical to that identified under APB 25), plus the time value of money and the time value associated with the underlying stock's volatility. Thus, even if intrinsic value was zero (i.e., the option price is equal to or greater than market price at the measurement date) the sum of other two components would nonetheless most often result in compensation being attributed to grants of fixed options (Dealaney et al. 2001, p.752).

However, organized opposition (particularly, from 'high technology' sector) forced the FASB to accept a deeply flawed compromise. Even US Congress opposed the standard (Congressional Records 1994). As a result, SFAS 123 was made recommendatory and issuing entities were permitted continued application of APB 25 coupled with supplemental (foot note) disclosure of the impact on profit if the SFAS 123 had been applied. The compromise formula was passed by the FASB by a 5-2 vote. Both the dissenters argued that compensation associated with employee stock option should be recognized in the body of the financial statements, not in the foot notes (Zeff 1997). The entire episode exhibits the impact of 'political' pressure in the process of standard setting that generally leads to roll back of the initiative to prescribe specific accounting treatments imposed additional disclosure requirements or tighten the allowed interpretation (Zeff 2002). The politicization of the environment of accounting standard setting is due to increasing realization of the fact that

accounting standards have economic consequences (Basu 1995). In such a scenario, it is not difficult for management group having superior lobbying power to prevent standard setting agencies from formulating accounting standards that have potentials of bringing about adverse economic consequence for them.

SFAS 148 – Transition and Disclosure

In December 2002, the FASB issued SFAS 148 to provide alternative methods of transition for a voluntary change to the fair value-based method of accounting for stock-based employee compensation. SFAS 148 amends the disclosure requirements of SFAS 123 to require prominent disclosures in both annual and interim financial statements about the method of accounting and the effect of the method on reported results. The disclosure provisions of SFAS 148 are applicable for fiscal periods beginning after December 15, 2002 (Dealaney 2004).

SFAS 123 (R) – Fair Value Method (Mandatory)

SFAS 123 (Revised) is based on the underlying accounting principle that compensation costs resulting from share based payment transactions should be reflected in the financial statements at fair value. It is the standard issued by the FASB after IASB issued IFRS 2, *Share-based Payment* in February 2004. Ultimately, SFAS 123 (R) requires compensation expenses underlying stock option grants based on the fair value to be calculated using a valuation model chosen by the company. SFAS 123 (R) is effective for public entities from the first interim or annual reporting period that begins after June 15, 2005.

Table 1 below gives illustration of accounting procedure under different US pronouncements.

Table 1: Illustration of Accounting Procedures

Example: On April 1, 2007 a company grants an option to its Managing Director to purchase one share of Rs. 10 face value at Rs.100 (which is the market price of the stock at that time) anytime during April 1 2008 to March 31 2011. The recipient can exercise the option anytime after March 31 2008; The Black-Scholes value of the option is determined to be Rs. 16. The market price of share at the end of financial year 2007-08, 2008-09 and 2009-10 is Rs.110, Rs. 115 & Rs. 121 respectively. On March 31, 2011 when the price is Rs.121 the recipient exercises the option.

Accounting under APB 25

- No accounting entry is necessary as intrinsic value is nil, exercise price being set at market price on the grant date. On exercise of option following accounting entry will be made.

31.03.2011	Bank	Dr.	Rs.100	Common Stock	Cr.	Rs. 10
				Paid-in Capital	Cr.	Rs. 90

Accounting under SFAS 123 & SFAS 123 (R)

- Accounting entries are necessary to recognize fair value of the option. Following accounting entries will be necessary.

01.04.2007	Deferred Option Exp.	Dr. Rs.16	Paid-in Capital : Option	Cr.	Rs.16
31.03.2008	Personnel Exp.	Dr. Rs. 8	Deferred Option Exp.	Cr.	Rs. 8
31.03.2011	Bank	Dr. Rs.100	Common Stock	Cr.	Rs.10
	Paid-in Capital: Option	Dr. Rs.16	Paid-in Capital	Cr.	Rs.106

Note: Under SFAS 123, fair value accounting is optional but under SFAS 123 (R) fair value accounting is mandatory. Further, one may debit personnel expenses directly against paid-in capital option instead of routing the expenses through deferred compensation account.

4.2.2. IASB position

IASB issued IFRS 2, *Share-based Payment* on 19th February 2004 to provide that shares, options and other equity instruments provided to employees as compensation for services rendered must be recognized at fair value as an expense on an entity's financial statement. IFRS 2 is the first standard that mandates adoption of fair value method of employee stock option accounting. According to the IASB, "the objectives of IFRS 2, *Share based Payment* is to ensure that an entity recognizes all share based payment transactions in its financial statement, measured at fair value so as to provide high quality, transparent and comparable information to users of financial statements." (IASB 2004) Regarding accounting of ESOPs the provision of IFRS 2 and SFAS 123 (R) are basically similar.

4.2.3. Indian GAAP

Regulatory framework of accounting of ESOPs in India is at its infancy. There is no standard on the issue by the Institute of Chartered Accountants of India (ICAI). At present, ESOP accounting in India is governed by the SEBI Guidelines issued in 1999 and the Guidance Note issued by the ICAI in 2003. As per the professional ethics requirement of the ICAI, requirements of a guidance note are not mandatory for compliance and such a guidance note only provides guidance on any accounting matter to the preparers and auditors of financial statement. As such, Indian companies rarely follow the requirements of the guidance note (Dhar and De 2008b).

Thus the source of regulation is the Securities and Exchange Board of India (SEBI) Guidelines that were issued in 1999 (SEBI 1999). The Employee Stock Option Scheme and Employee Stock Purchase Guidelines, 1999 (SEBI Guidelines hereinafter) originally issued in 1999 by the SEBI require mandatory disclosure of impact on profits for not following fair value approach. However, to compute fair value, the companies are permitted to adopt the

option value calculated by applying the difference between market price on grant date or by applying Black-Scholes or similar valuation methods. In effect, the position is akin to that of the APB Opinion 25 of the US. Thus, compensation cost implicit in an option may be based on intrinsic value method of APB 25 although the term fair value method is used. SEBI Guidelines provide for detailed disclosure rules for Directors' Report and the financial statement. The important requirements are amortization of compensation cost over the vesting period on straight-line basis and detailed disclosure of option statistics regarding grant, vesting and exercise. An illustration is also provided in the Guidelines showing the required journal entries to be made for a fixed plan.

Moreover, the requirements of the Guidelines being applicable in all stock option schemes established on or after June 1999, the prior schemes are out of the purview of the Guidelines. SEBI Guidelines were amended in 2002 and 2003 and the amended Guidelines now provide for a detailed disclosure including disclosure of stock option compensation expenses computed by applying fair value method² and impact of non-recognition of fair value compensation cost on basic and diluted EPS.

5. ESOP ACCOUNTING IN INDIA

In order to assess the prevailing practice regarding ESOP reporting in India a survey was conducted. We conducted the survey in two stages. First, a pilot survey conducted in 2002-2003 and a detailed survey in 2006-07. The rationale behind conducting the survey in two stages is to explore the changes in the accounting and disclosure pursuant to the changes in the provisions of the SEBI Guidelines. We report the survey results under the two heads 2002-03 survey and 2006-07 survey.

5.1. 2002-03 Survey

For the purpose the survey, first 50 big companies as per market capitalization were considered. The companies were ranked on the basis of market capitalization (during February 15, 2003 to March 15, 2003) by the Economic Times Survey (Economic Times 2003). The classification of the surveyed companies is shown in Table 2. Thereafter, annual reports of the sample companies for the year ended 31st March 2003 (December 2002 in few cases) were consulted to find out whether those companies have stock based compensation plan in their remuneration package. A close scrutiny of all those 50 annual reports reveals that out of 50 companies 11 companies have such stock based compensation plan and all those plans are stock-option plans. Further, we made a detailed analysis of those 11 annual reports with respect to different parameters viz., quality of disclosure, area of diversity, extent of compliance with the SEBI Guidelines, extent of adoption of fair value method of accounting etc. It is observed that out of 11 sample companies, 3 companies have reported US GAAP consolidated financial statement in their annual reports. It may be mentioned that all the 3 companies belong to IT sector and have listing of their securities in the USA.

Table 2: Classification of Surveyed Companies (2002-03 Survey)

Particulars	No. of Companies in	No of Companies having ESOP
Companies in IT Sector.	6	6
Companies in Pharmaceutical Sector	5	2
Others Manufacturing Companies	31	1
Others	8	2
Total	50	11

Source: ET 500. Results computed.

5.1.1. Method of Accounting

As per the extant SEBI Guidelines, for compensatory stock option plans, option discount requires accounting when exercise price is less than the market price on the date of grant. It has been observed that out of 11 sample companies, 6 companies have plans having positive intrinsic value (i.e. exercise price is less than the market price on the date of grant) in terms of the SEBI Guidelines. All these six companies have recognized costs associated with their plans in accounts by applying APB 25 (which also conforms to the SEBI Guidelines). The accounting treatment leads to inclusion of outstanding stock options (net of deferred compensation expenses) under the head Reserves & Surplus in the Balance Sheet. Amortized employee stock compensation expenses are included with 'Personnel Expenses' in the Profit & Loss Account.

Although, accounting treatments followed by the sample companies are same, it is observed that diversities exist regarding:

- Disclosure of deferred compensation expense account.
- Detailed disclosure of deductions from stock option outstanding.

5.1.2. Disclosure Practice

The SEBI guidelines require mandatory disclosure of stock option plans in the Directors' Report. Regarding disclosure in the main parts of the financial statement, viz., Balance Sheet, Profit & Loss Account and Cash Flow statement, there is no specific requirement. The disclosure practices of the sample companies are at variation, mostly, regarding the place of disclosure and the form of disclosure. So far as disclosure in the Directors' Report is concerned, all the sample companies comply with it. But only two companies have shown it in a tabular form in the annexure instead of narrative disclosure in the body of Directors' report.

Table 3 summaries the practices of sample companies with respect to disclosure in the main financial statement. It is observed that disclosures in notes to accounts are most prevalent.

Table 3

Disclosure Practice of Sample Companies regarding ESOP in Financial Statements

Disclosure Types	No. of Companies
Disclosure is made under Significant Accounting Policies regarding the method of ESOP accounting and other disclosures are in Notes to Accounts.	5
All disclosures are in Notes to Accounts	6
Total	11

Source: Annual Reports of sample companies. Results computed.

Regarding quality of disclosure a lot may be expected. Disclosure of accounting policies is sketchy. For example, policy of a company runs as follows: "Compensation cost relating to employee stock options plan, has been accounted in accordance with guidelines of Securities & Exchange Board of India."

Moreover, most of the companies have disclosed the amount of deferred compensation amortized in Notes to Accounts part instead of under the head 'Personnel Expenses', a Schedule attached to Profit & Loss Account. Regarding disclosure under the head Reserves and Surplus for stock option outstanding, detailed disclosure of deductions for forfeiture, expiry etc. are absent in all cases.

5.1.3. Compliance with SEBI Guidelines

All the sample companies have shown quantitative details of the stock option plans showing movement of outstanding stock options during the year in the Notes to Accounts of the financial statement. It has been observed that out of 11 companies, 3 have trust administered stock option plans that have compensation element. Although, the plan administered through trust has compensation element, foot note disclosure has been avoided by two sample companies. Out of these two companies, one has defended the practice on the ground that the plan is established prior to issuance of the SEBI Guidelines and accordingly no compensation cost is considered even for foot note disclosure. The other has not bothered to provide any such explanation. Only one company made a separate disclosure showing the effect on reported profit considering implicit cost of its plan instituted prior to the issuance of SEBI Guidelines.

5.1.4. EPS reporting

Stock options that allow purchase of shares of the company at a price less than the market value on the allotment date have dilutive potential on EPS (earnings per share). As per Accounting Standard 20 on EPS, issued by the ICAI, Indian companies are required to disclose basic and diluted EPS. All the sample companies have disclosed diluted EPS considering stock options outstanding.

5.2. 2006-07 Survey

5.2.1. Sample selection

We draw our sample from BSE 500 listed Indian companies that have issued shares pursuant to exercise of employee stock options till March 2007. We have taken these data from the companies' Annual Reports for the financial year 2006-07. Our initial sample consists of 99 companies. But we have to restrict our sample for non-availability of financial statements of 14 companies and only 85 companies can be included in our sample. We have hand picked data relating to different employee stock option schemes, accounting policies followed by the sample companies and ESOP related information from the annual reports of the sample companies. Table 4 gives classification of surveyed companies as per industry segment. Industry classification related information is obtained from CMIE Prowess database. It is observed that knowledge companies are more pro-active in administering ESOP schemes. Out of 85 companies, 42 companies belong to information technology and pharmaceutical sector.

Table 4

Industry Classification of ESOP Companies (2006-07 Survey)

Industry Segments	No. of companies	%
Information Technology	30	35.3
Manufacturing- Drugs and Pharmaceuticals	12	14.1
Manufacturing- Others	16	18.8
Banking & Financial services	10	11.8
Other services	17	20.0
Total	85	100.00

Source: CMIE PROWESS Database. Results computed.

5.2.2. Stock based compensation schemes

As mentioned earlier, there are different types of stock option plans, such as, Employees Stock Option Plans (ESOPs), Employee Stock Purchase Plans (ESPPs), Restricted Stock Units (RSUs), Stock Appreciation Rights (SAR)/Phantom Shares. Table 5 presents classifications of sample companies on the basis of the nature of the employee compensation plans adopted. Our analysis reveals that out of 86 companies 83 companies granted Employee Stock Option Plan (ESOP), one company granted American Depository Share (ADS) Linked Stock Option, ESOP, and Restricted Stock Unit Plans, one company granted both ESOP and Stock Appreciation Rights (SAR), one company granted Employee Stock Purchase Scheme (ESPS). But there is no company with both ESOP and ESPP. Overall, it is observed that there is more variation in stock-based compensation plans in 2006-07 as compared to that in 2002-03 when only option plans were used by sample companies.

Table 5
Nature of Stock-based Compensation Plans (2006-07 Survey)

Particulars	No. of Companies
Companies granting ESOP	82
Companies granting ESPS	01
Companies granting ESOP & SAR	01
Companies granting ADS Linked Stock Option, ESOP and RSUs	01
Companies granting both ESOP & ESPP	00
Total	85

5.2.3. US GAAP accounting

It is observed out of 85 companies, 5 companies followed US GAAP for accounting of stock-based compensation plans as these companies prepared US GAAP financial statements simultaneously with Indian GAAP financial statements. One company also presented a reconciliation of profits under the Indian and the US GAAP.

5.2.4. Disclosure Practice

Most of the surveyed companies have disclosed details of stock-based compensation plans in Notes to the Accounts attached to the financial statements. However, 11 companies have not given any information in the financial statements. Such companies may be under the impression that disclosures in the directors' report under the SEBI Guidelines are enough and no more additional information need be given in the Note to Accounts. It is also found that there is wide diversity in these disclosures in Notes to Accounts. We have summarized most common information items that are disclosed by sample companies in Exhibit 2. But diversities exist regarding number of items disclosed and disclosure of impact of fair-value accounting is avoided by a large number of companies. Such a position may be due to lack of mandatory accounting standard.

5.2.5. Compliance with SEBI Guidelines

We found that all the companies have complied with SEBI guidelines through making disclosure in the Directors' report. However, such disclosures are not uniform and impact on EPS disclosure is avoided in a few cases. In a study it is demonstrated that assumptions adopted by Indian companies for valuation of option plans under fair value methods also vary widely (Dhar and De November 2008). Lack of any requirement to audit the disclosures under SEBI Guidelines may be a cause of such variation.

Exhibit 2

Common Items of ESOP related Disclosure

1. Options outstanding at the beginning of the year.
2. Options granted during the year.
3. Options lapsed during the year.
4. Options exercised during the year.
5. Options cancelled during the year.
6. Options outstanding at the end of the year.
7. Information about Compensation Committee/Trust.
8. Details of the meeting in which decision of granting of options have been taken.
9. Terms and conditions of the ESOS.
10. Fair value pricing model used for valuation of options.
11. Policies about amortization of compensation cost.
12. Accounting treatment of unamortized amount of compensation cost.
13. Weighted average exercise price.
14. Nature of volatility – Historical or not
15. US GAAP information.
16. Impact of fair value method after considering employee compensation expense on net profit and EPS.
17. Assumptions (risk-free interest rate, expected life, expected volatility, expected dividend, the price of the underlying share in market at the time of option grant) for the current year and previous year.

5.2.6. EPS reporting

Position of EPS reporting is better and all the sample companies have disclosed basic and diluted EPS pursuant to the requirements of Accounting Standard 20 on EPS reporting.

6. CONCLUSION

Now, developed countries have shifted to fair value accounting that requires recognition of stock option compensation expenses based on fair value of option.

The position will change from April 2011 when Indian companies will be required to follow IFRS in the preparation of financial statements. Consequently, the requirements of IFRS 2, share-based Payment will be applicable. But companies may shift to other share based compensation contracts.

Mandating expensing would raise the accounting cost of ESOPs to their approximate fair value forcing firms to reconsider the costs and benefits of ESOPs. To the extent that the use of ESOP was facilitated by favourable accounting treatment, adoption of IFRS 2 will cause Indian firms to switch to more cost efficient forms of compensation.

¹ In USA, the term ESOP is used for 'Employee Stock Ownership Plan' where an employee purchases shares of the employer company but such a plan has no 'option' feature. In India the term ESOP is used to denote 'Employee Stock Option Plan'. In this paper we have used the Indian connotation of ESOP.

² After the amendment in the SEBI Guidelines, fair value means not the intrinsic value but the fair value in the conventional sense i.e. fair value method of accounting as proposed under IFRS2 or SFAS 123(R).

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Guanxi Marketing—An Urge of 21st Century by Indian Banking Institutions

*Indrani Majumder**

"...a company's most precious asset is its relationship with its customers. It is not "who you know" but how well you are known to them"¹ -- Theodore Levitt²

ABSTRACT: There is a growing realization among Indian banks that it no longer pays to have a "transaction-based" operating model. There are active efforts to develop a relationship-oriented model of operations focusing on customer-centric services. The biggest challenge our banks face today is to establish customer intimacy without which all other efforts towards operational excellence are meaningless. The banks need to ensure through their services that the customers come back to them. This is because a major chunk of income for most of the banks comes from existing customers, rather than from new customers. Customer relationship management (CRM) solutions, if implemented and integrated correctly, can help significantly in improving customer satisfaction levels. The study delves into the relationship marketing practices of the units of the Indian Banking Industry. The study is exploratory in nature. An attempt also has been made to make a direction of future course of action of this sector.

Key Words : *Customer intimacy, Customer satisfaction, Profitable exchanges, Operational excellence, Business Process Reengineering.*

1. INTRODUCTION

Marketing is the crucial connection between company and customer; no enterprise can expect to succeed without a substantial investment in its marketing efforts. And modern

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marketing concept is telling that customer is the lifeblood of any business. In that background traditional approaches to marketing are beginning to show their limitations. Companies nowadays are devising ways of both surprising and impressing consumers, as well as ways of retaining their customer base. "Bringing customers back" has become the '*mul mantra*' of every business organization in this jet age, as consumers ever shows the switching tendencies at a jet speed due to the advent of different media. Nowadays organizations are proactively creating, developing and maintaining committed, interactive and *profitable exchanges* with selected customers or partners over time with a long term benefit perspective and thus marketing evolved into Guanxi (relationship in Chinese) marketing.

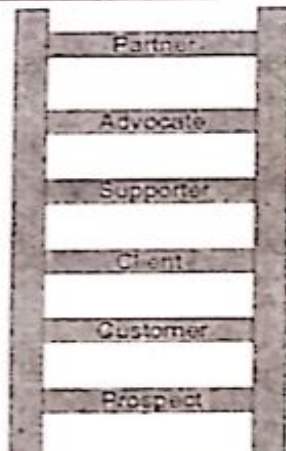
Guanxi or *Relationship* marketing is about relations – relation with the customers. It's about provision of goods and services that are valued by the customers. So we need to listen and refocus. Guanxi marketing is all about mapping all touch-point and evaluating what services are provided, and how, and by whom, and when, and what is expected by these customers. It's about customer expectations and satisfaction, it's about building loyalty and long-term relationships, it's a '*WIN-WIN*' situation. Gail McGovern and Youngme Moon explain in an article "Companies and the customers who hate them" (HBR June 2007) how many industries (cell phones, credit cards, banking, insurance, leasing) are using negative forms of relationship marketing by profiting from customers' confusion, ignorance or poor decision-making to establish various kinds of contracts, penalties and bleeding fees. Unfortunately these strategies are often very profitable, until eventually a customer-friendly competitor arrives on the scene, with an offering that puts customer satisfaction and transparency first.

The Chinese are acclaimed to be the masters of building Guanxi (relationship in Chinese). The core concept of Guanxi in Chinese is "a personal connection between two people or a group of people (a network) in which one is able to prevail upon another to perform a favor or service, or be prevailed upon". As an art of social relationship, Guanxi has generally formed the basis of Chinese social value structure. When it goes to the business reign, unfortunately, it often violates bureaucratic norms and leads to corruption. Such negative aspects would no doubt impair its great charm as a social art. Thankfully, while the research of relationship in the western is learning from the oriental wisdom, the science of relationship would definitely have a positive influence on this Chinese social art. As its Pinyin³ is becoming more popular in English language instead of any other translations such as "relationships" or "connections", we can see how widely and fiercely Guanxi is expanding its cultural, social and (mostly) commercial implications and influences beyond its Chinese cultural territory.

A sound philosophy is a backbone of 'Effective Marketing'. And Guanxi is that philosophy of most of the business organizations of 21st century, which was first described by Theodore Levitt in 1983 as "Relationship Marketing". The philosophy guides the organizations to make the customers clients, supporters, advocate and ultimately partner of the organization (Table 1). To survive in this millennium, to sustain profitable growth in the face of diminishing returns the marketing waves must be preceded by CRM ladder. According to

Harvard Review contributors Riechheld and Sasser, a 5% increase in customer retention can lead to a 25-85% rise in profits, depending on the industry and here lies the importance of Guanxi (Relationship) Marketing. If the organization can identify and understand its customers, engage them in a relevant, timely and motivating way and continually evaluate and anticipate how they want to interact, and then your brand and its value will consistently evolve (Figure 1). The Guanxi Marketing (GM) goal is to convert buyers into loyalists and loyalists into enthusiasts or evangelists.

Table 1: CRM Ladder of Loyalty

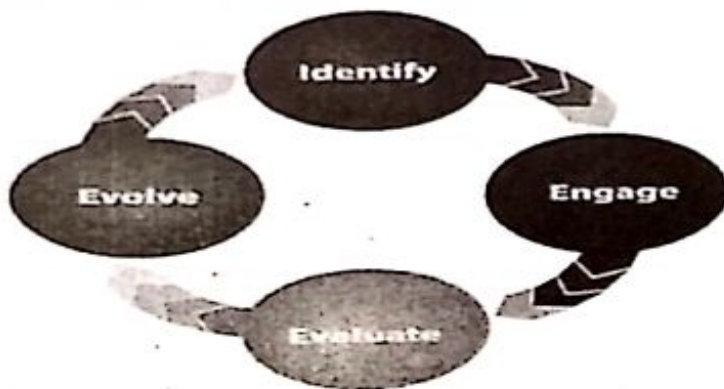
<ul style="list-style-type: none"> ■ Relationship of partner ■ Actively recommends you ■ Supports you passively ■ Repeat business, but passive or negative attitude ■ Carried out one transaction ■ Potential customer 		<p style="text-align: center;">↑</p> <p style="text-align: center;">Emphasis on developing and enhancing existing relationship (customer keeping)</p> <p style="text-align: center;">↓</p> <p style="text-align: center;">↑</p> <p style="text-align: center;">Emphasis on new customers (customer catching)</p> <p style="text-align: center;">↓</p>
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Source: <http://www.design-ireland.net/.../relational.gif>

2. GUANXI MARKETING MILIEU

In 1983 Levitt wrote: "In a great and increasing proportion of transactions, the relationship actually intensifies subsequent to the sale. This becomes a central factor in the

Figure 1: Stages of evolving a brand



Source: apps.permission.com.au/.../cat1.html

buyer's choice of the seller the next time". GM is strongly linked to 'Business Process Reengineering'. The idea of GM was originated in the 1950s (McGarry 1950, 1951; 1953, 1958) but was first mentioned by Berry in 1983. The term "guanxi marketing" has been commonly used in scientific literature as a synonym of another term - "interaction

approach" (Gronroos 1994). Gronroos (2004) has defined it as "the process of identifying and

establishing, maintaining, enhancing, and when necessary terminating relationships with customers and other stakeholders, at a profit, so that the objectives of all parties involved are met, where there is done by a mutual giving and fulfillment of promises". Harker's (1999) viewpoint was that guanxi marketing occurs when an organization engages in proactively creating, developing and maintaining committed, interactive and profitable exchanges with selected customers or partners over time".

In the contemporary era of hyper-competition, customer retention and loyalty became crucial for the marketers (Dick and Basu 1994; Reichheld 1996). Many marketers even believe retaining existing customers is more effective and cost-saving than to seek for the new ones (Hayes, Wheelwright and Clark, 1988; Spekman 1988). As a result, companies tend to maintain long-term relationships with customers than to make one-time sales (Cannie and Caplin 1991; Rosenberg and Czepiel 1984). In recent years, it has become a key topic in leading books on consumer behavior (Sheth et al. 1999). And using the vocabulary of lifecycle theory, the concept of guanxi marketing is approaching its maturity stage (Berry 1995; Thurau et al. 1999). Guanxi marketing is a dominant paradigm of marketing practice (Dwyer et al. 1987; Morgan and Hunt 1994).

Right from the beginning, marketing theory has tended to focus on the *suppliers' perspective*, rather than that of the customers. Little attention has been given to the willingness of the customer to become or stay a relational partner, even though there is wide consensus that relationships have to be "mutually perceived and mutually beneficial" (Berry 1995; Fournier et al. 1998). There continues to be extensive debate on the potential advantages to firms of developing lasting relationships with their customers (Narayandas 1998; Payne and Frow 2000; Reichheld and Sasser 1990). Lately, a number of authors have started to develop this field of research and redress the disequilibrium (e.g. Bendapudi and Berry 1997; Gwinner et al. 1998). Marketing during the 70's and 80's had been dominated by large multinationals that focused on product advertising relying almost exclusively on television. Yet during the eighties the era of 'services' started to gain traction and what emerged was a shift in focus from the 'product' to 'customer service' (Bejou and Palmer 2005). Effective networking is all about building relationships. Successful businesspeople understand that networking and relationship marketing are more about "farming" than they are about "hunting." It's about building long-lasting connections with other professionals (Misner 2003).

Wyner, G.A., (1999) suggested that market orientation is the overall strategic concept (the business philosophy) and relationship marketing is one "tool" to achieve customer orientation. As a prerequisite, we need market information and long-term focus and the outcome should be increased profit through increased customer loyalty. Wyner (1999) argued that one of the most visible shifts in marketing is the one from transaction marketing to relationship marketing (Table 2). Diller (1991); Glynn and Lehtinen (1995); Hansen and Bode (1999) have outlined the implications of relationship marketing and point out the differential areas of these two marketing strategies (Table 3).

Table 2: The Marketing Strategy Continuum

Transaction			Relationship			
← Characteristics →						
Market Orientation			Product as the unit of planning	Customer as the unit of planning		
↓			Transaction orientated (one-off)	Relationship building		
Competitor orientation	Customer orientation	Interfunctional coordination	Product investments	Market investments		
			Market analysis and segmentation	Customer analysis and segmentation		
	Relationship Marketing		Product performance	Service and quality marketing		
			Short-term profit	Long-term profit		

Source: Macleod and Trevor, 2002

Table 3: Key Differences between the concepts of relationship marketing and transactional marketing

Criterion	Relationship Marketing	Transactional Marketing
Primary Object	Relationship	Single transaction
General Approach	Interaction-related	Action-related
Perspective	Evolutionary-dynamic	Static
Basic-orientation	Implementation-oriented	Decision-oriented
Fundamental Strategy	Maintenance of existing relationship	Acquisition of new customers
Focus in decision process	All phases focus on post sales	Pre-sales activities
Intensity of contact	High	Low
Degree of mutual dependence	Generally high	Low
Measurement of customer satisfaction	Managing the customer base (direct approach)	Monitoring market share (indirect approach)
Dominant quality dimension	Quality of interaction	Quality of output
Production of quality	The concern of all	Primary concern of production
Role of internal marketing	Substantial strategic importance	No or limited importance
Importance of employees for business success	High	Low
Production focus	Mass customization	Mass production

Source: Diller 1991; Glynn & Lehtinen 1995, 103-106; Hansen & Bode 1999, 294-296)

http://www.uni-weimar.de/medien/.../%5BC9%5D_Hennig-Thurau_Hansen_book_2000.pdf

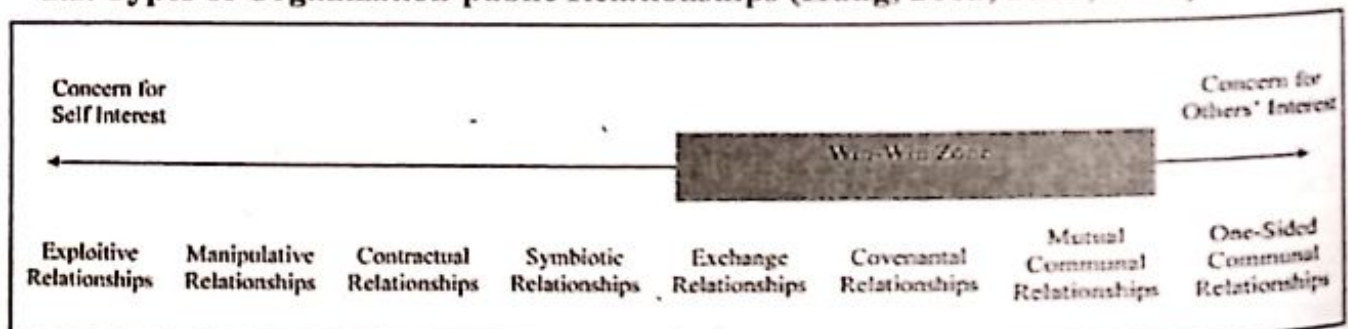
Palmer (1996) has suggested an interesting interpretation of GM that contains three levels:

- At '*Tactical level*' guanxi marketing is treated as one of sales promotion instruments (creating various loyalty programs with help of modern information technologies).
- At '*Strategical level*' guanxi marketing is described as a process, in which a company seeks to bind customers with legal, economic, technological, geographical and time ties. It concentrates on maintaining relations with existing customers rather than looking for new ones.
- At '*Philosophical level*' Guanxi marketing is defined as the essence of marketing, which redirects marketing strategy from product life cycle to customer life cycle. In this case, the emphasis is put on coordination of all functions, which include customer-based orientation, integration of all activities, involvement of personnel, and serving the needs of target markets

2.1. Schools of thoughts on the importance of GM:

- *Industrial Marketing and Purchasing (IMP)-Group*: Networks of companies are the main focus where relationships are seen as the criteria for developing and managing these networks (Håkansson 1982; Håkansson and Snehota 1995).
- *The Nordic school*: Scholars from this school believe "internal marketing" and engaging the whole company in relationship development with customers account for the effectiveness of marketing and service delivery (Gronroos 1981).

2.2. Types of Organization-public Relationships (Hung, 2002, 2005, 2006)



2.2. Approaches to Implementation of GM

Berry (1983):

1. Develop a core service around which to build a customer relationship.
2. Customize the relationship to the individual customer.
3. Augment the core service with extra benefits.
4. Price services to encourage customer loyalty.
5. Market to employees so that they, in turn, will perform well for customers.

Shani and Chalasani (1992):

1. Pursue a niche marketing strategy to identify a gap in the market.
2. Build up a customer database.
3. Focus on relationship marketing activities

Voss and Voss (1997):

“Successful implementation of a relationship marketing program requires a complement of marketing strategies that satisfy and motivate customers through the four phases of relationship development”. So it requires awareness, exploration, expansion and commitment.

Dodge and Fullerton (1997):

1. Choose the right customers i.e. the profitable ones.
2. Find ways to deliver superior value to these customers.
3. Personalisation of the relationship

And it becomes successful when...“the marketer and the customer abandon their adversarial role behaviour in favour of some form of partnership or alliance”.

The services literature emphasizes the importance of having good long term relationship with customers (Crosby et al. 1990; Parasuraman et al. 1985). Relationship marketing is an old idea but a new focus now at the forefront of services marketing practice and academic research. The impetus for its development has come from the maturing of services marketing with the emphasis on quality, increased recognition of potential benefits for the firm and the customer, and technological advances. During the eighties the era of 'services' started to gain traction and what emerged was a shift in focus from the 'product' to 'customer service'. Accelerating interest and active research are extending the concept to incorporate newer, more sophisticated viewpoints. Emerging perspectives explored here include targeting profitable customers, using the strongest possible strategies for customer bonding, marketing to employees and other stakeholders, and building trust as a marketing tool. Although relationship marketing is developing, more research is needed before it reaches maturity (Berry 1995).

GM is gradually becoming important in financial service sector (Zineldin 1996) from a belief that if a bank develops and sustains a solid relationship with its customers, its competitors cannot easily replace them and therefore this relationship can provide sustained competitive advantage (Gilbert 2003). Moriarty et al. (1983) has suggested relationship concept in the banking sector which states that banks can increase their profits by maximizing the profitability of the total customer relationship over time instead of seeking to get more profit from any single transaction. Perrien et al. (1992) observed that severe competitive pressures forces financial intuition to restructure their marketing strategies by developing into long-term relationship with customers.

3. OBJECTIVE OF THE STUDY

In accordance with the past studies so far thrashed out in the previous section 'Guanxi Marketing' uses the event-driven tactics of customer retention marketing, and treats marketing as a process over time rather than solitary unconnected events. GM is based on the premise that important accounts need focused and continuous attention. By molding the marketing message and tactics to the lifecycle of the customer, the *Guanxi Marketing* approach can achieve very high customer satisfaction and is highly profitable. In that light the objective of the present study are following:

- To portray the practices of guanxi marketing in Indian banking institutions to convert a prospect to a client.
- To study the return of the guanxi marketing practices in the banking sector.
- To make a direction towards needful.

4. GUANXI MARKETING IN INDIAN BANKING INSTITUTIONS

4.1. 80-20 rule and options to retain customer base intact in service organizations

Worldwide service organizations have been pioneers in developing customer retention strategies, the pioneering intent of guanxi marketing. Banks have relationship managers for select customers, airlines have frequent flyer programs to reward loyal customers, credit cards offer redeemable bonus points for increased card usage, telecom service operators provide customized services to their heavy users, and hotels have personalized services for their regular guests. In the context of service, guanxi marketing has been defined as attracting, maintaining and in multi-service organizations enhancing customer relationships (Berry 1983). Here attracting customers is considered to be an intermediary step in the relationship building process with the ultimate objective of increasing loyalty of profitable customers. This is because of the applicability of the 80-20 rule. According to Market Line Associates, the top 20% of typical bank customers produce as much as 150% of overall profit, while the bottom 20% of customers drain about 50% from the bank's bottom line and the revenues from the rest just meeting their expenses.

4.2. Liberalization escorts the urge for guanxi marketing in Indian banking sector

In recent years, the banking industry around the world has been undergoing a rapid transformation. In India also, the wave of deregulation of early 1990s has created heightened competition and greater risk for banks and other financial intermediaries. The cross-border flows and entry of new players and products have forced banks to adjust the product-mix and undertake rapid changes in their processes and operations to remain competitive. In the present era most of the banking institute opts for GUANXI Marketing from an understanding that it is the key element of differentiation that allows a bank to develop its customer base and sales capacity. Increasing competition, deregulation, and the internet have all contributed to the increase in to entry and exit for the customers, making it easier to switch banks or brokers

without feeling the pinch in the wallet. Hence retaining customers is a major concern for banking institutions, which underscores the importance of customer relationship management (CRM). Customers, faced with an increasing array of banking products and services, are expecting more from banks in terms of customized offerings, attractive returns, ease of access and transparency in dealings. By using knowledge of the customer, banks can turn customer relationship into a key competitive advantage. Banks can develop customer relationships across a broad spectrum of touch points--branches, kiosks, ATMs, internet, electronic banking, smart cards, call centres and phone banking. The full integration of these systems, their associated business processes, and the methods, for which information is extracted and used, forms the basis for CRM. The deepening of technology has facilitated better tracking and fulfillment of commitments, multiple delivery channels for customers and faster resolution of mis-coordinations.

Unlike in the past, the banks today are market driven and market responsive. The top concern in the mind of every bank's CEO is increasing or *at least maintaining* the market share in every line of business against the backdrop of heightened competition. With the entry of new players and multiple channels, customers (both corporate and retail) have become more discerning and less "loyal" to banks. This makes it imperative that banks provide best possible products and services to ensure customer satisfaction. To address the challenge of retention of customers, there have been active efforts in the banking circles to switch over to customer-centric business model. The success of such a model depends upon the approach adopted by banks with respect to customer data management and customer relationship management. '*Customer-centricity*' implies increasing investment in technology. Throughout much of the last decade, banks world-over have re-engineered their organizations to improve efficiency and move customers to lower cost, automated channels, such as ATMs and online banking.

4.3. Reserve Bank's Initiative in customer retention aspect

The Reserve Bank initiated several measures during 2006-07 to protect customers' rights, enhance the quality of customer service and strengthen the grievance redressal mechanism in the Reserve Bank as well as in banks. A new department for customer service, 'Customer Service Department', was constituted in the Reserve Bank which became operational on July 1, 2006 mainly to (i) oversee the customer service aspects relating to grievance redressal by banks; (ii) administer the Banking Ombudsman (BO) Scheme; and (iii) liaise with the Banking Codes and Standards Board of India (BCSBI). The department also oversees the level of customer service in the Reserve Bank offices. The data regarding the complaints received at the Reserve Bank offices are collated and analyzed at Central Office level on a monthly basis and reviewed by the Local Board on a quarterly basis. The 'Code of Bank's Commitment to Customers' was released on July 1, 2006 which signifies the first formal collaborative effort by the Reserve Bank, banks and the BCSBI to provide a framework for a minimum standard of fair practices on various banking transactions for individual customers. Out of 84 scheduled commercial banks, 70 banks are committed to follow the code as members of the BCSBI. In order to facilitate easy comparison of service charges of various banks by their customers, banks were advised on July 20, 2006 to place service charges and

fees on the homepage of their website at a prominent place under the title of 'service charges and fees'. A web link to the websites of the banks was provided on the Reserve Bank's website. Banks were also advised that a complaint form, along with the name of the nodal officer for complaint redressal, may be provided on the homepage itself to facilitate complaint submission by the customers. Based on the recommendation of the Committee on Procedures and Performance Audit of Public Services (CPPAPS) (Chairman: Shri S.S. Tarapore) and for enhancing the effectiveness of the grievance redressal mechanism, banks were advised, on February 22, 2007, to place a statement of complaints before their boards/Customer Service Committees along with an analysis of the complaints received. Banks have also been advised to place the detailed statement of complaints and their analysis on their websites for information of the general public at the end of each financial year. The complaints should be analyzed to identify customer service areas in which the complaints are frequently received, frequent sources of complaint, and to identify systemic deficiencies, for initiating appropriate action to make the grievance redressal mechanism more effective. Further, banks were also advised to disclose brief details relating to customer complaints such as number of complaints received, number of complaints redressed and number of pending complaints along with their financial results. Similarly, banks were also required to disclose brief details relating to 'awards' passed by the Banking Ombudsmen such as number of awards passed, number of awards implemented/remaining unimplemented along with their financial results. With a view to ensuring better governance standards and transparency in the conduct of affairs of public institutions, the Government had, on April 21, 2004, authorized the Central Vigilance Commission (CVC) as the 'designated agency' to receive written complaints or disclosure of any allegation of corruption or of misuse of office, and recommend appropriate action. The jurisdiction of the CVC is restricted to employees 52. As private sector banks and foreign banks are outside the purview of the CVC, the Reserve Bank introduced a similar scheme called 'Protected Disclosures Scheme for Private Sector and Foreign Banks' on April 18, 2007. The complaints under the scheme cover areas such as corruption, misuse of office, criminal offences, suspected/actual fraud, failure to comply with existing rules and regulations, and acts resulting in financial loss/operational risk, loss of reputation, and act detrimental to depositors' interest/public interest. Under the scheme, employees of the bank concerned (private sector banks and foreign banks operating in India), customers, stakeholders, NGOs and members of public can lodge complaints.

4.4. Guanxi marketing and yields to the banking sector of country

According to a spokesperson of Standard Chartered Bank, "Previously the customer operations were limited to current and saving account operations. Now more and more customers are going beyond the deposit function and showing interest in various bank products like credit cards, personal, house building and educational loans. This change made imperative for every bank to have a full-blown CRM solution". According to IDBI Bank state head, West Bengal and Ranchi, "Among the few businesses which understood technology to be blended with human touch was banking, especially retail banking. Today, retail banking is primarily expanding and maintaining the existing customer base. This is only possible if the bank has a long-term plan of customer relationship management. IDBI bank, was fortunate to

be mindful of the opportunities in embracing both technology and customer relationship. It reflected in a hugely successful programme that they launched last October. Branded "Saathiya", it strove to map customer delights and dismay. As per the feedback, we were swift to put into place mobile- and Internet-driven consumers sweeteners." One of India's major commercial banks, UBI, wanted to offer their customers a cost-efficient and convenient alternative to enquire about its suite of financial services. With the proliferation of mobile phone subscribers in India (149.5 million in 2006), SMS is the ideal medium for UBI to reach new -- and engage existing -- customers. Voice of GM, Marketing and New Initiatives, United Bank of India make it clear that enabling their customers to enquire via SMS (with a strategic partnership with Sybase 365, a subsidiary of Sybase, Inc., the global leader in mobile messaging interoperability and mobile content delivery) about their different types of services, such as loans or opening new accounts, frees up a tremendous amount of time for their customer service officers to perform more value-added services. In addition, this mobile enquiry service ensures customers receive timely information -- without the need to dial a call centre, go through a tedious interactive voice response system, or make a physical trip to the bank and thus is a part of guanxi marketing.

4.5. SBI's (The Leading Indian Banking Institution) Customer Service

A number of initiatives were launched to intensify focus on customer service. These include conducting of Open House or Town Hall Customer Meets with participation by Circle Management; 'Operation Samay' at branches to ensure that counters open for business before time and drawing up of ground rules for customer service for operating staff. Customers were encouraged to provide frank and honest feedback on services at Open House Meets. The Bank became a member of the Banking Codes and Standards Board of India (BCSBI) in September 2006. The Bank has thereby adopted the BCSBI's Code of Bank's Commitments to Customers as the Fair Practice Code for implementation at all its branches. The Bank has also appointed Code Compliance Officers at all its Local Head Offices. The Bank places importance not only to redress customer grievances but also in identifying systemic/attitudinal issues, if any, that lead to a high frequency of complaints in particular areas and in rectifying them.

A strategy paper prepared by SBI's Karnataka Circle, says that technology, although an important weapon to fight competition, will also have to be aided by "boutique banking". Under a pilot project called the Customer Service Excellence Initiative, the bank is trying out some ideas in customer service in 12 branches in Bangalore city. The objective of the initiative that began in November 2006 was to transform these 12 branches - from ambience to the attitude, from the leadership to the men and women manning the counters, and leave such an impact on the customer that he or she would make favourable comparisons with the best in the private sector. That goal seems closer to fruition if initial reactions of some customers whom *Business Line* spoke to, are anything to go by.

4.6. Hospitality Edge in SBI's Service

In a benchmarking move aimed at improving customer service, SBI decided to borrow some tips from the hospitality industry. The bank had approached the Taj Group in Bangalore

to conduct sessions on etiquette and communication, particularly for front line staff. About 500 of its staff, including top officials underwent this training. In due course, it intends to take this programme to 50 more branches. This is in addition to the Connect to Customer programme of the bank, an internal training system of the bank for customer service that trains every one, including messengers and guards in branches. Around 4,000-5,000 staff members have been trained in customer service under this programme.

State Bank Group, which consists of State Bank of India, its seven Associate Banks, and State Bank International & Commercial Bank Ltd. (hereinafter collectively referred to as "Bank") intends to launch a Loyalty Rewards Program for its customers using Bank's Debit Cards on merchant POS terminals

5. CONCLUSION

Indian banks have started implementing full-blown GUANXI or CRM packages as they are getting networked. During the period of planned economic development, the bank products were bought in India and not sold. What our banks, especially those in the public sector, lack was the marketing attitude -- a customer-oriented operation. But nowadays banking sector is experiencing a shift from 'product centric approach' in marketing to 'customer centric approach in this 21st century. Banks are vying with each other to provide multitudes of services to the customers. One of the recent observation has been that a silent revolution is going on in Banks viz. 'cradle to grave strategy' to fulfill the life long needs of the customers. This is true and this is the principle behind "Customer Relationship Management"- a new relationship marketing strategy. Once such a long enduring relationship is established, the Bank tries to sell multitude of products to the customer -- be an individual or a Corporate without any room for them to lookout for any other financial service provider. What is needed is the effort on the part of the bankers to improve their service image and exploit their large customer information base effectively to communicate product availability. Achieving customer focus requires leveraging existing customer information to gain a deeper insight into the relationship a customer has with the institution, and improving customer service-related processes so that the services are quick, error free and convenient for the customers.

With banks using Internet as one of the mediums of delivering services, CRM becomes a part of Internet banking. Though most Indian banks like IDBI Bank, UTI or State Bank of India (SBI) still do not have a separate CRM solution, Banks like SBI are at the implementation stage of core banking solutions while others are using the CRM package as a part of their core banking solutions; for example, IDBI Bank uses the CRM package which came with Infosys Finacle. Along with these banks, Reserve Bank of India (RBI) is also taking care of customer services, with customers whose profiles vary from large government departments to the banking industry. For example, RBI provides the Integrated Forex Management System for online collection and dissemination of data and information from or to its constituents in a secured environment. RBI deputy governor, Vepa Kamesam, in a recent address delivered at the Central Bank of Sri Lanka, said that the apex bank is considering the possibility of introducing electronic cheques along with the implementation of

a secure Web server that will provide a common platform for RBI's customers to interact with the bank, access necessary information and file returns in a most secured way.

Banks need to have very strong in-house research and market intelligence units in order to face the future challenges of competition, especially customer retention. Marketing is a question of demand (customers) and supply (financial products & services, customer services through various delivery channels). Both demand and supply have to be understood in the context of geographic locations and competitor analysis to undertake focused marketing (advertising) efforts. Focusing on region-specific campaigns rather than national campaigns would be a better strategy for a diverse country like India.

¹ The marketing imagination, 1986, New York: Free Press (New, expanded ed.)

² Theodore Levitt (March 1, 1925, Vollmerz, Main-Kinzig-Kreis, Germany – June 28, 2006, Belmont, Massachusetts) was an American economist and professor at Harvard Business School and a writer. He was also editor of the *Harvard Business Review* and an editor who was especially noted for increasing the Review's circulation and for coining the term globalization.

³ Pinyin, more formally Hanyu pinyin, is the most commonly used Romanization system for Standard Chinese. *Hanyu* is the Han (Chinese) language, and *pinyin* means "phonetics", or more literally, "spelling sound" or "spelled sound". Developed by a government committee in the People's Republic of China, the system was initially approved by the Chinese government on February 11, 1958.

⁴ According to Business Process Reengineering theory, organizations should be structured according to complete tasks and processes rather than functions. The business process reengineering method is described by Hammer and Champy (1993) as "the fundamental reconsideration and the radical redesign of organizational processes, in order to achieve drastic improvement of current performance in cost, services and speed".

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Stock Selection Performance of Mutual Fund Managers in India: An Empirical Study

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ABSTRACT: Competitive efficiency in the Indian mutual fund industry has shown a tremendous improvement since the entry of private sector mutual funds in 1993. Total assets under management registered an increase from Rs.47,000 crore in March 1993 to a mind-boggling Rs.5,05,152 crore in March 2008. As a result of this large investment interest, the extent of stock selection skills exploited by the fund managers to earn superior returns always merits for continuous assessment. For this, the study made an attempt to evaluate the stock picking performance of the growth-oriented equity fund managers in India over a 3-year period from April 2005 to March 2008 using Jensen (1968) and Fama (1972) models. The study has found insignificant evidence for superior returns due to stock selectivity of the fund managers in India. It is also found that mutual fund schemes, on an average, have failed to outperform the market even after taking a risk higher than the market. In the diversification front, majority of the schemes have performed moderately well. As a result, compensation for the inadequate diversification, on an average, has not impacted selectivity performance anyway. But, the impact of the expected risk premium for the schemes is reported to be very high.

Key Words : *Mutual Funds, Selectivity, Net Selectivity, Diversification*

1. INTRODUCTION

Opening up the industry door to private sector banks and financial institutions in 1993 had ushered in a new era in the evolution of Indian mutual fund sector. Foreign asset management companies were also okayed to set up their funds. With the entry, competitive

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efficiency in the industry showed a tremendous improvement and led to an appreciable increase in the number and variety of schemes offered to the investors in terms of risk-return preference, maturity period and tax benefits. Since then, the industry continued to grow by leaps and bounds. Assets under management (AUM) of the industry registered an increase from Rs.47, 000 crore in March 1993 to a mind-boggling Rs.5,05,152 crore in March 2008. As per the report of Association of Mutual Funds of India (AMFI), there were 35 mutual fund houses covering Indian public sector, private sector, and joint ventures with foreign players as against only 9 public sector mutual funds in 1993. Out of the total 956 odd schemes (equity, income, balanced, money market, gilt, ELSS, ETFs) as on 31st March 2008, 270 growth schemes and 506 income schemes with Rs.3,77,484 crore assets under their management have scooped around 75% share in the total AUM of the industry. At the same time, there were around 590 open-ended schemes managing about more than 90% of the assets.

In the backdrop of this large investment interest, performance appraisal of the mutual fund schemes always remains in vogue and merits for a continuous assessment. In practice, active fund manager's performance broadly depends on three activities: strategic allocation of the fund's money to broad asset categories, selection of securities and timing market movements. Among them, security selection exercise of the fund managers is perhaps the most sought-after for an evaluation. And hence, has been chosen to be the subject of the present study. For this, rest of the paper has been organized as follows. Existing literature on the problem area has been reviewed in section 2. An attempt to set the specific objective of the study has been made in section 3. In section 4, the data and methodology used for evaluating the stock selection performance of the fund managers have been explained. A discussion on the empirical research findings comes next in section 5 and finally, section 6 presents the summary and conclusion of the study.

2. REVIEW OF LITERATURE

Stock selectivity of the fund managers as a means of evaluating the mutual fund performance always created a huge amount of equal interest among the investors, practitioners and academicians. At the same time, literature available in this field of finance is enormous. A few of them, which have been chiefly consulted in the preparation of this paper, are reviewed in this section.

Jensen (1968) made a pioneering work on the fund managers' selection ability to pick undervalued securities. The classic study reported negative abnormal returns of 115 mutual fund schemes, net of transaction costs. Fama (1972) advocated another methodology for mutual fund performance evaluation with detail break down of overall performance into four components; risk-free return, return expected due to risk assumed, net selectivity and diversification. Grinblatt and Titman (1994) empirically contrasted results of Jensen measure with the other measures. The study found uniformity in the inferences across the measures using same benchmark and varying inferences on a measure using different benchmarks.

In the Indian context, one of the early works in the area was made by Barua and Varma (1991). They evaluated the performance of 'Mastershare', the first close end mutual fund in India, during 1987-1991 and concluded with the satisfactory performance of the fund using Jensen and other measures. Shah and Thomas (1994) made the performance evaluation of 11 mutual fund schemes and reported inferior returns by all the schemes excepting one. Jaydev (1996) has examined the performance of two schemes, viz. 'Mastergain 1991' of UTI and 'Magnum Express' of SBI Mutual Fund. He found unsatisfactory diversification as well as insignificant selectivity and timing skills of the schemes:

Gupta (2000) has evaluated performance of 73 Indian mutual funds using weekly NAV data from 1994 to 1999 and arrived at a mixed bag performance of the schemes. Gupta and Gupta (2004) found no conclusive evidence in support of the superior stock selection performance of the Indian mutual fund schemes. Tripathy (2004) examined the performance of 31 tax-planning schemes in India over the period 1994-95 to 2001-2002 and reported no selectivity of the funds in general. Anand and Murugaiah (2006) also found lack of superior stock selectivity among the fund managers of 113 selected schemes during April 1999 to March 2003.

However, significant positive stock selection abilities of the Indian investment managers have been reported in Chander (2005) across the various measurement criteria considering a sample of 80 schemes during 1998-2002. Sehgal and Jhanwar (2008) also found improved evidence of selectivity using higher frequency data such as daily returns vis-à-vis monthly returns of 59 mutual fund schemes during 2000-2004.

Out of the studies consulted, though a few have confirmed the superior stock selection performance, on the whole, the review indicates insubstantial and inconsistency stock selectivity of the fund managers in India.

3. OBJECTIVES OF THE STUDY

In the light of the above discussions, it would be interesting to find out anew the extent of the fund managers' ability in the recent time to outperform the market by identifying and exploiting the opportunities inherent in the misvalued securities (undervalued or overvalued), and provide insights that can benefit the investors as well as the fund managers. Hence, the study specifically aims to evaluate the stock picking performance of the mutual fund managers in India using related time-tested models and to trace out the extent of difference in the rankings of the schemes across these selectivity measurement criteria. In pursuit of the same, the study also endeavours to appraise the schemes in the context of ex-post risk, return and diversification.

4. DATA AND METHODOLOGY

4.1. Data

4.1.1. Sample

In order to investigate the performance of mutual funds in India, a total of 31 open-ended, growth-oriented equity schemes, which showed a long-term existence in India, have been selected (Table 1). For this, mutual fund schemes floated before 2000 are only considered. Using convenience sampling technique 13 schemes of 5 public-sector mutual funds and 18 schemes of 9 private-sector mutual funds have been selected. Due care has been taken so that the sample can make a true representation of the population of the growth-oriented equity schemes in India.

4.1.2. Period of Study

The study considers performance evaluation of 31 sample schemes over a recent 3-year period from April 2005 to March 2008. The period is marked with relentless upward movements in the stock prices with occasional dips. And hence, has been chosen for the study to find out whether the funds, even during this indomitable bull market phase, have succeeded in surpassing the market performance by the active stock selection of their fund managers. At the same time, the study period is long enough to draw meaningful inferences on the selectivity of the mutual fund managers in India.

4.1.3. Data sources

Monthly NAV (Net Asset Value) data of each sample scheme and the data on their corporate actions have been compiled from www.indiainfoline.com and www.mutualfundsindia.com. In order to benchmark the performance of the mutual fund schemes, S & P CNX Nifty has been chosen as it is widely used in practice and research. Monthly S&P CNX Nifty data are collected from www.nseindia.com. The study has used the monthly yield on 91-day Treasury bills (T-bills) issued by the Government of India as surrogate to the risk-free rate of return and the data in this regard has been compiled from www.rbi.org.in.

4.2. Methodology

The study has utilized (i) Jensen measure (1968); and (ii) Fama's decomposition measure (1972), to throw light on the security selection practices of the fund managers. Average return, standard deviation, portfolio beta and R^2 as well have been calculated for each scheme to know their actual earning, risk and extent of diversification.

Table 1: Selected Sample Schemes

Sr. No.	Name of the Scheme	Nature of Sponsor	Year of Launch
1	Birla Sunlife Advantage Fund	Private	1995
2	Birla Sunlife Equity Fund	Private	1998
3	Birla Sunlife India Opportunities Fund	Private	1995
4	Boroda Pioneer Diversified Fund	Public	1994
5	Canara Robeco Equity Diversified Fund	Public	2003*
6	Canara Robeco Expo	Public	1994
7	Canara Robeco Fortune'94	Public	1995
8	DBS Chola Opportunities Fund	Private	1997
9	FT India Bluechip Fund	Private	1993
10	FT India Prima Fund	Private	1993
11	FT India Prima Plus Fund	Private	1994
12	HDFC Capital Builder Fund	Private	1993
13	HDFC Equity Fund	Private	1994
14	ICICI Pru Growth Plan-Cumulative	Private	1998
15	JM Equity Fund	Private	1994
16	Kotak 30	Private	1998
17	LIC Equity Fund	Public	1993
18	LIC Growth Fund	Public	1994
19	Magnum Equity Fund	Public	1991
20	Magnum Global 94	Public	1994
21	Magnum Multiplier Plus 93	Public	1993
22	Reliance Growth Fund	Private	1995
23	Reliance Vision Fund	Private	1995
24	Tata Equity Opportunity Fund	Private	1992
25	Tata Pure Equity Fund	Private	1998
26	Tata Select Fund	Private	1996
27	Templeton India Growth Fund	Private	1996
28	UTI Equity Fund	Public	1992
29	UTI Masterplus	Public	1991
30	UTI Mastershare	Public	1986
31	UTI Mastervalue	Public	1998

*erstwhile Canbonus, Canglobal and Canpep'95 launched before 2000 merged with the Canara Robeco Equity Diversified Fund.

The monthly returns for each of the sample scheme have been calculated after making proper adjustment for the dividend, if any, paid by the scheme, as follows:

$$\text{Portfolio Return } (R_{pt}) = \frac{(\text{NAV}_t - \text{NAV}_{t-1}) + D_t}{\text{NAV}_{t-1}}$$

Where, R_{pt} = Return of a scheme for the month of 't'.
 NAV_t = Net asset value of the scheme at the end of the month 't'.
 NAV_{t-1} = Net asset value of the scheme at the end of the preceding month 't-1'.
 D_t = Dividend paid during the month of 't'.

Similarly, the monthly returns for the market index, i.e. for S & P CNX Nifty have been calculated using the following formula:

$$\text{Market Return } (R_{mt}) = \frac{(\text{Market Index } t - \text{Market Index } t-1)}{\text{Market Index } t-1}$$

Where, R_{mt} = Return of the market benchmark for the month of 't'.
 $\text{Market Index } t$ = Market value of the index at the end of the month 't'.
 $\text{Market Index } t-1$ = Market value of the index at the end of the preceding month 't-1'.

4.2.1. Jensen Measure

Michael C Jensen (1968) developed an absolute measure based on Capital Asset Pricing Model (CAPM) to find out the stock selection ability of the mutual fund managers by regressing excess fund returns with the excess market returns. This model can be presented as follows:

$$(R_{pt} - R_f) = \alpha + \beta(R_{mt} - R_f) + e_p$$

Where,
 R_{pt} = Average Return of the Scheme
 R_f = Risk-free Rate of Return
 α = Intercept measuring predictability of the fund manager
 β = Systematic Risk of the scheme
 R_{mt} = Average Return of the Market
 e_p = Random Error Term

Here, the intercept (α) of the equation provides Jensen's measure of performance. A positive and significant Alpha (α) value indicates average extra return earned by a scheme over the benchmark return after considering the level of systematic risk assumed by the fund

and reflects the superior performance of the scheme due to superior selectivity of the fund manager. In this paper, alpha values of the sample schemes thus obtained were tested for z variate at 1% and 5% significance levels.

4.2.2. Fama's Decomposition Measure

Eugene F Fama (1972) developed another portfolio performance evaluation framework with a finer breakdown of the performance of a fund. It segregates the total return into risk-free rate of return, return due to market risk and return emanating from the stock selection ability (selectivity) of the manager at a given level of risk. This can be illustrated as below:

$$R_p = R_f + \underbrace{\beta(R_m - R_f)}_{\substack{\text{Compensation} \\ \text{for systematic} \\ \text{Risk}}} + \underbrace{(R_m - R_f)(\sigma_p/\sigma_m - \beta)}_{\substack{\text{Compensation} \\ \text{for inadequate} \\ \text{diversification}}} + \underbrace{(R_p - R_f) - (\sigma_p/\sigma_m)(R_m - R_f)}_{\substack{\text{Net selectivity} \\ \text{or Net superior return} \\ \text{(excess return after} \\ \text{adjusting for all risks)}}$$

Risk-free
Selectivity
Rate of Return

Where,

- R_p = Average Return of the Scheme
- R_f = Risk-free Rate of Return
- R_m = Average Return of the Market
- β = Systematic Risk of the scheme
- σ_p = Standard Deviation of the scheme returns
- σ_m = Standard Deviation of the market returns

As per Fama (1972), selectivity i.e. the stock selection ability of the fund managers can again be decomposed into two parts, viz. compensation for diversification and net selectivity. In fact, greater the diversification achieved by a fund, lesser would be the compensation for inadequate diversification and vice-versa. This may be close to zero for a well-diversified fund and will always take a non-negative value otherwise. As a result, net selectivity, which is the difference between the selectivity and the compensation for inadequate diversification, can always be less than or equal to that of the selectivity. A positive net selectivity represents superior return even after the extra return required for inadequate diversification. On the other hand, negative net selectivity denotes that the fund manager has failed to earn even a part of the return required for inadequate diversification.

5. EMPIRICAL FINDINGS AND DISCUSSIONS

5.1. Ex-post risk, return and diversification

5.1.1. Rate of Return and Risk

Table 2 depicts the results of the return, risk and diversification calculations of the sample mutual fund schemes together with the benchmark return and risk. It is found that all the 31 sample schemes have succeeded to score positive returns in gross as well as after accommodating for the risk-free return over the study period from April 2005 to March 2008. This can be mainly contributed to the indomitable stock market uprising over the same 3-year period. But interestingly only 14 schemes i.e. Birla Sunlife Equity, DBS Chola Opportunities, FT India Prima Plus Fund, HDFC Equity Fund, Kotak 30, Magnum Equity, Magnum Global 94, Magnum Multiplier Plus 93, Reliance Growth, Reliance Vision, Tata Equity Opportunity, Tata Pure Equity, Tata Select and UTI Mastershare, representing 45.16 % of the total sample size, have managed to register a return higher than the average monthly benchmark return of 2.636 %. Where, Magnum Multiplier Plus 93 has delivered the highest return of 3.247 % per month, the lowest return is calculated for Canara Robeco Expo Fund.

In the context of total risk, it is found that 21 schemes (67.74 %) have assumed a risk greater than the market. UTI Mastershare tops the list with a risk of 11.59%, whereas, the lowest risk has been taken by Canara Robeco Fortune'94. It is also interesting to state that only 3 schemes, viz, FT India Prima Plus Fund, HDFC Equity Fund and Tata Pure Equity, have managed to get higher returns taking lower amount of risks vis-à-vis the market risk and return. On the other hand, there are 10 schemes out of the 31-sample schemes, which have earned lower return than the market taking risk higher than that of the market. These are Birla Sunlife Advantage, Boroda Pioneer Diversified, Canara Robeco Equity Diversified, FT India Prima Fund, HDFC Capital Builder, JM Equity, LIC Equity Fund, LIC Growth Fund, UTI Masterplus and UTI Mastervalue.

However, It is also evident from Table 2 that on an average mutual fund schemes earned 2.532% per month, which is below the monthly market return of 2.636%. So, it can be said that the schemes are in general failing to outperform the market even after taking an average risk of 7.678 %, which is higher than the market risk of 7.307 %.

5.1.2. Diversification

R^2 i.e. coefficient of determination measures the extent of variation in the mutual fund scheme's returns that can be explained by the market benchmark index. Low R^2 means that lesser proportion of the variation in the scheme's returns being explained by the market and hence, indicates poor diversification of the scheme. Looking at the R^2 value from the Table 2, it is revealed that 13 (41.94 %) schemes registered a diversification score less than the average of 0.7985. Where, UTI Mastershare (having lowest R^2 of 0.2990), FT India Prima Fund (0.5830), Magnum Global 94 (0.6330), did poorly in the diversification front, Canara Robeco

Sr. No.	Name of the Scheme	Scheme Return (R_F)	Risk-free Return (R_F)	Excess Return ($R_F - R_F$)	Market Return (R_M)	Market Risk (σ_M)	Scheme Risk (σ_F)	R^2	Scheme Beta (β_F)
1	Birla Sunlife Advantage Fund	0.02242	0.00542	0.01699	0.02636	0.07307	0.07456	0.8640	0.9482
2	Birla Sunlife Equity Fund	0.03058	0.00542	0.02515	0.02636	0.07307	0.07800	0.8570	0.9890
3	Birla Sunlife India Opportunities Fund	0.01664	0.00542	0.01122	0.02636	0.07307	0.06580	0.7600	0.7860
4	Boroda Pioneer Diversified Fund	0.02428	0.00542	0.01886	0.02636	0.07307	0.08206	0.8420	1.0300
5	Canara Robeco Equity Diversified Fund	0.02379	0.00542	0.01836	0.02636	0.07307	0.08117	0.7900	0.9870
6	Canara Robeco Expo	0.01612	0.00542	0.01070	0.02636	0.07307	0.07148	0.7950	0.8730
7	Canara Robeco Fortune'94	0.02101	0.00542	0.01559	0.02636	0.07307	0.06439	0.8220	0.7990
8	DBS Chola Opportunities Fund	0.02869	0.00542	0.02327	0.02636	0.07307	0.07935	0.6990	0.9070
9	FT India Bluechip Fund	0.02629	0.00542	0.02087	0.02636	0.07307	0.06899	0.9180	0.9050
10	FT India Prima Fund	0.01993	0.00542	0.01451	0.02636	0.07307	0.07816	0.5830	0.8170
11	FT India Prima Plus Fund	0.02830	0.00542	0.02288	0.02636	0.07307	0.06886	0.8790	0.8840
12	HDFC Capital Builder Fund	0.02394	0.00542	0.01852	0.02636	0.07307	0.07450	0.7270	0.8700
13	HDFC Equity Fund	0.02786	0.00542	0.02243	0.02636	0.07307	0.06825	0.9170	0.8950
14	ICICI Pru Growth Plan-Cumulative	0.02628	0.00542	0.02086	0.02636	0.07307	0.07102	0.9340	0.9400
15	JM Equity Fund	0.02451	0.00542	0.01909	0.02636	0.07307	0.07715	0.8260	0.9610
16	Kotak 30	0.03030	0.00542	0.02488	0.02636	0.07307	0.07480	0.8790	0.9600
17	LIC Equity Fund	0.01982	0.00542	0.01440	0.02636	0.07307	0.08944	0.8360	1.1190
18	LIC Growth Fund	0.01712	0.00542	0.01169	0.02636	0.07307	0.07870	0.7900	0.9580
19	Magnum Equity Fund	0.03027	0.00542	0.02485	0.02636	0.07307	0.07545	0.9040	0.9824
20	Magnum Global 94	0.03026	0.00542	0.02483	0.02636	0.07307	0.08096	0.6330	0.8822
21	Magnum Multiplier Plus 93	0.03247	0.00542	0.02705	0.02636	0.07307	0.07814	0.7850	0.9480
22	Reliance Growth Fund	0.03216	0.00542	0.02673	0.02636	0.07307	0.08080	0.7050	0.9280
23	Reliance Vision Fund	0.02709	0.00542	0.02167	0.02636	0.07307	0.07436	0.8380	0.9320
24	Tata Equity Opportunity Fund	0.02935	0.00542	0.02393	0.02636	0.07307	0.08264	0.8420	1.0370
25	Tata Pure Equity Fund	0.02722	0.00542	0.02179	0.02636	0.07307	0.07230	0.9010	0.9400
26	Tata Select Fund	0.02928	0.00542	0.02386	0.02636	0.07307	0.08203	0.7850	0.9950
27	Templeton India Growth Fund	0.02634	0.00542	0.02091	0.02636	0.07307	0.07096	0.8730	0.9070
28	UTI Equity Fund	0.02175	0.00542	0.01633	0.02636	0.07307	0.06655	0.8850	0.8570
29	UTI Masterplus	0.02598	0.00542	0.02056	0.02636	0.07307	0.07400	0.8880	0.9550
30	UTI Mastershare	0.02654	0.00542	0.02112	0.02636	0.07307	0.11590	0.2990	0.8660
31	UTI Mastervalue	0.01826	0.00542	0.01284	0.02636	0.07307	0.07940	0.6970	0.9070
Average		0.02532	0.00542	0.01989	0.02636	0.07307	0.07678	0.79848	0.92789

Expo (0.795), Canara Robeco Equity Diversified (0.79), LIC Growth Fund (0.79), Magnum Multiplier Plus 93 (0.785), Tata Select (0.785), Birla Sunlife Opportunities (0.76), HDFC Capital Builder (0.727), Reliance Growth (0.705), DBS Chola Opportunities (0.699) and UTI Mastervalue (0.697) have succeeded moderately to diversify their portfolio by selecting proper securities. The other 18 (58.06 %) schemes have shown greater diversification than the average (0.7985). Maximum amount of diversification has been calculated for ICICI Pru Growth Plan-Cumulative (0.9340). So, in nutshell, it can be commented that the schemes have performed moderately well in the diversification front excepting a few.

5.1.3. Systematic Risk (β)

The last column of the Table 2 represents systematic (market) risk inherent in the sample schemes. All the schemes excepting 3 (i.e. Boroda Pioneer Diversified, Tata Equity Opportunity and LIC Equity Fund) have showed Beta less than 1, indicating holding of less risky portfolio than the market portfolio. But still, it can be seen that majority of the schemes are highly volatile as their betas are very close to 1.

5.2. Stock selection performance

5.2.1 Jensen Measure (1968)

From the information reported in the Table 3, it is revealed that 19 schemes (61.29 %) have come out with positive alpha values, which indicate superior stock selectivity of their fund managers assuming their respective level of systematic risk. But, looking at their respective P-values, it is found that none of their positive stock picking performance is statistically significant even at 0.10 level. On the other hand, 12 schemes have reported negative alpha values, meaning poor performance in the stock selectivity front. Managers of LIC Equity Fund (rank 31), LIC Growth Fund (rank 30), Canara Robeco Expo Fund (rank 29) have exhibited abysmal performance in the stock selection game. Whereas, the managers of Magnum Multiplier Plus 93 (rank 1), Reliance Growth (rank 2), Magnum Global 94 (rank 3), Kotak 30 (rank 4) have succeeded to leave at least some mark of their good stock selection skills (though not statistically significant). Magnum Multiplier Plus 93 has secured No.1 rank by earning a maximum extra monthly return of 0.7 % out of their stock selection ability. However, on an average, the select growth-oriented equity schemes have outperformed the benchmark by a meager 0.039% per month exploiting active stock selection skills of their fund managers. From the investors' viewpoint, net of transaction costs, the performance would deteriorate further.

Sr. No.	Name of the Scheme	Jensen Measure (1968)	Rank	P value	Fama's (1972) Components of Investment Performance						
					Risk-free Return	Risk Premium	Imperfect Diversification	Net Selectivity	Rank	Selectivity	Rank
1	Birla Sunlife Advantage Fund	-0.0030	24	0.5590	0.00542	0.01985	0.00151	-0.00437	22	-0.00286	26
2	Birla Sunlife Equity Fund	0.0040	5	0.3990	0.00542	0.02071	0.00165	0.00280	7	0.00445	5
3	Birla Sunlife India Opportunities Fund	-0.0050	27	0.3640	0.00542	0.01645	0.00240	-0.00763	25	-0.00523	27
4	Boroda Pioneer Diversified Fund	-0.0030	25	0.6430	0.00542	0.02156	0.00196	-0.00465	23	-0.00269	25
5	Canara Robeco Equity Diversified Fund	-0.0020	22	0.7280	0.00542	0.02066	0.00259	-0.00489	24	-0.00230	23
6	Canara Robeco Expo	-0.0080	29	0.1930	0.00542	0.01827	0.00221	-0.00978	27	-0.00757	29
7	Canara Robeco Fortune'94	-0.0010	20	0.8120	0.00542	0.01674	0.00171	-0.00286	20	-0.00115	21
8	DBS Chola Opportunities Fund	0.0040	6	0.5810	0.00542	0.01899	0.00374	0.00053	12	0.00427	8
9	FT India Bluechip Fund	0.0020	12	0.5860	0.00542	0.01895	0.00081	0.00110	9	0.00192	15
10	FT India Prima Fund	-0.0030	26	0.7720	0.00542	0.01711	0.00528	-0.00789	26	-0.00260	24
11	FT India Prima Plus Fund	0.0040	7	0.3070	0.00542	0.01851	0.00122	0.00315	5	0.00437	6
12	HDFC Capital Builder Fund	0.0000	19	0.9650	0.00542	0.01821	0.00313	-0.00283	19	0.00030	19
13	HDFC Equity Fund	0.0040	8	0.2950	0.00542	0.01875	0.00081	0.00288	6	0.00369	9
14	ICICI Pru Growth Plan-Cumulative	0.0010	17	0.7170	0.00542	0.01968	0.00067	0.00051	13	0.00118	17
15	JM Equity Fund	-0.0010	21	0.8580	0.00542	0.02011	0.00199	-0.00301	21	-0.00102	20
16	Kotak 30	0.0050	4	0.3050	0.00542	0.02010	0.00133	0.00345	3	0.00478	4
17	LIC Equity Fund	-0.0090	31	0.1670	0.00542	0.02342	0.00221	-0.01123	30	-0.00902	31
18	LIC Growth Fund	-0.0080	30	0.1980	0.00542	0.02005	0.00250	-0.01086	29	-0.00835	30
19	Magnum Equity Fund	0.0040	9	0.3060	0.00542	0.02057	0.00105	0.00323	4	0.00430	7
20	Magnum Global 94	0.0060	3	0.4670	0.00542	0.01847	0.00473	0.00164	8	0.00636	3
21	Magnum Multiplier Plus 93	0.0070	1	0.2680	0.00542	0.01985	0.00253	0.00466	1	0.00719	2
22	Reliance Growth Fund	0.0070	2	0.3520	0.00542	0.01943	0.00371	0.00359	2	0.00730	1
23	Reliance Vision Fund	0.0020	13	0.6860	0.00542	0.01952	0.00179	0.00036	14	0.00215	13
24	Tata Equity Opportunity Fund	0.0020	14	0.7060	0.00542	0.02172	0.00196	0.00025	16	0.00221	12
25	Tata Pure Equity Fund	0.0020	15	0.6000	0.00542	0.01967	0.00104	0.00108	10	0.00212	14
26	Tata Select Fund	0.0030	10	0.6540	0.00542	0.02083	0.00268	0.00035	15	0.00303	10
27	Templeton India Growth Fund	0.0020	16	0.6700	0.00542	0.01900	0.00133	0.00058	11	0.00192	16
28	UTI Equity Fund	-0.0020	23	0.6890	0.00542	0.01794	0.00113	-0.00274	18	-0.00161	22
29	UTI Masterplus	0.0010	18	0.8980	0.00542	0.02000	0.00121	-0.00065	17	0.00056	18
30	UTI Mastershare	0.0030	11	0.8630	0.00542	0.01814	0.01507	-0.01209	31	0.00298	11
31	UTI Mastervalue	-0.0060	28	0.4290	0.00542	0.01899	0.00375	-0.00991	28	-0.00616	28
Average		0.00039			0.00542	0.01943	0.00257	-0.00210		0.00047	

5.2.2. Fama's Decomposition Measure (1972)

Results on Fama's decomposition measure have been placed in Table 3. Following this metric, return expected by the investors of mutual funds consists of Risk-free rate of return expected additional return for assuming market risk (Risk premium) and expected additional return for inadequate diversification. Excess of the actual return over the expected return of the portfolio, can be contributed to the superior stock selectivity of the portfolio manager and is known as Net Selectivity. Analyzing the Fama's components on investment performance, it is evident that expected risk premiums i.e. $\beta(R_m - R_f)$ for the schemes are very high with a maximum of 2.342 % for LIC Equity Fund and minimum of 1.645 % for Birla Sunlife Opportunities. In average, risk premium expected is found to be very high (1.943 %) and eats up a substantial portion of the actual average monthly return (2.532 %) earned by the schemes. This is mainly because of high systematic risk assumed by the schemes as represented by their beta values close to 1 or even more than 1.

It is also important to report that all the schemes, which have shown negative selectivity following Jensen criterion, have scored negative selectivity values following this measure also. Reliance Growth (rank 1), Magnum Multiplier Plus 93 (rank 2), Magnum Global 94 (rank 3) are the top three schemes in the context of overall stock selection ability following Fama (1972).

In the net selectivity front, 15 schemes (48.39 %) have shown negative return. And the rest 16 schemes (51.61 %) have reported positive net selectivity, indicating superior stock selection performance of their fund managers. For the three schemes namely, HDFC Capital Builder, UTI Masterplus and UTI Mastershare, though the overall selectivity scores are positive, their net selectivity scores turn to be negative. This means that these 3 funds have failed to generate enough returns to recover even a part of the compensation for the inadequate diversification of their portfolio.

In this context, the results of UTI Mastershare and Magnum Global 94 are worth to be mentioned separately. On the selectivity aspects, UTI Mastershare has earned a positive return of 0.298 % and ranked 11th. But, due to very poor diversification ($R^2 = 0.2990$), compensation expected by the investors for the same is reported to be very high (1.507 %). Hence, net selectivity of the scheme (- 1.209 %) becomes the worst among the select schemes and contributed enough to bring down the rank of the scheme in the last position (rank 31). Similarly, in case of Magnum Global 94, the scheme's rank relegates from 3rd position on selectivity front to 8th on net selectivity front owing to its inadequate portfolio diversification.

However, on an average, selectivity skills of the fund managers have contributed to a very insignificant amount of extra monthly return of 0.047%. But, after taking cognizance of the compensation for the inadequate diversification, average net selectivity has resulted into negative i.e. (-) 0.210 %. So, it can be said that, in general, the mutual fund managers in India are failing to generate superior returns by their active stock selection exercise.

5.3. Stock Selection Performance Across the Measurement Criteria

In order to find out, whether managers' stock selection performance ranking following various measurement criteria are differing largely from one another or not, the study attempts to calculate Spearman's Rank Correlation Coefficients between the ranks under each selectivity measurement criteria used. The results as per Table 4 show that magnitude of association between the rankings under Jensen (1968) and Fama's (1972) Selectivity Criterion [$r_s(1,3)$], between the Rankings under Jensen (1968) and Fama's (1972) Net Selectivity Criterion [$r_s(1,2)$] and between the Rankings under Fama's (1972) Net Selectivity Criterion and Fama's (1972) Selectivity Criterion [$r_s(2,3)$] are highly significant, even at 0.01 level. It implies fund managers' uniform stock selection performance across the measurement criteria. At the same time, highly significant [$r_s(1,2)$] and [$r_s(2,3)$] denotes that compensation for the inadequate diversification has not impacted selectivity performance anyway.

Table 4: Association Between the Rankings under Each Selectivity Measurement Criteria

Spearman's Rank Correlation Coefficients		$r_s(i, j)$	P-value
Association between Ranks under Jensen (1968) and Fama (1972) Selectivity Criterion	$r_s(1,3)$	0.992**	0.000
Association between Ranks under Jensen (1968) and Fama (1972) Net Selectivity Criterion	$r_s(1,2)$	0.869**	0.000
Association between Ranks under Fama (1972) Net Selectivity Criterion and Fama (1972) Selectivity Criterion	$r_s(2,3)$	0.868**	0.000

** Significant at 0.01 level (2-tailed)

6. SUMMARY OF FINDINGS AND CONCLUSION

The study has evaluated the performance of 31 growth-oriented equity schemes across the various public and private sector mutual funds over a period encompassing April 2005 to March 2008. It is found that, over the period, mutual fund schemes on an average have failed to outperform the market even after taking a risk higher than that of the market. Around 32.26 % sample schemes are found to make a mismatch in risk-return trade-off and have reported lower return after taking higher risk vis-à-vis the market risk and return. Though, in the diversification score, majority of the schemes have performed moderately well but are found to be highly volatile as their betas are very close to 1 or even more than 1.

Following the Jensen (1968) measure 61.29 % samples have shown superior but statistically insignificant stock selection performance of their fund managers. And on the whole, stock selection performance of the schemes though positive but is very low. Like Jensen (1968), Fama's (1972) decomposition measure too finds positive selectivity for the 61.29

% samples. But, in the net selectivity front, only 16 schemes, representing a little over 51 % of the total samples, have reported positive net selectivity. Average net selectivity, however, has resulted into negative i.e. (-) 0.210 % even before netting of any transaction cost.

In fact, security selection is the nub of the fund's investment decision-making as it signifies the success of identifying under or over valued securities by proper company and industry-specific forecasting on the part of the fund managers. Good stock selection performance indicates holding of outperforming portfolio by the fund managers out of their quality investment decision-making and hence, generation of above normal return. This study using Jensen (1968) as well as Fama (1972) models, on an aggregate, finds no such significant and conclusive evidence in support of superior stock selection activity of the mutual fund managers in India during the period of recent stock market bull run. This uniformity in the stock selection performance of the fund managers across the measurement criteria has also been statistically validated.

Analyzing the fund's performance attributes following Fama's (1972) measure, the impact of the expected risk premiums for the schemes is reported to be very high. This is mainly due to high betas reported by the select schemes. In fact, during the market upswings, funds always select to hold larger proportion of their investment in market portfolio and try to time the market by increasing the beta of their portfolio. Hence, high risk premiums as a consequence of high portfolio betas reported by the select schemes are very much a common phenomenon during the stock market boom and not contributing to the poor stock selection performance of the select schemes. At the same time, it is evident that the compensation for the inadequate diversification, on an average, has not impacted selectivity performance anyway. So, it can be concluded that the fund managers though have succeeded to some extent on the diversification front, but failed to earn significant positive returns by selecting misvalued securities in their portfolio. This can possibly be an outcome of the efficient market theory.

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Status of Commerce Education in Tripura Since 2001 to 2007- An Analysis

*Prallad Debnath**

ABSTRACT: The state Tripura was backed by a glorious past in commerce education to cater to the growing needs of the Schools, Colleges and small business houses, and so on. The flow of intake in the schools and colleges were exemplarily noticeable during the period between 1976 and 1990. Thereafter, the students' intake in the schools and colleges were started receding every year drastically. One of the major reasons was the change of syllabi in the colleges and university levels without corresponding changes in the school level. Moreover, the commerce students were not given opportunity in the arena of employment as a separate stream. Jobs in the schools and colleges were stuck for a long time. The resultant is of the changed syllabus in the college level turned out a good no. of students from attaining their bachelor degrees in commerce. Whereas, the percentage of successful students in the 10+2 stage was high. The unsuccessfulness was because of huge syllabi in the undergraduate level which has a little match with the 10+2 curriculum. The students were not aware of the tough syllabus in the college level. No parity was maintained between schools and colleges in regard to syllabus and other things. Consequently, a large number of students were turned out of the colleges of that time. In turn, fluctuations of the number of students in degree level were reflected in the annual report of the state education department. A survey has been made in this direction to show a line of declining trends in commerce education in Tripura since 2001 to 2007. The reasons are of mushrooming of the introduction of all short duration courses as per the demand of the job market and so on.

Key Words : *Commerce education, Curriculum, Commercialization,*

1. INTRODUCTION

This study attempted to present a short history of commerce education in Tripura. It made an empirical study of the spread or shrinkage of commerce education in the state. It

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investigated the commerce education system to find reasons behind the rise and fall of commerce education in Tripura. The study observed some weaknesses in the system and some threats outside the system. Finally the study tried to make certain policy suggestions in order to revive the waning commerce education in Tripura.

2. THE STATE OF TRIPURA

Tripura, a formerly princely state, was integrated with the Indian Territory in 1949. It is located at the south-west extremity of Assam and is surrounded on three sides by Bangladesh. The population of the state as per 2001 census is 31, 99,203.

Strategically, Tripura state has 839 KMs of border with Bangladesh and 162 KMs with Assam and Mizoram. The tribal communities constitute 30% (app.) of the total population of the state. Agartala, the capital town of Tripura is well connected with Kolkata, Guahati and Silchar by air as well as road and rail.

3. A SHORT HISTORY OF COMMERCE EDUCATION

It was a glorious past when commerce education in Tripura bloomed like anything to cater to the growing needs of the Schools, Colleges and small business houses and so on. The flow of intake in the schools and colleges were exemplarily noticeable during the period between 1976 and 1990. Thereafter, the students' intake in the schools and colleges started receding every year drastically. One of the major reasons was the change of syllabus in the colleges and university levels without corresponding changes in the school level. Moreover, the commerce students were not given opportunity in the arena of employment as a separate stream. Jobs in the schools and colleges were stuck for a long time. The changed syllabus in the college level turned out a good number of students from attaining their bachelor degrees in commerce. However, the percentage of successful students in the 10+2 level was high. The unsuccessfulness was because of huge syllabi in the undergraduate level which has a little match with the 10+2 curriculum. The students were not aware of the tough syllabus in the college level. No parity was maintained between schools and colleges in regard to syllabi and other important facets. Consequently, a large number of students turned out of the colleges at that time. In effect, fluctuations of the number of students in degree level were reflected in the annual reports of the state education department. Moreover, commerce students have not got any comparative advantage in the market of accounts related jobs over the students of science and arts from the government departments of the state. Tough syllabi, variety of subjects, and low success rate were at the root that compelled the students abstaining from studying commerce. That has been a major setback in the study commerce in the state of Tripura.

Despite of these, a ray of hope for the students of commerce has shined when they have been provided jobs to some extent in the Directorate of Auditors in Tripura under the Finance Departments of the State. But the number of jobs has been very low in comparison to the total number of commerce students in the state. Any way, the venture is obviously a timely step to revive the dying state of the commerce education in Tripura. After a gap of three or four

consecutive years the commerce students are being absorbed therein as the Auditor. The corporate business houses are of the new avenues for the commerce students in the state. But the fate of the commerce students is not so much favorable in creating any special impetus in the job markets as a special separate stream. The march to success is yet to flag off.

As time passed on, the schools made the required change of syllabus taking considerable time in the process and by this time, the colleges again changed their curriculum and mismatch did arise again in the syllabus between schools and colleges. The gap in syllabi between schools and colleges and between colleges and university as well has continued over time as a vicious circle. For the aforesaid reasons the inflow of students in some schools in rural areas and in one college in sub divisional town had dried up. If the prevailing situation continues, commerce education in more schools and colleges will be in severe crisis in near future in terms of the number of commerce students. The situation is almost deplorable all over the state. Only the schools and colleges in the capital city, Agartala have been showing a reasonably good trend in terms of students' intake. The number of schools has been increasing having the facility of commerce education although the responses are not that satisfactory. However, very recently some initiatives have been taken by the government departments to absorb the commerce graduates phase wise. But this appears to be very insufficient when compared to the number of annual pass-outs. The need is urgent to review the syllabus completely keeping in view the requirements of the corporate houses for absorbing of the students. A complete management oriented syllabus would help the commerce students meet the private sector demand. The commerce students will, then, find their places in the specialized job markets separated from disciplines.

4. DATA ANALYSIS

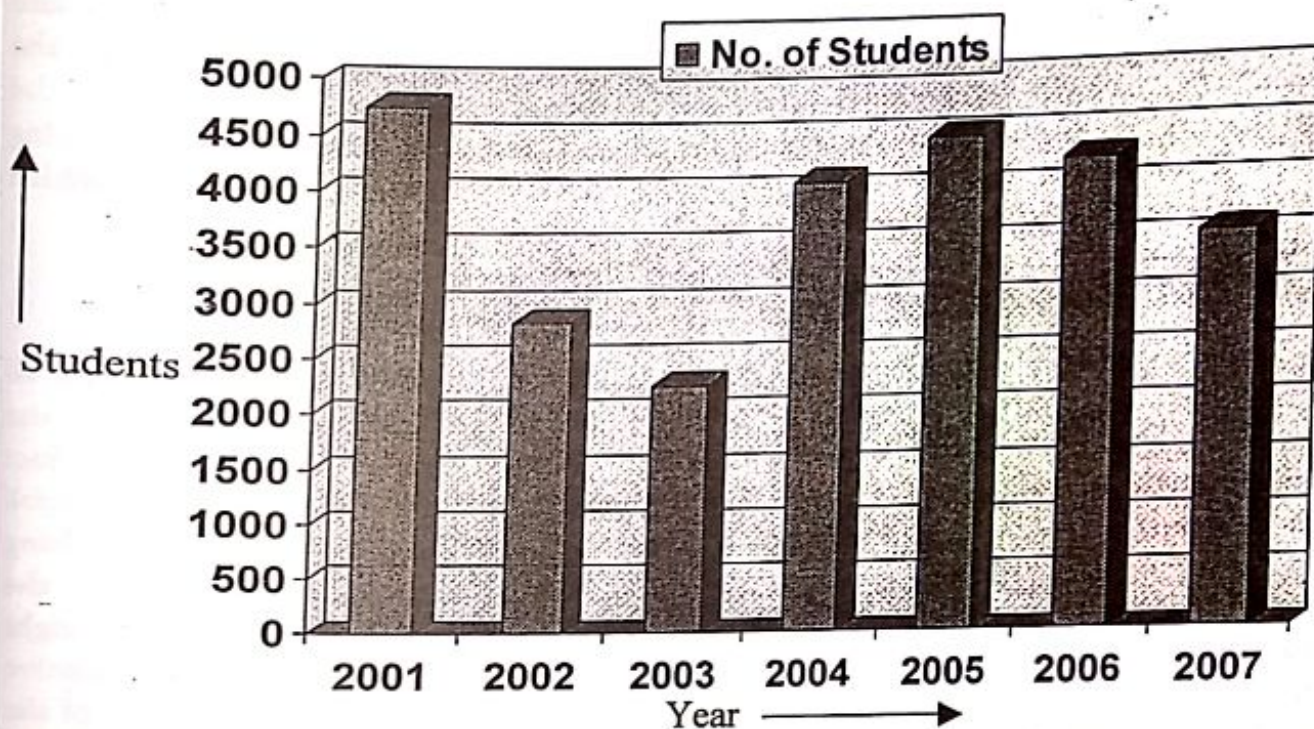
To facilitate year wise analysis a 7- year record of intake of commerce students in the schools, colleges and the university where commerce subjects are taught in the state are portrayed in Table 1:

Table 1: Commerce students in schools, colleges and University in Tripura

Year	No. of schools	No. of Colleges	University	No. of students
2001	80	7	1	3200+1500+60 (4760)
2002	*75	*6	1	2000+800+22 (2822)
2003	75	6	1	1500+700+40 (2240)
2004	80	6	1	3000+1010+50 (4060)
2005	86	6	1	3200+1200+50 (4450)
2006	86	6	1	3000+1200+40 (4240)
2007	84	6	1	2500+1000+49 (3549)

The annual intake of commerce students in schools, colleges and university has also been graphically presented in Figure 1.

Figure 1: Total Students' Intake in Commerce Education



From the above bar graph it is evidenced that the number of schools and colleges were reduced in 2002 and the trend continued up to 2003 along with the students' number. An upward move started in 2004 and was maintained till 2006. In 2007 again, there is a fall in the number of schools where commerce subjects were taught along with a fall in number of students as well. For placement in job after completion of study the commerce students are too much dependent on the job opportunities in the government services which are very much limited and went nil in several years. Moreover the commerce students have not developed that much confidence in themselves to hunt jobs anywhere other than in schools, colleges and government sector. All India level tests are required to absorb in colleges and universities is also a barrier in finding jobs there. The recent development is not as bad as some initiatives have been taken by the government of the state to offer a special employment opportunity for the commerce-educated people in Tripura. But this is too insufficient to absorb the large number in general. What is more important is to educate the students as per the requirement of the private sector. The time is up. Not only the syllabi and teaching method but also the dedications on the part of the teachers are equally important in order to boost up the employability of the commerce students and break the stationary state of commerce education in Tripura. A determined move is required to set the commerce education of the state in full swing. A curriculum revision keeping in pace with the market demand should be the most important move in that direction.

5. THREATS FROM PROFESSIONAL COURSES

The mushrooming of privately-run short duration professional courses in Tripura has added further problems in commerce education. A major threat to commerce education in the state is generated from all these short duration courses. The choice of professional course and of commerce graduation course is measured to be at the proportion of 4:1. Moreover, the students who complete professional course are absorbed in jobs quickly whereas the commerce students take long time to complete the course followed by a longer time of waiting for a job. These courses are of BBA, BCA, MCA, MBA and other professional courses, which have the huge demand in the job market.

6. SUGGESTION FOR REVIVAL

The one possible way to revive commerce education in Tripura may be to embrace all the professional approaches in regard to framing of curriculum keeping in pace with the demand of the job market which is very much essential now. Commercialization of a product is important for its sustenance in the long run as well as its gradual development. A re-look with constructive thoughts and foresight is as important as the new look. There is nothing more important than reframing of the whole matter with professional touch to revive the commerce education. Presently, the State has been lagging behind in setting the right infrastructure for development for commerce education. Last but not the least, positive attitude and positive thinking will pave the way to success. The demand of the hour is of the initiatives on the part of the educationists and government to re-frame the system in order to revive the limping commerce education before it is too late. As is said - "make the hay while the sun shines".

ANNEXURE

Brief Resume of Commerce Education:

1. Commerce education was started in Tripura in 1961.
2. Maharaja Bir Bikram College at Agartala was the pioneer in the establishment of Commerce Education in Tripura.
3. The followings are the some total of the academic institutions that have been imparting Commerce Education in Tripura:
 - I. School (HS) : 32
 - II. College : 06
 - III. University : 01
4. No. of Colleges imparting commerce education: 29, they are:
 - I. Maharaja Bir Bikram College, Agartala
 - II. Bir Bikram Memorial College, Agartala

- III. Women's College, Agartala
- IV. Ramthakur College, Agartala
- V. Inst. of Advance Studies in Education Agartala
- VI. Government Law College, Agartala
- VII. Government Music College, Agartala
- VIII. Govt. College of Arts & Crafts, Agartala
- IX. College of Agriculture, Lembuchera, West Tripura
- X. RIPSAT, Agartala
- XI. Dasaratha Deb Memorial College, Khowai
- XII. Belonia College, Belonia
- XIII. Michael Madhusudhan Datta College, Sabroom
- XIV. Govt. Degree College, Amarpur
- XV. Netaji Subhash Mahavidyalaya, Udaipur
- XVI. Kabi Nazrul Mahavidyalaya, Sonamura
- XVII. Govt. Degree College, Kamalpur
- XVIII. Govt. Degree College, Dharmanagar
- XIX. Ambedkar College, Fatikroy
- XX. R.K. Mahavidyalaya, Kailasahar
- XXI. Regional College of Physical Education, Panisagar
- XXII. Bhavan's Tripura College of Science & Technology, Anandanagar
- XXIII. Agartala Govt. Medical College, Agartala
- XXIV. Bhavan's Tripura College of Teacher Education, Narsingarh Govt. Degree College
- XXV. Khumlung Degree College, Jirania
- XXVI. Tripura Institute of Technology Narsingarh.
- XXVII. Tripura College of Nursing Hapania, Agartala-799014
- XXVIII. Women's Polytechnic College Hapania, Agartala- 799014
- XXIX. Tripura Medical College & Dr. BRAM Teaching Hospital

5. Courses offered are:

Commerce, Science – pure science all subjects and Bio- science all subjects, BBA, MBA, BCA, MCA, MRMD, BCRU, B.Tech, M.Tech, MBBS, LLB, Fisheries and so on.

SOURCES OF DATA

Directorate of school education

Directorate of Higher education

Statistical Department of Tripura

Tripura at a Glance – Tripura Darpan

State Archives of Tripura

Conducted personal Interviews in corporate houses

Conducted personal Interviews with the students and guardians.



Ethics in Corporate Governance: A Critical Review

Ananda Mohan Pal *

ABSTRACT: Ethics sets social behavior in the track of personal morality. Business ethics is supposed to set the business behavior on the track of fairness, justice and equity. Corporate governance is responsible for setting business behavior on the ethical line. The present study observed certain conceptual problems with the ethical issues in corporate governance and the consequential failures in practice also. In view of the observed problems the study attempted to explore the ways out.

Key Words : *Business Ethics, Corporate Governance, Tri-focal Approach, Additionality*

1. INTRODUCTION

Ethics is a state of mind that guides social behavior on the line of morality. It is not the business or any other social institution that could have a mind to conduct ethically. It is the people behind the organization who can move the behavior of the organization on the ethical track. Peter Drucker (1981) raised the issue by commenting that *there is neither a separate ethics of business nor is one needed*. It is management that acts as head and heart of a business and for conducting business with fairness, justice and equity management should behave ethically. The purpose of this study is to review the ethical strength of corporate

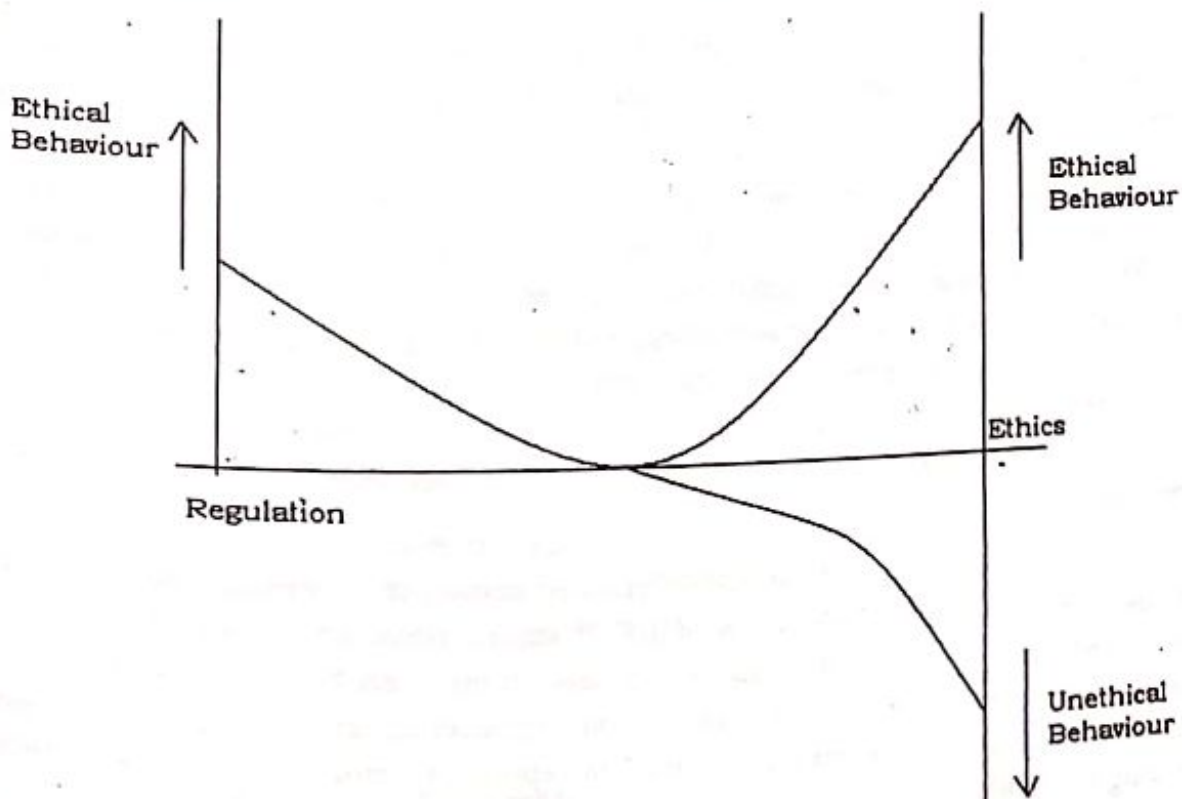
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governance to make managers conduct business with fairness, justice and equity. The study has further objective of exploring strategic infrastructural developments to promote ethical behavior in corporate governance.

2. CONCEPTS OF ETHICS AND CORPORATE GOVERNANCE

If we leave things on people's ethical sense, we have to allow such space where unethical behavior may also play in disguise. Then again, if we want to bind behavior on the ethical line, code of conduct needs to be formulated and once codified, the conduct is enforced and monitored, and the essence of ethics disappears in the process. The enforcement and monitoring of the regulatory measures have their limitations and lapses well known to all. For this reason, not all the desirable behavior can be captured through hard regulation. As a result, again recourse is sought in promoting ethics not strictly relying on morality or on the principles of altruism, rather diluting to the devices of incentive and market mechanisms.

Before directing attention to corporate governance, the basic relation between regulation and ethics may be examined with the help of a diagram. At one end is the hard regulation ensuring ethical behavior by the strength of enforcement and monitoring, and at the other end is the absence of regulation, where behavior is guided by the sense of ethics allowing the possibilities of both ethical behavior and unethical behavior. Ethics in its pure form needs no enforcement and monitoring, but in its diluted form it is driven by soft regulation, incentives and forces of market mechanism in order to keep behavior on the ethical track and not to break away to unethical practices.



Desirable Code of Corporate Governance – a voluntary code published by the Confederation of Indian Industries (CII) in 1998 stated the limitation of legislation in the vast field of corporate governance and insisted on the role of corporate responsibilities to play beyond the ambit of law. It stated that *corporate governance goes far beyond company law. The quantity, quality and frequency of financial and managerial disclosure, the extent to which the board of directors exercise their fiduciary responsibilities towards shareholders, the quality of information that management share with their boards, and the commitment to run transparent companies that maximise long term shareholder value cannot be legislated at any level of detail. Instead, these evolve due to the catalytic role played by the more progressive elements within the corporate sector and, thus, enhance corporate transparency and responsibility.*

Report of SEBI Committee on corporate governance by Narayanamurthy (2003) stated: *corporate governance is about ethical conduct in business. Ethics is concerned with the code of values and principles that enables a person to choose between right and wrong, and therefore, select from alternative courses of action. Further, ethical dilemmas arise from conflicting interests of the parties involved. In this regard, managers make decisions based on a set of principles influenced by the values, context and culture of the organization. Ethical leadership is good for business as the organization is seen to conduct its business in line with the expectations of all stakeholders.*

3 ETHICS IN CORPORATE GOVERNANCE: GLIMPSES FROM ACTUAL SCENARIO

There remains little doubt as to the need of ethics in corporate governance, but question may arise about the presence of ethical substance in corporate practice. A few instances are cited below in this respect.

A host of well-known companies including the Mardia Group, Llyods, Modern, Patheja Group, Parasrampur Group, Core Healthcare, Rajinder Group appear in the Reserve Bank of India's Rs 110,000-crore list of defaulters. The Department of Company Affairs' Web site, www.dca.nic.in, lists a set of companies that had vanished after issuing shares to the general public for Rs 1153.93 crore (as on July 29, 2003). Indian experiences seem to raise "very little hope of safeguarding the interests of investors and in terms of finding a method of recovering crores of rupees that have been siphoned off from companies' funds into the private pockets of its directors" (Kamath 2003).

Loughran, McDonald and Yun (2007) viewed corporate governance on ethical issues as a wolf in sheep's clothing. On a study of 10000 annual reports they found that firms using ethics-related terms are more likely to score poorly on measures of corporate governance. The consistency of their results across the alternative measures of ethical behavior suggested that managers who portray their firm as "ethical" in reports are more likely to be systematically misleading the public.

The shareholders enjoying the privilege of remission of liability beyond a limit forget to admit a consideration in exchange. The increased imposition of capital adequacy norm, however, takes into consideration at least partially, the shareholders' responsibility arising from limited liability. The shareholders expect the board to act for maximizing their wealth and the board need the height of ethics to recognize the interest of other stakeholders. Corporate governance likes to play the ethical card in a boastfulness of generosity often deliberately obscuring all accounts of its unpaid consideration to the society.

Dhan and Mohan (2008) argued that the corporate actions that basically conform to the law and economic prudence are preferred to be dressed up in the language of ethics and value and opined that corporate governance principles are solely dictated by legal obligations in force and are completely devoid of ethical considerations.

Among a good number of studies on failures of corporate governance there are some affirmative notes also for materializing ethics in business.

Vhanu Murthy (2007) advocated tri-focal approach; good governance, corporate social responsibility and environmental accountability. She also emphasized on methods of measurement of over-all performance.

Narayanamurthy (2003) stated, *common to all good corporate governance regimes, however, is a high degree of priority placed on the interests of shareholders, who place their trust in corporations to use their investment funds wisely and effectively. In addition, best-managed corporations also recognize that business ethics and corporate awareness of the environmental and societal interest of the communities, within which they operate, can have an impact on the reputation and long-term performance of corporations.*

Jensen (2002) argued that management cannot pursue multidimensional objectives unless they are unified in a single score objective function. Management can proceed with the objective of shareholders' value maximization but not with the stakeholders' value as there is no single valued measure (not even in balanced score card) under stakeholders' theory. The author proposed the corporate objective function to maximize a single value as he named Enlightened Value Maximization. Enlightened Value Maximization utilizes much of the structure of stakeholder theory but accepts maximization of the long run value of the firm as the criterion for making the requisite tradeoffs among its stakeholders.

4. A STRATEGIC MODEL TO STRENGTHEN THE ETHICAL ARM

One way of conversion of tri-focal or multi-focal approach into singular approach is use of market mechanism. Socially responsible behavior can be promoted by securitization of social achievements of business and by creation of active market of those instruments. The major social achievements include:

- Generation of employment
- Contribution to public health
- Disaster prevention measures

- Spread of education
- Sustainable consumption of natural resources
- Saving of pollution

Following steps are suggested for setting up market mechanism in promotion of ethics in corporate governance, at least partially:

- Securitization of ethical outcomes or Additionalities: Additional social achievements over business as usual, can be certified by designated authorities and such certificates should be held transferable at market price.
- Through SEBI an obligation for ethical behavior, i. e., social and environmental services can be imposed upon the listed companies by requiring them to account for a required number of certificates.
- In order to produce a required number of certificates the companies have either to bear the cost of self-generated additionalities or to pay the price for acquiring required number of certificates from the sources of excess additionalities. On failure to produce the required number of certificates the companies have to pay comparatively higher penalty for the amount of shortfall.
- Directors' remuneration should also be linked to the revenue from the market of 'additionality' certificate.

5. CONCLUSION

Flexible market mechanism has already been initiated through Kyoto Protocol for saving emission of green house gases in the atmosphere. The scope of operation devised by Kyoto can well be extended to other areas of socially desirable activities as mentioned above. When a market would promise revenue for social achievements, a business would be financially rewarded for ethical behavior. Again, through the positive linkage between directors' remuneration and revenue from additionality, the ethical arm of corporate governance would further be strengthened.

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Mystery Shopping: A Marketing Research Tool to Measure Customer Satisfaction

*Kallol Saha**

ABSTRACT: Since time immemorial, ensuring customer satisfaction has been considered to be the most vital ingredient to successful marketing. Customer satisfaction is simply not ensured by carrying out good practices to satisfy customers, but it is actually ensured by gathering unbiased information about the level of customer satisfaction. Mystery shopping or Ghost shopping is a marketing research tool which helps companies to gather unbiased information on how far and to what extent they have been successful in satisfying their clients. This article aims at explaining the root behind mystery shopping and also tries to comment on the procedure, benefits and applicability of the concept.

Key Words : *Ghost shopping, Ghost shoppers, Mystery Auditors*

1. INTRODUCTION

Chambers English dictionary defines the terms 'mystery' and 'shopping' as 'a miracle play' and 'visiting shops to buy or see goods'. So, mystery shopping may be defined as 'a miracle play (or an act) in relation to visiting shops to buy or see goods'. The concept of mystery shopping has its roots deep within the concept and spirit of customer satisfaction. Actually in

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the present competitive and dynamic world every seller wants to ensure that he renders optimum benefits to its present and prospective customers and is able to satisfy them to the highest possible level. Satisfied customers are indispensable pillars in creating and maintaining sustainable business for the company. As a result customer satisfaction and service quality have been of great interest to marketers, researchers and academicians. All these factors and the overall growing importance of ensuring quality level and customer satisfaction gave birth to the concept of mystery shopping in the 1940's and mystery shopping became a vital tool to measure employee integrity. Mystery or 'Ghost' shopping is a long established observational marketing research tool and is used extensively to measure the actual quality of services rendered by marketers and to the customers. This information provided through mystery shopping helps the seller to understand whether it is meeting or failing to meet its customer's expectations.

2. OBJECTIVE OF THE STUDY

This study on mystery shopping has been carried out with a view to fulfill the following objectives:

- To explain briefly the process involved in mystery shopping.
- To identify the benefits of mystery shopping.
- To identify the areas where mystery shopping can be effectively used.
- To throw light on the Indian scenario of mystery shopping.

3. RESEARCH METHODOLOGY

This study is mainly based on secondary data. The secondary data and information required for the study have been collected from books, magazines, journals, and e-journals through the net.

4. THE ACTUAL PROCESS

A special type of company known as 'Mystery shopping company' provides persons known as 'mystery shoppers'. Companies selling products and services and intending to get an idea about the satisfaction level of customers can hire "mystery shoppers" or "ghost shoppers" from these companies. Thereafter, these "mystery" or "ghost" shoppers are sent to sales outlets of the client company as shoppers or customers. Here, the mystery shoppers pose or act as normal customers and test the service quality level by asking questions, bringing in objections, registering complains etc. Finally the mystery shoppers prepare detailed reports or feedback about their experiences and submit such reports to the mystery shopping company.

Corporate Research International, a leading company in providing Mystery shopping services prefers to call their shoppers as 'Mystery Shopping Auditors'. Mystery-Auditors are independently contracted persons for Corporate Research International who conduct telephone and on-site evaluations of properties owned by their clients. As an Auditor, shoppers are responsible for thoroughly and accurately evaluating the performance of any

accepted assignment and send the report back into Corporate Research International for processing.

Mystery shopping can take up any one of the following forms:

1. **In person visits:** Here the mystery shopper actually visits the shop or store to gather knowledge regarding the seller /service provider.
2. **Telephonic Surveys:** Here the mystery shopper makes phone calls with carefully and strategically designed questions which helps to gather knowledge regarding various aspects of the seller /service provider.

5. BENEFITS OF MYSTERY SHOPPING

Considering the importance of surviving under stiff competition and providing optimum customer satisfaction, mystery shopping has already been accepted as an important tool to ensure the level of service quality provided by companies to its customers. The benefits of mystery shopping may be listed as follows:-

- Mystery shopping is a tool to measure the quality of service provided by companies to its customers.
- It helps to discover whether customers are consistently receiving superior customer service at different sales outlets.
- It helps to know about the placement/arrangement of the companies' product at the retailer's shelf.
- It helps the company to get an idea about the demand of the customers for its products.
- It helps the company to know how retailer's salesmen promote the company's products.
- Mystery shopping also has an element of espionage. It helps to discover information's about competitors regarding new product launch, new promotional campaigns etc.
- Mystery shopping helps the company to measure the effectiveness of training imparted to its sales related staffs.
- Mystery shopping helps the company to recognize good employees based on findings of the audits.
- Last, but not the least, mystery shopping also helps to create false demand for the products (e.g. if the product has been first launched and 10-15 ghost shoppers ask for the product, then the retailer himself feels that he should keep the product in the store in order to fulfill the needs of the customers)

Apart from the above benefits, another really great advantage of 'mystery shopping' is that it has become one of the areas where young men and women can seek employment as mystery/ghost shoppers as part timers or full timers and earn a living. Organisations such as Mystery Shopping Providers Association (MSPA, North America), Mystery Shopper Insights

(MSI, Delhi), or Best Mark (Nevada) are providing employment opportunities to thousands of people who have been chosen mystery shopping as a career.

6. AREAS WHERE MYSTERY SHOPPING CAN BE USED

The most common areas where mystery shopping can be effectively used in order to attain its objectives are as:

- Retail stores (malls, supermarkets etc),
- Hotels and restaurants,
- Bank, Insurance Companies and Financial Intermediaries,
- Health Care Services (Hospitals, Spas and Nursing homes),
- Transport Agencies,
- Telecommunication services, etc.

In retail stores, malls and supermarkets, mystery shopping can be used to collect information about

- stores arrangements
- behaviour of the staffs and assistance quality
- product knowledge
- cleanliness of the store
- speed of the service, etc

In hotels and restaurants, mystery shopping can be used to collect information about

- store ambience
- reception, greeting and welcome by the staff
- delivery time
- food quality
- general cleanliness, etc

Banks, insurance companies and financial intermediaries can use mystery shopping to know about

- their acceptance among customers
- regularity in rendering financial services, etc

In health care services, mystery shopping can be carried out to get information regarding

- quality of treatment
- timeliness in providing the treatment
- care and safety measures
- cleanliness of the hospital , nursing home or spa
- quality of support services like blood bank, ambulance, medicines, etc.

Transport agencies mainly use mystery shopping in order to get an idea about

- timeliness of services
- behaviour of the dealing staff, etc

Finally telecommunication service providers carry out mystery shopping in order to know about

- general behaviour of their support staff
- knowledge of the staff regarding the companies services and their power to convince prospects, etc.

7. THE INDIAN SCENARIO

The Indian retail scenario is witnessing a noticeable shift with modern retail formats slowly replacing traditional forms of retailing. Competition is increasing with various Indian and International marketers fighting for a share of wallet of the Indian shopper.

Under the above circumstance, a customer's in-store experience and his level of satisfaction arising out of the shopping experience is becoming increasingly important asset for any retail marketer. High quality of services rendered in the outlet acts as a differentiating factor in enhancing customer loyalty and generating positive word-of-mouth communication in favour of the company.

Although the concept of Mystery Shopping is not yet practiced extensively in India, still the following organizations have started to use mystery shoppers effectively:

ICICI Bank used mystery shopping to check the services offered by one of its branches in Pune. It conducted a telephonic survey through the ghost shoppers to inquire about the different services provided by the bank to the different age groups etc. (karia 2005). Similarly, McDonald's conducts a mystery shopping survey every month to keep a check on their services such as cleanliness of the outlet, the politeness of the servers and order takers with the customers, serving process etc. (karia 2005). Some other Indian companies taking the benefit of mystery shopping in one form or the other are: Bluedart, Titan, Arrow, Reliance Telecommunications, etc.

8. CONCLUSION

To conclude it may be said that, in the present age of cut-throat competition, Mystery shopping or Ghost shopping can be regarded as one of the most effective and unbiased tool to ensure the level of customer satisfaction. In the present scenario, when companies are spending lakhs of rupees to ensure customer satisfaction, it will indeed be helpful to choose mystery shopping as a weapon to know in details about different positive and negative aspects of services rendered to customers. It is in fact a control tool in the hands of the management to measure actual level of customer satisfaction, finding out causes of deviation from expected results and to rectify deviations from expected results.

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A Study of Production, Productivity and Profitability of Fisheries in the District of North 24-Parganas, West Bengal

Dhrubaranjan Dandapat and Sahidul Islam***

ABSTRACT: Fish culture involves various processes like preparing the pond, application of lime, weed control, removal of undesirable animals, nurturing the desirable species in a scientific way, harvesting, etc. Fish culture may range from large-scale industrial enterprises to small 'subsistence ponds' of the fishermen. But whatever may be the range of fish culture, the profitability depends upon proper management of all the operations involved in the fish culture activities. Profitability means the profit earning capacity, which depends on many factors like productivity, cost of production, market price of the product etc. Minimization of cost and maximization of productivity help improve the profitability. This paper highlights the production, productivity and profitability of fisheries based on the results of a primary survey conducted among the selected fishermen household units in the district of North 24-Parganas.

Key Words : *Fish Culture, Fish Production, Profitability analysis*

1. INTRODUCTION

Fish being one of the most favourite food items of the Bengalees, fishery activities have been being carried on in West Bengal from ancient time. Out of the total culturable water area of 41781.65 hectares in West Bengal, 15439.60 hectares (about 37%) lies in North 24-Parganas alone (Table 1).

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Large number of tanks and ponds are stocked every year with fry (young fish) and fingerlings, but fish culture under scientific method is yet to be followed. However, use of scientific methods in fish culture and proper management of fish culture activities offer immense scope for improvement in the productivity and profitability of fisheries.

This paper highlights the production, productivity and profitability of fisheries based on the results of a primary survey conducted among the selected fishermen household units in the district of North 24-Parganas.

2. METHODOLOGY

Table 1 shows that 61.06% of the total number of *Bheries* and 43.08% of the total area of fisheries in West Bengal are located in the districts of North and South 24-Parganas, while 53.27% of the total number of *Bheries* and 36.95% of the area of fisheries situated in the district of North 24-Parganas alone. Therefore, the district of North 24-parganas with the maximum number of Bheries and most of the culturable area may be considered as a representative of West Bengal so far as fisheries are concerned. Hence, the district of North 24-Parganas has been selected for field survey and primary data have been collected through administering structured questionnaire among the sample fishermen household units of different parts of the district.

Table 1: Area of Fish Cultivation in West Bengal & North 24-Parganas

	No. of Fisheries	Area (Hectares)
West Bengal	963	41781.65
24 Parganas (North & South)	588	18000.80
% of 24 Parganas (North & South)	61.06	43.08
South 24 Parganas	75	2561.20
% of South 24 Parganas	7.79	6.13
North 24 Parganas	513	5439.60
% of North 24 Parganas	53.27	36.95
Other Districts	375	23780.85
% of other districts	38.94	56.92

Source: Department of Fisheries, Government of West Bengal, results computed.

Out of five (5) Sub-divisions (Bongaon, Barasat, Basirhat, Barrackpur and Bidhannagar) in the district of North 24-Parganas, three (3) sub-divisions (Bongaon, Basirhat, Barasat) have been selected as area of the field survey because most of the fishermen community live in these three sub-divisions. Primary data have been collected through administering questionnaires among 240 selected fishermen household units of twelve (12) villages (taking four villages from each of the three sub-divisions and 20 units from each such village). However, analysis has been made considering 200 questionnaires as 40 questionnaires have been rejected due to incomplete responses.

It may be mentioned in this connection that the data were collected for a period of two years (2001-02 & 2002-03) during 2003-04 & 2004-05. As the fishermen do not maintain systematic records of fishery activities carried on by them and also they are reluctant to provide the relevant information, a period of only two years has been considered for the study. Collected data have been tabulated and analysed using simple statistical and accounting tools as shown in section IV.

3. FACTORS FOR FISH PRODUCTION

Fish production is dependent upon various factors, such as pond preparation, control of weeds, control of predatory, liming, proper stocking, monitoring of physico-chemical parameters, use of manure, supplementary feeding, netting, stock manipulation, harvesting, etc. Selection of pond (water area) for fish farming is very important. Usually the following factors are considered at the time of selecting pond for cultivation of fish.

(i) Suitable shape of the pond, (ii) Assured supply of adequate quantity of water, either surface or ground water, (iii) Quality of soil and water of the pond suitable for fish culture, (iv) Road connection from pond to market for easy transportation of fishes. (v) Location of pond in a place that is free from social problems e.g., pouching, malicious damage and fraud, etc.

4. FISH PRODUCTION & PRODUCTIVITY: SURVEY RESULTS

Fishermen are used to produce various types of fishes. In our survey, it is seen that most of the fishermen are used to culture fresh water fishes. For survey purpose, we have taken into consideration seven species of culturable carps i.e., *Rohu*, *Catla*, *Mrigal*, *Grass Carp*, *Silver Carp*, *Common Carp* and *Natural Fish* (locally called *Rani fish*). *Rohu*, *Catla* and *Mrigal* are called '*Major Carps*'. *Silver Carp*, *Grass Carp* and *Common Carp* are called '*Exotic Carps*' which have been introduced from foreign country to our country for culture purpose, known as '*Exotic Fish Culture*'. Besides, another sample fish in our study is '*Rani Fish*', which breeds by nature. Such type of fish is *Kai*, *Magur*, *Singi*, *Mourala* etc. These fishes are of high economic importance and are largely used for culture.

Productivity of fish depends upon proper stocking and stock manipulation. Proper stocking means maintaining scientific proportion of different types of fishes in ponds. Growth of fish depends upon proper stocking. Ponds can support either a large number of very small fishes or small number of large fishes. Though growth of fish in ponds with thin stocking may be very satisfactory, but it is not economical. Total fish population that a given pond can support depends on its nourishing power in terms of food contained in the body of water or the artificial food that can be supplied. As the nourishing capacity of pond is governed by variable factors like physico-chemical and biological conditions, no two ponds can be stocked with equal number of fry, even though the ponds may be of same size and located adjacent to each other.

While nursery ponds are heavily stocked, the rearing ponds are lower stocked. Advance fry measuring 20-30 mm are usually indistinguishable. Therefore, rearing ponds are stocked without any discrimination of species. However, as they grow and attend 40-45 mm size, it is better to segregate major carps and discard the undesirable stock. For this purpose, stock manipulation i.e., discrimination of species must be maintained in scientific fish farming.

At the time of field survey it has also been found that, in composite fish culture, six species of fish having different habits and habitats are mainly cultured. Among these six species, three are major indigenous fish (rohu, catla and mrigal) while remaining three are exotic fish (grass carp, silver carp and common carp). Survey results of the stock manipulation in composite culture are noted in table 2.

Table 2 reveals that production of major carps and exotic carps constitute 45 per cent and 55 per cent of the total production respectively. At the time of survey, it is also noticed that culture of four species - Rohu, Catla, Mrigal and species of Common Carp are common to 85 per cent of the fishermen household units.

Table 2: Stock manipulation in composite fish culture

Species	% of composition
Major Carps	
Rohu	25
Catla	10
Mrigal	10
Exotic Carps	
Grass carp	10
Silver carp	25
Common carp	20

Source: Field survey

Further, it is known that the ratio of stock manipulation of these four species are 2: 2.75: 1: 1 respectively. In other words, if the stocking rate of 10000 pieces of fish per hectare is maintained, 2965 pieces of Rohu, 4075 pieces of Catla, 1480 pieces of Mrigal and 1480 pieces of Common Carp are stocked. In course of survey, it is found that 60 per cent households maintained stock manipulation properly, but 40 per cent households are very reluctant towards maintaining proper stock manipulation.

4.1. Profitability Analysis

The fish culture involves some important cost elements that are categorized as follows.

- (i) Annual Non-recurring Costs such as annual rent of pond, cost of preparation and maintenance of pond.

(ii) Recurring Costs such as cost of weed clearance, fish eradication, labour cost, cost of organic / inorganic manure, cost of fry / fish seed, cost of harvesting, cost of netting for removal of insects and transport cost.

(iii) Other Costs such as depreciation of equipments, interest on loan, etc.

The fish production has *three* stages:

- (i) Raising of Fry from Nursery Pond;
- (ii) Raising of Fingerling from Rearing Pond; and
- (iii) Raising of Table Size Fish from Composite Culture.

The sample fishermen were interviewed to know their cost structure relating to the above three stages of fish culture. The figures have been derived on the basis of their responses, because fishermen usually do not maintain accounts in a systematic manner. Information on sales price have been obtained from the different wholesale markets in North 24-Parganas during 2001-02 and 2002-03 and average price has been taken into consideration. The cost structure and profitability of three different stages of production have been shown in tables 3, 4, and 5.

Table 3: Profitability of 'Raising of Fry' from 'Nursery Pond'

(At the prevalent market price: Average of 2001-02 & 2002-03)

A: Annual Non-recurring Cost	Annual cost (Rs.)
Annual rent of pond (1 bigha / 0.133 hectare)	1000.00
Pond preparation and maintenance	500.00
B: Recurring Cost	
Labour – Weed clearance + Netting for removal of insects (300+250) =	550.00
Organic manure & its application	400.00
Cost of fish seed (4 lakh pieces)	2000.00
Transport	800.00
Cost of feed	2500.00
Harvesting	500.00
Depreciation of nets	150.00
Total cost	8400.00
C: Income from sale of 200000 Fry at Rs.60 per 1000 pieces	
[Expected Fry production at an average rate of survival of 50% of 4 lakh pieces]	12000.00
D: Net Profit [C – (A+B)]	3600.00

Source: Field Survey, results computed

Table 4: Profitability of 'Raising of Fingerlings' from 'Rearing Pond'
(At the prevalent market price: Average of 2001-02 & 2002-03)

A: Annual Non-recurring Cost	Annual cost (Rs.)
Annual rent of pond (1 bigha / 0.133 hectare)	1200.00
Pond preparation and maintenance	600.00
B: Recurring Cost	
Weed clearance	350.00
Fish eradication (control of predatory)	250.00
Labour	1000.00
Organanic manure	800.00
Cost of Fry (15000 pieces)	8000.00
Transport	900.00
Cost of feed	3500.00
Harvesting	800.00
Depreciation of Boat	200.00
Total cost	17600.00
C: Income from sale of 10500 Fry at Rs.2000 per 1000 pieces [Expected Fry production at an average rate of survival of 70% of 15000 pieces]	21000.00
D: Net Profit [C – (A+B)]	3400.00

Source: Field Survey, results computed

Table 5: Profitability of 'Raising of Table Size Fish' from 'Composite Culture Pond'
(At the prevalent market price: Average of 2001-02 & 2002-03)

A: Annual Non-recurring Cost	Annual cost (Rs.)
Annual rent of pond (1 bigha / 0.133 hectare)	1600.00
Pond preparation and maintenance (Earth filling + Mohua cake etc.)	1200.00
B: Recurring Cost	
Labour	1850.00
Organanic manure	900.00
Cost of Fingerling (1500 pieces)	3000.00
Transport	1000.00
Cost of supplementary feeding	4500.00
Harvesting	900.00
Depreciation of Handi	250.00
Contingency	150.00
Total cost	15350.00
C: Income from sale of 450 kg Fish at Rs.41 per kg [Expected fish production at an average rate of survival of 90% of 1500 pieces and an average size of 3 kgs.]	18450.00
D: Net profit [C – (A+B)]	3100.00

Source: Field Survey, results computed

Tables 3, 4 and 5 show net profit per bigha (0.133 hectare) per annum from Nursery Pond, Rearing Pond, and Composite Culture Pond

Table 6: Annual Income, Expenditure and Savings of Fishermen Household Unit

	Rs.
Net Profit per bigha from Nursery Pond (Table 3)	3600
Net Profit per bigha from Rearing Pond (Table 4)	3400
Net Profit per bigha Composite Culture Pond (Table 5)	3100
Total Profit (from 3 bigha)	10100
Average Income per household unit per annum (on the basis of average pond holding of 3 bigha)	10100
Average household expenditure	9000
Savings per household unit per annum (10100 - 9000) =	1100

Source: Field Survey, results computed

From the survey of 200 fishermen household units, it has been found that average pond holding per household unit is 3 bigha and average household expenditure of each household unit is Rs.9000 p.a. Therefore, the average surplus per household unit is only Rs.1100 p.a. (Table 6)

4.2. Statistical Analysis

Some statistical tools have been used to analyse the survey results in order to examine relationship, if any, among average production of fish, average selling price of fish and average expenditure of fish cultivation.

Table 6 (a): Average production of fish

Types of fish	Actual Production Per Bigha (Average in Kg.)	
	2001-02	2002-03
Rohu	300	290
Katla	250	245
Mrigal	260	265
Grass carp	040	033
Silver carp	025	020
Common carp	085	075
Others (Rani fish)	095	090
Total	1055	1018

Source: Field Survey

Table 6 (b): Average annual selling price of fish (Rs. per Kg.)

Types of fish	Average Price (Rs.)	
	2001-02	2002-03
Rohu	42	43
Katla	47	48
Mrigal	41	42
Grass Carp	32	33
Silver Carp	30	32
Common Carp	31	33
Others (Rani fish)	37	40

Source: Field Survey

Table 6 (c): Average Expenditure for fish cultivation

Item of expenses	Amount of expenses per bigha (Average in Rs.)	
	2001-02	2002-03
Rent of pond	1270.00	1350.00
Pond preparation	780.00	850.00
Organic manure	700.00	800.00
Cost of fish seed	4400.00	5000.00
Cost of feed	3500.00	3400.00
Harvesting	740.00	800.00
Transport	900.00	1000.00
Labour	1140.00	1500.00
Depreciation	250.00	300.00
Total	13680.00	15000.00

Source: Field Survey

Student's 't' Test has been applied to find out the relationship among average production of fish [Table 6 (a)], average selling price of fish [Table 6 (b)] and average expenditure of fish cultivation [Table 6 (c)]. For this purpose, the following hypotheses have been set:

H_0 : There is no significant difference

- (i) between the average production of two years (2001-02 & 2002-03);
- (ii) between the average selling price of fish for two years (2001-02 & 2002-03);
- (iii) between the average expenditure for fish cultivation of two years (2001-02 & 2002-03);

H_1 : Difference is significant in the above cases.

In case of average selling price, the calculated value of 't' (3.832) is greater than the tabulated value (2.447) at 5% level of significance. Therefore, H_0 cannot be accepted. So it can

be said that the average selling price of fish for two years (2001-02 & 2002-03) have been significantly different.

In case of average production of fish, the calculated value of 't' (-1.446) is less than the tabulated value (2.447) at 5% level of significance.

Similarly, in case of average expenditure for fish cultivation the calculated value of 't' (1.977) is less than the tabulated value (2.306) at 5% level of significance. Therefore, H_0 in case of both the above are accepted.

So, it can be said that the average production of fish and average expenditure of fish cultivation in two years (2001-02 & 2002-2003) have not been significantly different.

5. CONCLUDING OBSERVATIONS

It has been revealed from the survey that income of fishermen household units is very poor. With this poor income, they try to spend as little as possible and maintain a very low standard of living. So, they cannot provide adequate funds required for fish cultivation from their own source. As a result, they have to depend on 'Mahajans' who lend money at a very high rate of interest and force the fishermen to sell their fish at a lower price. Higher interest, lower price for the produce (fish), uncertain quantity of fish-catching due to adverse climatic condition often force the fishermen families to live in "debt trap" of the Mahajans.

For improvement in the production, productivity and profitability of the fisheries, as well as overall economic condition of the fishermen, the following suggestions are put forward.

- A well co-ordinated and collective effort must be made to develop fish co-operatives for all-round development of production of fish in fishery sector and fishermen community.
- All water areas above one acre may be incorporated under the control of co-operative society so that fish cultivation may be carried on scientifically for increasing productivity,
- Regional offices of different National Institutes of Fisheries should be set up at the State level to quickly communicate various information regarding fish and fisheries such as research result, market information etc.
- Fishermen may be encouraged to establish aqua club that may facilitate developing awareness about different fisheries activities like importance of seed collection, proper stocking, control of predatory, importance of organic manure in fish culture, importance of supplementary feeding, and proper management for increasing production of fish etc.
- There should be proper storage and processing facilities in the fish landing centers.

- Government should develop proper marketing facilities, and should declare minimum support prices of fishes.
- Co-ordination among the fish farmers, Community Development Block and the Gram Panchayet personnel should be ensured by the district level fishery authority. All types of information regarding fish farming should be communicated through these personnel.

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