Impact of Employee Stock Options on Corporate Performance with special reference to selected Pharmaceutical Companies in India

Dr. S.Poornima
Associate Professor, Department of Business Management, PSGR Krishnammal College for Women, Coimbatore, E-mail: spformal@gmail.com

K. Nithya Kala
Ph.D Research Scholar, Department of Business Management, PSGR Krishnammal College for Women, Coimbatore, E-mail: phdnithya@gmail.com

Dr. K. Vidya Kala
Assistant Professor, Department of Business Management, PSGR Krishnammal College for Women, Coimbatore, e-mail: vknk28@yahoo.com

Abstract
Employee stock option is the worldwide phenomena now. The popularity of broad based employee stock option plans in India has increased only in 2000 due to the escalation in the Indian Industry yet it is still in the nascent stage of development. This study is an attempt to identify and analyze the macro trends of ESOP phenomenon in Indian pharmaceutical Industry. The present paper makes an empirical study on the sample of 20 pharmaceutical companies listed in Indian stock market which has adopted employee stock option plan and analyze its impact on firm performance.

Key words: Employee Stock Options, Companies, Performance.

1. Introduction
Emergence of India as a knowledge economy, globalization of Indian workforce, and awareness about new compensation trends led to the birth of Employee Stock Option Plans in India (Ghate 2011). Development of organizational capability based on the skilled and motivated human resource is a most important source of competitive advantage in business in the context of rapid advances in technology, financial markets and marketing strategies (Kumar, 2004).

The Pharmaceutical industry in India is the world's third largest in terms of volume and stands 14th in terms of value. According to Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, the total turnover of India's pharmaceuticals industry between 2012 and 2013 was US$21.04 billion. Sale of all types of medicines in the country has reached around US$19.22 billion by 2013 (Wikipedia, 2013).

Most pharmaceutical companies operating in India, even the multinationals, employ Indians almost exclusively from the lowest ranks to high-level management. Mirroring the social structure, the firms are very hierarchical. Home-grown pharmaceuticals, like many other businesses in India, are often a mix of public and private enterprise. Although many of these companies are publicly-owned, leadership passes from father to son and the founding family holds a majority share. In terms of the global market, India currently holds a modest 1-2% share, but it has been growing at approximately 10% per year, in outsourced clinical research as well as contract manufacturing and research. The Indian pharmaceutical sector is already one of the largest in the world and is a knowledge-based industry which is growing steadily and is playing a major role in the Indian economy. In fact, the emergence of India as an important manufacturing base and at the same time, an attractive market for global drug makers, makes it an attractive sector for young professionals.

After SEBI ESOS & ESPP Guidelines 1999, pharmaceutical companies in India adopted ESOP practices to ensure that the key employees do not leave the organization, because there is the danger of these key employees taking vital knowledge and information with them when they leave the organization. Since the employees will be absorbed by competitors who could use these vital knowledge and information to get a competitive edge over the others.
2. Review of Literature

Blasi et al. (1996) in their study compared the corporate performance in 1990/91 of two groups of public companies those in which employee owned more than 5% of the company’s stock. The results of the study indicated that productivity, profitability and compensation were consistent with neither negative nor highly positive views of employee ownership, but where differences are found, they are favorable to companies with employee ownership, especially among companies of small size. The study concluded that the circumstances in which employee ownership was used specifically as a part of wage/ benefit concession package or in a takeover threat do not appeared to have significant effect on the 1990 performance levels or performance growth of the firms. The study results were consistent with those of past studies.

Sesil et al. (2002) in their paper compared the performance of 229 firms offering broad-based stock options to that of their non-stock option counterparts. The study used total shareholder returns, Tobin’s q, value added per employee, and the number of patents applied for and granted as performance measure to evaluate the performance characteristics of stock option firms. The study assessed the performance of broad-based stock option companies using multiple regression technique with both cross-sectional and longitudinal specifications. The study concluded with mixed results highlighting that the adoption and maintenance of broad-based stock option plans is associated with greater value added per employee but there were no significant growth in Tobin's q or new knowledge generation after the introduction of stock options.

Dhiman and Gupta (2010) measured post-financial performance of pharmaceutical corporate sector considering sample size n=10 of top pharmaceutical units which adopted ESOP during 1st April 2000 to 31st December 2005 using financial performance measures of six years after following the employee stock option plan. The post-financial performances were measured by net profit ratio, employee cost ratio, material cost ratio, administrative cost ratio. The study found that the post-financial performance of Suven Life Science Ltd has reduced compared to Industry average. However, the financial performance of Ranbaxy Ltd. has statistically improved as compared to the group average for all financial measures under the study.

Sridharan and Amaravathi (2011) in their paper regarded ESOP as a tool to motivate, reward and retain top performer. Higher degree of employee productivity and commitment results in success and profitability of the organization. The study used secondary data pertaining to Indian IT & ITeS and pharmaceutical companies between 1999 and 2000 to analyze ESOP design practices adopted by these companies. The findings indicated that these companies are clear about their ESOP practices post-SEBI ESOP &ESPP Guidelines, 1999. The study suggested that Indian industries can benefit more by exploiting the full potential of ESOPs by designing, communicating and implementing their plans in a more appropriate manner.

3. ESOP AND CORPORATE PERFORMANCE

The theory is that owning shares will provide employees with financial incentives that will make them more committed to the organization and more motivated at work (Employee Direct report 2002). If the company is more profitable, employees will gain financially through dividend payments and an increased share price. Greater motivation will have a direct effect in improving productivity through greater effort and possibly innovation (Michi et al. 2002). The goal of employee ownership is to align the self-interest of all stakeholders in the business so that everyone shares the same motivation to achieve higher profits (Lyon 2009). Conyon and Freeman (2001) found that firms with shared compensation arrangements perform better than other firms in productivity and financial performance. The stock price of firms with shared compensation practices also outperformed those of other firms.

Employee ownership has attracted attention and interest of the researchers for a wide variety of reasons. Much of the interest has focused on the potential for better economic performance, particularly through enhanced motivation and commitment from employees who have a direct stake in firm performance. It is believed that employee-owners work harder and pay more attention to the quality of their work than non-owners, and are more likely than outside shareholders to vote their
shares in the long-term interest of the company (Kruse & Blasi). There have also been social arguments for employee ownership, based on its potential to broaden the distribution of wealth, decrease labor-management conflict, and enhance social cohesion and equality by distributing the fruits of economic success more widely and equitably (Gates, 1998). The positive benefit of establishing a class of employee-owners is often cited as a primary motive to establish an ESOP. It is believed that through ESOP participation, employees will be more motivated, begin to think and act as owners. They will exercise fiduciary-like responsibility over the resources of the firm, minimize agency costs, and align their behavior with the goals of the firm. Essentially, they will perform in their own best interest—not as employees, but as shareholders (Steve et al., 2007).

4. OBJECTIVE
The main objective of the study is to examine the impact of ESOP on corporate performance in selected Indian Pharmaceutical companies.

5. Methodology
The study was confined to the listed pharmaceutical companies in BSE. The data for the study are drawn from the Centre for Monitoring Indian Economy (CMIE) PROWESS data base. The companies were selected based on the criteria that the companies should have allotted/adopted ESOP between April 2000 to 2008. The year of adoption/allotment of ESOPs were taken as 0, four years prior to adoption of ESOP were taken as -4, -3, -2, -1 and four years after adoption of ESOP was taken as +4, +3, +2, +1. Based on this criterion 20 pharmaceutical companies which are listed in Bombay stock exchange were selected for the study.

Employee stock options or employee ownership is the main variable of this research paper. There are several ways to measure ESOPs. One is the number of employee participants, another is the amount invested by the employees in ESOPs. At present, such information is not available for Indian companies. Allotment of Employee Stock Options is more commonly published. This measure can indicate the presence or absence of ESOPs.

The companies are categorized into three groups such as low, moderate and high ESOP companies based upon their employee stock option percentage. Categorization for this purpose has been based on 30th and 70th percentile (percentage varying between 0.01 to 7.81). Companies whose employee ownership percentage fall below or at 30th percentile value (0.083) were classified as low ESOP companies and companies whose employee ownership percentage fall above 70th percentile value, namely 0.465, were classified as having high ESOP companies. The companies whose employee ownership percentages fall between 30th and 70th percentile values were grouped as moderate ESOP companies.

6. Results:
Based on Percentage Analysis:
- Out of 210 listed pharmaceutical companies in India, only 9.52% i.e. 20 pharmaceutical companies have adopted ESOPs (Source: Prowess Data Base; Results: Computed).
- The minimum employee ownership percentage was found to be 0.01% and maximum employee ownership percentage was found to be 7.31% (Source: Prowess Data Base; Results: Computed).

Based on Mann Whitney U test:
- The Mann Whitney U test shows that valued added per employee metric showed significant difference during pre- and post- ESOP.
- Significant differences were noted in Asset Turnover Ratio (ATO) during pre- and post- ESOP, but the difference is significant on the decreasing side.
- Significant differences were noted in Net Profit Margin (NPM) during pre- and post- ESOP.
- It is noted that there is no significant difference in Earnings per Share during pre- and post- ESOP.

Based on Regression Analysis:
- Increase in Main Shareholder Power has shown significant negative effect on Return on Equity which is significant at 5 % level.
Sales Growth is found to have significant positive effect on Return on Assets at 1% level during post-ESOP period; also Assets Turnover Ratio is found to have significant positive effect on Return on Assets at 5% level.

Post-ESOP is found to have significant positive effect on Return on Capital Employed at 1%.

Post-ESOP period is found to have significant negative effect on Market Capitalization to Net Worth at 1% level.

Debt to Equity ratio is found to have significant negative effect on Market Capitalization to Net Worth at 1% level.

Total Assets and Age, i.e. companies with more years of existence and having more assets have higher Market Capitalization to Net Worth which is significant at 1% level.

ESOP did not have any significant impact on systematic risk.

It is concluded from regression analysis that ESOP in pharmaceutical sector did not have significant impact on performance except for Return on Capital Employed, whereas Age, Sales Growth, increase in Assets, and Asset Turnover ratio have impact on the performance of ESOP firms. However, leverage and ESOP period is found to have significant negative impact on market performance. It is also found that ESOP did not have any significant impact on systematic risk.

7. Categorization of Companies based on ESOP Magnitude and Performance Level in Pharmaceutical Sector (Computed based on ESOP Magnitude and Total Performance Score of the Companies):

High ESOP and High Performing Companies
- Aurobindo Pharma Ltd.
- Divi’s Laboratories Ltd.
- Ipca Laboratories Ltd.

High ESOP and Moderate Performing Companies
- Bal Pharma Ltd.
- Bliss G V S Pharma Ltd.
- Natco Pharma Ltd.

High ESOP and Low Performing Companies
- Jubilant Life Sciences Ltd.

Moderate ESOP and High Performing Companies
- Nil

Moderate ESOP and Moderate Performing Companies
- Glenmark Pharmaceuticals Ltd.
- Orchid Chemicals & Pharmaceuticals Ltd.
- Shasun Pharmaceuticals Ltd.
- Suven Life Sciences Ltd.
- Geojit B N P Paribas Financial Services Ltd.

Moderate ESOP and Low Performing Companies
- Nil

Low ESOP and High Performing Company
- Nil

Low ESOP and Moderate Performing Company
- Dr. Reddy's Laboratories Ltd.
- Elder Pharmaceuticals Ltd.
- Granules India Ltd.
- J B Chemicals & Pharmaceuticals Ltd.
- Lupin Ltd.
- Ranbaxy Laboratories Ltd.
- Unichem Laboratories Ltd.
- Wockhardt Ltd.
8. Conclusion:

This research paper will add to the different dimension and diversity of the employee stock ownership research domain in India. The results of the present study have several important contributions to the managers and employee shareholders of Indian corporate sectors with existing ESOPs and also to those contemplating to roll out ESOPs. The success of ESOP can be termed as the result of financial stimulation and participative management dynamics (Klein 1987). Good performance can be the cause and not a consequence of ESOP if assumed that companies use the ESOP as a participation tool for wealth redistribution for which good, initial performance is a prerequisite.

The study found mixed results associated with the use of broad-based stock options. On the positive side, it appears that the magnitude of stock option plans is associated with value added per employee. Value added per employee, as measure of employee productivity that most closely captures employee effort and motivation, provides some evidence that stock options positively influence employee productivity to some extent. The study’s result indicates that value added per employee increased after the adoption of the stock option plan but did not improve profitability and overall performance of companies after ESOP allotment. It is also identified that percentage of capital owned by employee shareholders are relatively insufficient to change employee attitudes and behaviour in a way that improves overall performance of the firm. It is observed from the present study that ESOP companies with more years of existence were found to have significant impact on performance in Pharmaceutical sector. Thus it can be determined that ESOP may work for large-scale companies with long-term vision. It is concluded that the company’s management system should synergize the intellectual capital and financial capital to provide a way to link employee and corporate fortunes for long term goals. Such an initiative will certainly result in enhanced employee motivation and improve company performance.

BIBLIOGRAPHY


Annexure I: LIST OF SAMPLE ESOP COMPANIES

<table>
<thead>
<tr>
<th>Pharmaceutical Companies</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 AurobindoPharma Ltd.</td>
<td>2006</td>
</tr>
<tr>
<td>2 Bal Pharma Ltd.</td>
<td>2008</td>
</tr>
<tr>
<td>3 Bliss G V S Pharma Ltd.</td>
<td>2007</td>
</tr>
<tr>
<td>4 Divi'S Laboratories Ltd.</td>
<td>2007</td>
</tr>
<tr>
<td>5 Dr. Reddy'S Laboratories Ltd.</td>
<td>2004</td>
</tr>
<tr>
<td>6 Elder Pharmaceuticals Ltd.</td>
<td>2007</td>
</tr>
<tr>
<td>7 Glenmark Pharmaceuticals Ltd.</td>
<td>2006</td>
</tr>
<tr>
<td>8 Granules India Ltd.</td>
<td>2006</td>
</tr>
<tr>
<td>9 Ipca Laboratories Ltd.</td>
<td>2007</td>
</tr>
<tr>
<td>10 J B Chemicals &amp; Pharmaceuticals Ltd.</td>
<td>2007</td>
</tr>
<tr>
<td>11 Jubilant Life Sciences Ltd.</td>
<td>2007</td>
</tr>
<tr>
<td>12 Lupin Ltd.</td>
<td>2006</td>
</tr>
<tr>
<td>13 NatcoPharma Ltd.</td>
<td>2006</td>
</tr>
<tr>
<td>14 Orchid Chemicals &amp; Pharmaceuticals Ltd.</td>
<td>2006</td>
</tr>
<tr>
<td>15 Ranbaxy Laboratories Ltd.</td>
<td>2002</td>
</tr>
<tr>
<td>16 Shasun Pharmaceuticals Ltd.</td>
<td>2003</td>
</tr>
<tr>
<td>17 Suven Life Sciences Ltd.</td>
<td>2007</td>
</tr>
<tr>
<td>18 Unichem Laboratories Ltd.</td>
<td>2006</td>
</tr>
<tr>
<td>19 Venus Remedies Ltd.</td>
<td>2007</td>
</tr>
<tr>
<td>20 Wockhardt Ltd.</td>
<td>2006</td>
</tr>
</tbody>
</table>

Annexure II: Mann Whitney U test

Table 1: Significance of Value Added per Employee ratio in pre- and post-ESOP

<table>
<thead>
<tr>
<th>Sector</th>
<th>Mean rank</th>
<th>Sum of ranks</th>
<th>Mann-Whitney U</th>
<th>Z value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceuticals</td>
<td>65.96</td>
<td>5277</td>
<td>2037</td>
<td>3.969</td>
<td>**</td>
</tr>
</tbody>
</table>

Significant at 1% level, * - Significant at 5% level, Ns- Not significant
Table 2: Significance of ATO ratio in pre- and post- ESOP

<table>
<thead>
<tr>
<th>Sector</th>
<th>Mean rank</th>
<th>Sum of ranks</th>
<th>Mann-Whitney U</th>
<th>Z value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceuticals</td>
<td>88.69</td>
<td>7095</td>
<td>2545</td>
<td>2.235</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>72.31</td>
<td>5785</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at 1% level, * - Significant at 5% level, Ns- Not significant

Table 3: Significance of Net Profit Margin in pre- and post- ESOP

<table>
<thead>
<tr>
<th>Sector</th>
<th>Mean rank</th>
<th>Sum of ranks</th>
<th>Mann-Whitney U</th>
<th>Z value</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmaceuticals</td>
<td>67.37</td>
<td>5389.50</td>
<td>2149.5</td>
<td>3.585</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>93.63</td>
<td>7490.50</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Significant at 1% level, * - Significant at 5% level, Ns- Not significant

Annexure III: Regression Synthesis for Pharmaceutical Sector

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Dependent variables</th>
<th>Performance:</th>
<th>Risk:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ROE</td>
<td>ROA</td>
</tr>
<tr>
<td>ESOP Period (Pre/Post)</td>
<td>Ns</td>
<td>Ns</td>
<td>(+) **</td>
</tr>
<tr>
<td>Debt to Equity Ratio</td>
<td>Ns</td>
<td>Ns</td>
<td>Ns</td>
</tr>
<tr>
<td>Sales Growth</td>
<td>Ns</td>
<td>(+) **</td>
<td>Ns</td>
</tr>
<tr>
<td>Employee Growth</td>
<td>Ns</td>
<td>Ns</td>
<td>Ns</td>
</tr>
<tr>
<td>Age</td>
<td>Ns</td>
<td>Ns</td>
<td>Ns</td>
</tr>
<tr>
<td>Main Shareholder Power</td>
<td>(-) *</td>
<td>Ns</td>
<td>Ns</td>
</tr>
<tr>
<td>Total Assets</td>
<td>Ns</td>
<td>Ns</td>
<td>Ns</td>
</tr>
<tr>
<td>Value Added per Employee</td>
<td>Ns</td>
<td>Ns</td>
<td>Ns</td>
</tr>
<tr>
<td>Asset Turnover Ratio</td>
<td>Ns</td>
<td>(+) *</td>
<td>Ns</td>
</tr>
<tr>
<td>Capital Intensity Ratio</td>
<td>Ns</td>
<td>Ns</td>
<td>Ns</td>
</tr>
</tbody>
</table>

(+ or (-) Symbol of the relationship

** Significant at 1 % level, * Significant at 5 % level

Source: Computed