ANALYSIS OF PROFITABILITY IN INFORMATION TECHNOLOGY ENABLED OUTSOURCING FIRMS IN INDIA

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Abstract

Outsourcing is basically a third party performance of functions once administered in-house with an overall objective of increasing efficiency and gaining cost effectiveness in all the areas wherever possible. Outsourcing may be classified under two categories. First, the information technology outsourcing, the ITO, that involves engagement of a third party to manage a particular application including all servers, networks and software upgrades. Secondly, the business process outsourcing, the BPO, that has the feature of engaging a third party contracted to manage the entire business process, such as procurement, accounting or human resources. Under BPO the professional expertise and experience of the supplier are exploited to the maximum extent for value addition process of investors. The proposed work analyzes both ITO and BPO in the business economics framework. It is based on financial statistics database of 75 companies dealing in computer software, services and business process outsourcing for a period of ten years. It is an attempt to capture the underlying business model using financial analysis covering profitability aspects.

INTRODUCTION

Financial Analysis is the process of identifying strengths and weaknesses of the firm by properly establishing relationships between the items of the balance sheet and the profit and loss account. Ratio analysis is the most powerful tool of financial analysis. It is the process of establishing and interpreting various ratios for helping in making certain decisions and to assess financial position of the company. Ratio analysis covers various ratios like profitability, liquidity and solvency to assess the financial position of the companies.

For the analysis purpose the database of 75 companies covered has been divided into the following three sections as shown in the following table. The data has been obtained from Centre for Monitoring Indian Economy Databases (CMIE).

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The companies selected have major shareholding in the outsourcing industry (Nasscom, 2008). The overall picture of the data set of 75 companies for various categories is shown in table 1. These companies are leading companies in their respective specialization and the percentages have also been calculated.

Table 1: Sector-wise breakup of the companies selected for analysis.

Outsourcing Sectors	Specialization	Number of companies	Percentage
Computer Software	Computer Software	43	57.33
Services	Software Services, Consultancy, Training and Education	18	24.01
ITES-BPO	Business Process Outsourcing and Information Technology Enabled Services	14	18.66
Total Companies		75	100

Source: Calculated (Nasscom Strategic Review (2004, 2005, 2008)

Following is the detailed analysis of profitability both in its temporal and spatial dimension.

Profitability Analysis

The primary objective of a business undertaking is to earn profit. Profit earning is considered essential for the survival of the business. In the words of *Lord Keynes*, "Profit is the engine that drives the business enterprise". Profits are thus a useful measure of overall efficiency of a business. Profits are generally compared with sales level and investment level and the following ratios have been used to assess the profitability namely net profit ratio, return on investment, return on gross capital employed, return on shareholder's fund and asset utilization ratios.

Net Profit Ratio

The first dimension of profitability namely net profit ratio is defined as the ratio of profits after tax and sales. The ratio indicates what portion of the net sales is left for the owners after, all expenses have been met. Net profit ratio establishes a relationship between net profits (after taxes) and sales, and indicates the efficiency of the management in manufacturing,

selling, administrative and other activities of the firm. Higher the value, higher is the profitability of the business. Net profit ratio has been calculated for the selected set of seventy five companies for a period of ten years. Historically the high average net profit ratio associated with all the segments of outsourcing industry has started normalizing to lower normal levels. The ratio was 14.06 percent in computer software segment as compared to -40.27 in services segment and 7.88 percent in process outsourcing segment in the year 1998. As compared to the other two, the software segment had been fairly homogenous (CV=89.66 percent) for the same year. In the year 2001, because of US software industry crisis, all the segments of business process outsourcing also depicted a relatively reduced profitability as compared to the earlier period. In computer software industry, average net profit came down to 11.47 percent in 2001 as compared to 14.06 percent in 1998. Likewise, there was also reduction in net profit ratio, in same period, in the other two segments, the services and process outsourcing. The fall in net profit ratio continued even in the following years. In the year 2005, being 4.53 percent, average profitability is the highest in the process outsourcing segment. The higher co-efficient of variation (901.71 percent) shows greatest heterogeneity of data in this category. As far as the range is concerned greatest range co-efficient is shown by the services and computer software segment. The variations in the net profit ratio are pronounced both in the temporal and spatial dimension. Temporal variability in range coefficients indicates the instability of ratio in the time dimension and spatial variability in the same indicates the heterogeneity of the sampled companies. On the whole, the analysis of net profit ratio is indicative of the fact that in the past, information technology industry in general and the outsourcing industry in particular have enjoyed a privileged position because of poor competition of rivals and comparative cost advantage. But over a period of time, the profitability in terms of net profit ratio is shrinking and coming to normal levels due to competition and increasing wage bills in the industry. The process outsourcing is emerging as relatively a profitable segment.

Analysis of growth rate of net profitability ratio in BPO sector in relation to other IT sectors for years up to 2000, 2005 and the overall has been done. The growth rates have been classified on a five point scale and the percentages of companies have been calculated under each category according to growth rates. The overall temporal growth of net profitability ratio of the industry shows that, 42.86 percent of the companies in the BPO segment lie in the above 20 percent growth rate of net profit ratio. This percentage mark of net profit ratio is 16.67 percent for the services segment and 9.52 percent for software companies. Nearly 73.81 percent of the companies in software segment and 61.11 percent in services segment

and 42.86 percent in BPO segment are in the recession zone in terms of shrinking profitability. Period up to year 2000 is characterized by the fact that the number of fast growing companies, in terms of net profit growth higher than 20 percent, 26.47 percent were software companies, 9.09 percent were service companies and 16.67 percent of the companies belonged to business process outsourcing. As against this, after the year 2001 the situation has drastically changed. The share of companies having higher than 20 percent growth has become 12.50 percent for software companies; 33.33 percent for service companies; and 50.00 percent for business process outsourcing companies. In the pre-2001 period most of the slowness in terms of net profit associated with business process outsourcing has shifted to the software companies in the post 2001 period. In terms of net profit ratio the business process outsourcing related companies have been the fast growing and the other two, the software and services have relatively slowed down. The recent structural shift in the information technology is characterized by a shift from only software or service type of body shopping to business process outsourcing. The plain economic reason has been the higher net profit ratio. Thus the overall picture that emerges signifies that BPO segment has come into momentum after the year 2000 only and is extremely doing well with regards to the profitability of the company is concerned.

Return on Investment

Next aspect of profitability may be viewed as a Return on Investment (ROI). ROI is one of the most important ratios used for measuring overall efficiency of the firm. This ratio reveals how well the resources of a firm are being used. It is defined as the percentage of return on the total capital employed in the business. Higher the value higher is the profitability of the business. Descriptive analysis of return on investment shows that on an average return on investment, in the year 2005, is the highest in software segment (12.65 percent) followed by process outsourcing (11.12 percent) and service segment (5.48 percent). Further the coefficient for variation for ROI depicts that there is smallest dispersion in software segment as compared to the other two segments. Coefficient of variation of 664.18 in BPO segments shows that there is a wide variation among the companies in this segment, as far as the ROI is concerned. In temporal dimension for computer software sector ROI used to be 27.16 percent in 1999; 24.28 percent in year 2001 and is 12.65 percent in 2005. Likewise, in BPO segment, ROI was 16.20 percent in the year 1999, 15.65 percent in year 2001 and 11.12 percent in 2005. But in case of service, after a spurt in 2001, ROI has come down to 5.48 percent level. Same behavior pattern is being shown by the aggregate sample.

Hence, analysis shows that ROI, that used to be enormous, is loosing ground and coming down to lower level. All the segments of the industry are approaching to normal return levels.

Distribution of ROI according to range of growth rate shows that majority of high growth companies, say in the range of ROI growth in greater than 20 percent per annum range, are historically associated with BPO segment and this share is continuously on the rise. In the pre 2001 era, nearly 12 percent companies, both in software and services segment, were in the high growth region of ROI. In the same period, this share for BPO companies was 20.00 percent. But in the 2001 onwards period, in BPO segment, high growth ROI companies have formed a share of 50.00 percent. It has improved for services also, it has become 27.27 percent. But the share of high growth ROI companies in software has come down to 10.53 percent. Thus the results are indicative of the fact that more and more fast growing companies in ITES-BPO segment are replacing the companies in the other two segments as far as return on investment is concerned.

Return on Gross Capital Employed

The next ratio of profitability namely Return on Gross Capital Employed (ROC) establishes the relationship between profits and the gross capital employed. It is defined as the ratio of profits before interest and tax to gross capital employed. The term 'gross capital employed' includes the total investments made in a business, i.e., total assets, fixed as well as current assets. The business can only survive when the return on capital employed is more than the cost of capital employed in the business. Higher the value of ROC, higher is the profitability of the business. Return on gross capital employed has been calculated for a set of 75 companies for a period of 10 years.

The return on capital is positive for software segment and is negative for services and the BPO segment. It was 10.62 percent, -11.57 percent and -7.00 percent for software, services and BPO segments respectively in year 2005. Historically, it was positive for all the three segments, it has declined and decline has been faster in services followed by BPO segments and is fairly slow in case of software segment. Software segment is fairly homogenous group of industries as compared to the other two.

Analysis of growth rate of return on gross capital employed in BPO sector in relation to other IT sectors for years up to 2000, 2005 and the overall has been done. The growth rates have been classified on a five point scale and the percentages of companies have been calculated under each category according to growth rates. Segment-wise growth profile of ROC highlights that more than fifty percent of the companies in BPO segment lie in the high

growth region, a region characterized by above twenty percent rate of growth of ROC. This share of high growth companies is 18.18 percent for services segment and 9.30 percent for software segment in the year 2005. Over a period of time, under consideration, the share of high growth companies is picking up in case of BPO segment followed by services segment. It has decreased marginally for the software segment. As compared to only 35 percent in BPO segment, more than 60 percent companies, both in software and services segment, are in the negative region of ROC growth. Thus slowdown in terms of ROC has effected largely to the software and services segment and companies have been turning to BPO activity because of high ROC.

Return on Shareholders' Funds

Return on shareholders' funds (ROSF) helps to work out the profitability of the company from the shareholder's point of view. It is defined as the ratio of profits after interest and tax to shareholder's funds. Higher the value higher is the profitability of the business as more profits secure the shareholder's funds and reduce their risk of investing into the company. Descriptive analysis of the return on shareholder's fund values in relation to industry segments shows that in the year 2005, ROSF has been the highest in software segment (11.64 percent), followed by services segment (8.33 percent), and lowest in BPO segment (-138.66 percent). Historically also the relative position has been the same as present one except that it has become too adverse in case of BPO segment. Thus the profitability from the view of shareholders' view has deteriorated in case of BPO segment and is fairly comfortable in other two segments.

Temporal growth rate of ROSF parameter is indicative of the fact that still a major chunk of high growth companies is still found in BPO segment. Larger share of negative ROSF ratio are associated with other two segments. But it should be read with a caution, as higher negative growth ROSF companies form a very large weight in aggregate profit as compared to the fast growing ones. From shareholders' angle BPO segment is becoming less profitable proposition as compared to the other two segments. This implies ITES-BPO sector is more vulnerable to any slight shock of stock market as compared to the other two segments which are relatively robust.

Asset Utilization Ratio (operating income to total assets)

Next operating performance ratio, asset utilization ratio, is a ratio of operating income to total assets. This ratio indicates how much operating income is generated, as compared to the total

assets employed. Higher the value higher is the efficiency of the business. In the year 2005 operating income to total assets is highest in BPO segment (1.22) as compared to 0.87 in software segment and 0.81 in services segment. Over a period of time the ratio has declined in other two segments as compared to consistent improvement in BPO segment. This shows that there is a better income generation in relation to asset utilization in BPO segment. Growth rate analysis of asset utilization ratio shows that the maximum number of companies lie in the BPO segment that is 35.71 percent whose growth rates is above 20 percent. In the services category number of companies, that is, 14.29 percent of companies have their growth rates between 10-20 percent and in computer software category maximum number of companies that is 62.50 percent companies have their growth rate below 0.00 percent. While studying these values for 2001-2005 about 37.50 percent of companies in the BPO segment have their growth rates above 20 percent.

For the years up to 2000 maximum number of companies that is 40 percent companies in the BPO category have their growth rate above 20 percent which has decreased over the years but still on the higher end as compared to computer software and services sector. Thus the growth of asset utilization has again gone in favour of BPO segment and the other two segments are relatively at a disadvantage.

Operating Income/Capital Employed Ratio

Operating income to capital employed ratio is another measure of asset utilization. This ratio analyses the relationship between the operating incomes generated to the capital employed. Thus higher the value higher is the profitability of the business. Descriptive analysis of the ratio for various segments of the industry shows that in the year 2005, average values of the ratio in each category indicate highest value in the BPO category at 2.74 followed by computer software at 1.24. Also the co-efficient of variation for computer software segment shows greatest heterogeneity of data in this category. These values are highest for services segment up to 2001 at 2.74 followed by computer software category at 1.24 and services at 1.01 percent. As far as the range is concerned greatest range co-efficient is shown by services segment at 3.24 for 2005 followed by computer software at 2.39 and services category at 1.25. Thus the spatial dimension shows greatest variation or dispersion between the highest and the lowest values in the services segment. The results also indicate gradual increase in average values over the years to be increasing in the BPO sector.

Analysis of Profitability ■Net Profit Ratio 60 Percentage of Companies having Growth Rate above 20 percent 50 ■ Return on Investment 40 ■ Return on Gross Capital **Employed** 30 ■Return on Shareholder's Fund 20 Operating Income /Total 10 Assets Operating Income **BPO** Computer Services /Capital Software Employed

Figure 1

Source: Calculated

The overall values indicate that maximum number of companies lie in the BPO segment that is 42.86 percent whose growth rates are above 20 percent. In the computer software category maximum number of companies that is 85 percent of companies have their growth rates below 10 percent and in computer software category maximum number of companies that is 42.86 percent companies have their growth rate below -10.00 percent. While studying these values for 2001-2005 about 37.50 percent of companies in the BPO segment have their growth rates above 20 percent. For the years up to 2000 maximum number of companies that is fifty percent companies in the services category have their growth rate above 20 percent. Thus the overall picture that emerges signifies that BPO segment has come into momentum during these years and is the fastest growing segment with regards to the asset utilization capacity is concerned. The overall profitability is ascertained by net profit ratio, return on investment, return on gross capital employed, return on shareholder's fund and asset

utilization ratios. Figure 1 shows all values of the above said ratios of the companies under each segment whose growth rate is above 20 percent.

CONCLUSION

To conclude, maximum profitability is indicated in the ITES-BPO segment thereby signifying maximum profitability area for creditors and investors and is the largest growing segment for the coming years. This implies as far as swiftly growing companies are concerned ITES-BPO is emerging as a leader as compared to the other two segments.
