



Effect of Financial Variables Disclosed in the Annual Report on Human Resource Value in Infosys Limited

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Abstract

The evaluation of Human Assets of Infosys is based on the present value of the future earnings of the employees with the following assumptions: Employees' compensation includes all the direct and indirect benefits earned both in India and abroad. The incremental earnings based on the basis of group and age is considered. The study is carried out by analyzing the behavior of all the important variables from the HRA point of view. To find out the interrelationship between these variables, the bivariate correlation analysis between HRV and financial variables has been undertaken. The data used in the study has been collected from the annual reports of Infosys for the years 2005-06 to 2011-12. The simple correlation analysis as examined in the study reveals the insignificant relationship between financial variables, predictor variables and HRV per employee except in Return on HRV. HRV is negatively related with the Return on HRV.

Keywords: Human resource value (HRV), human resource accounting (HRA), financial variables, predictor variables.

Introduction

One of the most debated dilemmas in the present accounting world is the Human Resource Accounting (HRA). Many theories and methods have been counseled for valuing human resource.

American accounting association (AAA) defines Human Resource Accounting: as "the process of identifying and measuring data about human resources and communicating this information to the interested parties¹".

Human Resource has long been recognized as a most important asset and value creator to organizations. The basic objective underlying Human Resource Accounting is to facilitate the effective and efficient management of human Assets². In mission statements, annual reports and annual general meetings, companies state that "our greatest assets are our people"³.

Review of Literature: Patra, Khatik and Kolhe⁴ studied a profit making heavy engineering public sector company which used the Lev and Schwartz⁵ model to evaluate HRA measures. The authors examined the correlation amid the total human resources and personnel expenses for their fitness and encounter on production. They find out that HRA valuation was important for decision-making in order to accomplish the organization's aims and enhance output. Verma and Dewe (2008)⁶ in their research revealed perceptions in the area of valuing human assets. This paper focused on the importance of human asset value, barriers to measurement, current measurement practices and the progress expected in this field. Majority of respondents regarded the measurement of human resources as important to their company, little or moderate progress was expected in

measurement practices over the next few years. Al Mamun.S.A.⁷ conducted a study on the relationship between corporate characteristics and Human Resource Disclosure (HRAD) level in 55 selected companies of Bangladesh. In the study, HRAD has been found significantly related with the size of the company, category of the Company and profitability. And HRAD had no influence on the age of companies. Sharma and Shukla⁸ in their article analyzed the application of human asset accounting in heavy industries covering the period from 2001-2010 with the case study of the Hindustan Copper Limited (HCL). According to the conclusion of this study the concept of human asset accounting is yet gain momentum in India. For the betterment of the organizations, it is necessary to evaluate the worth of human assets in a systematic manner and record the information in the financial statement of the organization to communicate their worth time to time to the users of the financial statement. Rosman Md., Shah F.A., Hussain J. and Hussain A.⁹ in their review paper examined factors impacting the role of HR department in private Healthcare Sector in Pakistan. They concluded by the analysis that HR department plays the role of an administrative expert in RMI (selected case study).

Infosys: Infosys provides additional information to the shareholders in the form of Balance sheet including intangible assets, economic value added statement, human resources accounting, brand valuation, intangible asset scorecard, value added statement, and risk manage report. Infosys started Human Resource Accounting (HRA) valuation and it's reporting from the year 1995-96. Infosys follows salary-based economic valuation proposed by Lev and Schwartz for human resource valuation. This model attempts to value the human resources of an organization by using the economic concept of human capital

by considering the future expected earnings of the employees. Thus, the human resources are valued at the present value of the future earnings of the employees, discounted by the appropriate rate which the company considers equal to the cost of capital. The company calculates the cost of equity by adding the expected risk premium adjusted for Beta variance to the rate of interest on risk free investment. The model requires the division of the complete labour force of an organization into certain homogeneous groups such as Skilled, Unskilled, Technical, Non-technical, Managerial staff etc. in accordance with different classes and age groups.

Material and Methods

The data used in the study has been collected from the annual reports of Infosys for the years 2005-06 to 2011-12. The study is carried out by analyzing the behavior of all the important variables from the HRA point of view. These variables are: Total number of employees, Education index, Cost per employee, Discount rate, Human resource value per employee (HRV), Turnover per employee, Value added per employee, Return on HRV.

Techniques of Analysis: the case study analysis has been carried out using three basic Statistical techniques: i. Behavioral Analysis, ii. Bivariate analysis: Simple correlation.

Hypotheses: i. There is a significant relationship between value added per employee and human asset value per employee. ii. There is a significant relationship between cost per employee and HRV per employee. iii. There is a significant relationship between turnover per employee and HRV per employee. iv. There is a significant relationship between return on HRV and human asset value per employee. v. There is a significant relationship between net income and HRV per employee. vi. There is a significant relationship between discount rate and

HRV per employee. vii. There is a significant relationship between total number of employee and HRV per employee. viii. There is a significant relationship between education index and HRV per employee.

Results and Discussion

Behavioral Analysis: The present analysis introduces all the variables under study and explains as to how Infosys measures and reports these vital human resource related variables. Thereafter, the index based time series behavioral analysis has been carried out to observe the movement of each of these variables. This section studies the movement of individual variables which are considered for the study. The values of all the individual variables have changed during the last seven years of the study. The researcher has also constructed the index of all variables with 2005-06 as the base year for comparative growth analysis.

Number of Employees: The number of employees has remarkably increased every year in the last seven years. At the year-end 2005-06, total employees were 52700, which increased by 152 in the next year [year-end 2006-07] to reach the strength of 72241. At the year-end 2011-12 the total number of employees was 149994 (table-1).

The same thing is clear from the above table. During all these years, the total number of employees increased from 52700 [2005-06] to 149994 [2011-12], more than 2.84 times.

Educational Index of Employees: Infosys calculates educational index at the year-end. It is calculated by assigning the weights: 1 for primary education, 2 for secondary education and 3 for tertiary education. Educational index of the company, calculated as per above criteria, is increasing every year as shown in the table 2.

Table-1
Indices for Number of Employees

| Particulars | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|
| Total number of employee | 52700 | 72241 | 91187 | 104850 | 113796 | 130820 | 149994 |
| Total no. of employee-Index | 100.00 | 137.07 | 173.03 | 198.95 | 215.93 | 248.23 | 284.61 |

Year ended on 31st March, Source: annual reports of Infosys, for the years 2006-2012.

Table-2
Indices for educational index

| Particulars | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Educational index | 148499 | 203270 | 251970 | 272644 | 296586 | 343407 | 391955 |
| Index number of educational index | 100.00 | 136.88 | 169.67 | 183.59 | 199.72 | 231.25 | 263.94 |

Year ended on 31st March, Source: annual reports of Infosys, for the years 2006-2012.

As per the Lev and Schwartz model of valuation of human assets of an organization, the future expected return of an individual during his expected working life is calculated and then discounted for the calculation of the present value. Therefore, human resource value depends directly on the future expected earning per returns of the employees. Future expected return depends on the expected service life left and the educational qualification of an employee. Hence, the education index is an important factor in the determination of HRV. With checking the educational index of employees working at Infosys, it is evident that it has been increasing every year. The number of employees increased more than 2.84 times where as educational index increased 2.63 times from the year 2006 to 2012. This makes it a lucid truth that the company is appointing qualified staff and every time company prefers to appoint employee with higher qualification than the earlier.

Cost per Employee: Infosys reports Employee Cost, which includes Salary and Bouns, Staff welfare, contribution to PF and other funds related to employees. The cost of employees has continuously increased every year in the last seven years. The total turnover also increased every year during this period (table-3).

It is obvious that the increase in number of employees will increase the employee cost. This increase in total employee cost at the higher rate is reflected in the cost per employee. Cost per employee was Rs.0.091 Crores in the year 2006 and with a regular increase in each year it reaches Rs. 0.108 Crores. Cost per employee increased by 1.18 times during the period of seven years of study. Total number of employees increased more than

2.84 times. Total employee cost increased by 3.38 times over a period of seven years whereas cost per employee increased by 1.18 times only. The number of employees increased by 2.84 times during the period from 2005-06 to 2011-12. The increase in total employee cost in this direction is also obvious but it increased by 3.38 times. The increase in total employee cost was at a higher rate than the increase in number of employees.

Thus increase in the total employee cost at a higher rate than the increase in a number of employees resulted in increase in cost per employee. This indicates that presently Infosys pays at a higher rate than in 2005-06. This is because of the policy of considering human resources as an asset and recognizing them. Infosys also believes in sharing the profits with employees and therefore, with the increase in profits, payments to employees also increased. To check the same thing let the researcher match the turnover with the employee cost. In the year 2005-06, total employee cost was Rs.4801 Crores, which works out to 53.17 per cent of the total turnover. The employee cost increased to Rs. 16237 Crores in the year 2011-12 which is 51.95 percent of total turnover. The increase in total employee cost is obvious but the share of employee cost in the total turnover indicates that payments were made at a higher rate than the year 2005-06 except for the year 2011-12. This is clear from the table 4.

Turnover per employee as well as employee cost increased during this period, indicate that attractive salary packages have worked positively. The payments to employees i.e. cost per employee at higher rate was not only on the basis of seniority but the company has paid at higher rate to all the employees, even to the new appointees who had joined recently.

Table-3
Indices for Cost

| Particulars | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------------------|--------|--------|--------|--------|--------|--------|--------|
| Employee cost | 4801 | 7112 | 8878 | 11405 | 12093 | 14856 | 16237 |
| Employee cost-index | 100.00 | 148.13 | 184.91 | 237.55 | 251.88 | 309.43 | 338.20 |
| Cost per employee | 0.091 | 0.098 | 0.097 | 0.108 | 0.106 | 0.113 | 0.108 |
| Cost per employee-index | 100.00 | 107.69 | 106.59 | 118.68 | 116.48 | 124.17 | 118.68 |

Year ended on 31st March, Source: annual reports of Infosys, for the years 2006 to 2012 [Rupees in Crores]

Table-4
Turnover and cost relationship at Infosys

| Year | Total turnovers Rupees in Crores | Total Employee Cost Rupees in Crores | Employee cost as a per cent of total turnover |
|-----------|----------------------------------|--------------------------------------|---|
| 2005-06 | 9028 | 4801 | 53.17 |
| 2006-07 | 13149 | 7112 | 54.08 |
| 2007-08 | 15648 | 8878 | 56.73 |
| 2008-09 | 20264 | 11405 | 56.28 |
| 2009-10 | 21,140 | 12093 | 57.20 |
| 2010-2011 | 25385 | 14856 | 58.52 |
| 2011-2012 | 31254 | 16237 | 51.95 |

Source: annual reports of Infosys, for the years 2005-2006 to 2011-12.

Discount rate: The discount rate is one of the most important factors in the valuation of the human resources of Infosys because the firm follows the Lev and Schwartz model where the valuation of human resource is the present value of future expected earnings of an individual. In the calculation of present value of future expected earnings, the discount rate plays an important and crucial role. HRV has very strong inverse relationship with the discount rate. Even with the same set of human resources and payment structure, HRV would differ at different discount rates. Therefore, the discount rate is an imperative factor in the human resource valuation following the Lev and Schwartz model (table-5).

Infosys uses discount rate for the valuation of human resources equal to the cost of capital, considering the economic meanings of human capital. At the year-end 2005-06, the discount rate was 12.96 per cent and that reduced to 4 per cent at the year – end 2011-12. Discount rate was decreased to 30.86 per cent from base year rate of 100. This decrease in the discount rate is due to the decrease in the cost of capital. As Infosys does not have long-term debt capital, only the cost of equity is used as the cost of capital. This in return would increase the calculated value of the company’s cost of capital. Hence, the HRV, which largely influenced by the cost of capital i.e. the discount rate, is eventually determined by the stock price movement. Further, the cost of equity depends upon the rate of interest and Beta factor. Company considers cost of equity calculated as under:

$$\text{Cost of equity} = \left(\frac{\text{return on risk}}{\text{free investment}} \right) + \left(\frac{\text{expected risk premium on equity}}{\text{investment adjusted for the beta variant}} \right)$$

Beta measures the stock sensitivity to the market. It measures non-diversifiable risk. Beta shows how the price of a security responds to market forces. The more responsive the price of a security to a change in the market, the higher will be its beta. Beta is calculated by relating the returns on a security with the returns for the market. The beta is calculated by relating the

average return of a large sample of stocks. The beta for the overall market is considered equal to 1.00 and beta for a particular company is visual in relation to this value. Higher the beta indicates higher is the rate of expected return from the capital asset and hence a higher value of the asset. Therefore, a relative improvement in the stock market performance of a company would increase the beta value. The discount rate so calculated for the valuation of the human resources has been decreasing. As the discount rate and net present value have inverse relationship, human resource value has been consistently increasing; however, it has not increased in the proportion of number of employees. The reasons for the decreasing discount rate are fluctuations in beta variant and a decrease in interest rate.

Human Resource Value: The total human resource value at Infosys was Rs. 46637 Crores at the year-end 2005-06, which has increased remarkably during the last seven years to reach to Rs. 125717 Crores at the year- end 2011-2012. This increase is 2.69 times over the base year i.e. 2005-06 (table-6).

HRV increased due to a number of reasons like: Increase in the number of employees more than 2.84 times would persuade the HRV due to direct relationship, between number of employees and HRV.

Educational index increased at an approximately same rate of the increase in the index of employees. This indicates that new employees had a higher education qualification.

In the last seven years, total number of employees increases more than 2.84 times and therefore total employee cost also increased. The important point to note here is that the cost per employee increased from 0.091 Crores to 0.108 Crores. Present payment to employees will definitely increase the future expected return of individual employee and it will definitely accelerate the value of human resources.

Table-5
Indices for discount rate

| Particulars | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------|--------|--------|--------|--------|--------|--------|-------|
| Discount rate (per cent) | 12.96% | 14.97% | 13.32% | 12.18% | 10.60% | 11.21% | 4% |
| Discount rate-index | 100.00 | 115.50 | 102.77 | 93.98 | 81.79 | 86.49 | 30.86 |

Year ended on 31st March, Source: annual reports of Infosys, for the years 2005-06 to 2011-12.

Table- 6
Indices for human resource value

| Particulars | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------|--------|--------|--------|--------|--------|--------|--------|
| Total HRV (Rs.) | 46637 | 57452 | 98821 | 102133 | 113287 | 135105 | 125717 |
| Total HRV-Index | 100.00 | 123.18 | 211.89 | 218.99 | 242.91 | 289.69 | 269.56 |
| HRV per Employee(Rs.) | 0.88 | 0.88 | 1.08 | 0.97 | 1 | 1.03 | 0.84 |
| HRV per employee-Index | 100.00 | 100.00 | 122.72 | 110.22 | 113.63 | 117.04 | 95.45 |

Year for human resource value, Source: Annual reports of Infosys, for the years 2005-06 to 2011-12

The important factor in valuation of human resources is the discount rate. The lump sum value of future expected return is converted into the present value as on the date of valuation. For this purpose, the discount rate (rate of cost of capital) is applied to the lump-sum value. The discount rate has inverse relationship with the human resource value. Any change in discount rate will change the value of human resources without having change in any other variables such as number of employee, average age, employee cost etc. the discount rate decreased in last seven years from 12.96 percent in the year 2005-06 to the 4 percent at the year-end 2011-12.

Turnover per Employee: Infosys experienced growth in the total turnover in the last seven years from the year 2005-06 to 2011-12. Total turnover increased by 3.46 times during this period. From the year 2005-06, the rate of increase in the turnover is quietly high (table-7).

The turnover is the mirror of resources performance. Therefore to have an idea about the performance of the employees and to check the result of increase in the total employee cost as well as cost per employee, the researcher has also calculated the turnover per employee (table-8).

The turnover per employee is calculated as total turnover divided by the number of employees. The turnover of the Infosys increased from 9028 Crores in 2005-06 to 31254 Crores in 2011-12 indicating that turnover increased by approximately 3.5 times over the period of seven years. On the other hand, turnover per employee increased 1.17 times during the same period. Considering the total turnover of the year 2005-06 as the base for the calculation of index, it increased by about 3.5 times during the seven years of the study. The turnover per employee

also increased slightly during the same period. In comparison to base year, turnover per employee increased by 1.17 times during the period under consideration. This is a clear-cut indication of an increase in employment efficiency and efforts increase in the number of employees. The total turnover increased by 3.5 times and number of employees increased more than 2.84 times. This has resulted in increase in the turnover per employee by about 1.17 times. This increase in the turnover per employee is a clear indication of increase in the efficiency of the employees at the Infosys. This increase in efficiency, even after following the hire and fire policy by the company, is the result of maintaining low average age, fresh appointments from the lower age group, increasing educational index and smart payment with advance training programs.

Value Added per Employee: Infosys calculates the total value added by deducting the software development expenses, selling and distribution expenses, administration expenses from the total revenue earned during the year. The amount of value added does not include the extraordinary income. Therefore, the value added indicates the earning power of the organization. The same amount is divided by the number of employee to calculate value added per employee. This calculation is made to check the performance in terms of revenue income available to meet the obligations towards the resources applied in the business operations. Value added per employee was Rs. 0.152 Crores in the year 2005-06, with total increase of 1.35 times it reached to 0.206 Crores per employee. In seven years, cost per employee increased by 1.18 times, whereas the value added per employee increased by 1.35 times. This indicates that performance of employee increased in line with increase in payments to the employees (table-9).

Table-7
Indices for Turnover at Infosys

| Particulars | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Total turnover (Rs. In Crores) | 9028 | 13149 | 15648 | 20264 | 21,140 | 25385 | 31254 |
| Total turnover - Index | 100.00 | 145.64 | 173.32 | 224.45 | 234.16 | 281.18 | 346.18 |

Year ended on 31st March, Source: annual reports of Infosys, for the years 2005-06 to 2011-12.

Table-8
Indices for turnover per employee at Infosys

| Particulars | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Turnover per employee (Rs. In Crores) | 0.17 | 0.18 | 0.17 | 0.19 | 0.18 | 0.19 | 0.2 |
| Turnover per employee- Index | 100.00 | 105.88 | 100.00 | 111.76 | 105.88 | 111.76 | 117.64 |

Year ended on 31st March, Source: Annual reports of Infosys, for the years 2005-06 to 2011-12

Table -9
Indices for value added per employee

| Particulars | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--|--------|--------|--------|--------|--------|--------|--------|
| Value added per employee | 0.152 | 0.164 | 0.162 | 0.181 | 0.183 | 0.191 | 0.206 |
| Index number of value added per employee | 100.00 | 107.89 | 106.57 | 119.07 | 120.39 | 125.65 | 135.52 |

Year ended on 31st March, Source: Annual reports of Infosys, for the years 2005-06 to 2011-12

Return on HRV: Infosys reports the return on HRV in percentage as a part of Human Resource Accounting in the section on additional information to shareholders. Return on HRV is calculated as the percentage ratio of profit after tax to the Human Resource Value (HRV) (table-10).

Table-10 makes it clear that the return increased as a percentage of HRV. But the return increased at a lower rate than the increase in the HRV. The HRV increased from Rs.46637 Crores in the year 2005-06 to Rs. 125717 Crores at the year end 2011-12. At the same time, profit after tax increased from Rs. 2421 Crores for the year 2005-06 to Rs.7986 Crores for the year 2011-12. Profit after tax [PAT] increased by 3.29 times in the last seven years. The same results are presented in the table 11. After the excellent growth rate experienced by the Infosys in the amount of PAT, the return on HRV increased from 5.3 percent to 6.5 percent in the same period. This is because of the increase in the PAT by 3.29 times, which is at a higher rate than the increase in total HRV by 2.69 times (table-11).

Total Asset per Employee: In the last 7 years, total assets increased by 5.19 times. During all these years, total assets increased from Rs. 6897 Crores to Rs. 35815 Crores. On the other hand, total assets per employee increased by 1.76 times during the same period (table-12).

Bivariate Analysis: After analyzing the growth of HRV and its related variables in the earlier section, one pertinent question which arises here is: how closely is the HRV related to each of

these variables? To answer this question, the present section undertakes bivariate analyses. That is: Simple correlation analysis. All the variables under study have been divided into two broad groups, namely; financial variables and predictor variables. Financial variables indicate the state of financial health whereas predictor variables are basically the determinants of HRV.

Group one: Financial variables: The financial strength of a company, to a great extent, depends upon its human resources. As the only active asset in a company, human resources directly contribute to the ultimate goal of an organization- optimization of efficiency and profitability. These variables measuring the efficiency and profitability are termed as financial variables. To find out the interrelationship between these variables, the bivariate correlation analysis between HRV and financial variables has been undertaken. The financial variables identified are: Cost per Employee, Turnover per Employee, Value added per Employee, Return on HRV, Net income per employee, Total asset per employee.

The Infosys limited considers all these variables for the human resource accounting disclosure. The Infosys has reported some of these information to the shareholders in its annual reports for the concerned period. Rest of them has been calculated by the researcher. The company also provides a balance sheet including the intangible assets as the additional information to the shareholders.

Table-10
Indices for return on HRV

| Particulars | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------------------|--------|--------|-------|--------|--------|-------|--------|
| Return on HRV (Percent) | 5.3 | 6.7 | 4.7 | 5.9 | 5.5 | 5.1 | 6.5 |
| Index-return on HRV | 100.00 | 126.41 | 88.67 | 111.32 | 103.77 | 96.22 | 122.64 |

Year ended on 31st March, Source: Annual reports of Infosys, for the years 2005-06 to 2011-12.

Table-11
Indices for profit after tax

| Particulars | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|------------------------|--------|--------|--------|--------|--------|--------|--------|
| Profit after tax (PAT) | 2421 | 3777 | 4470 | 5819 | 5755 | 6443 | 7986 |
| Index number of PAT | 100.00 | 156.00 | 184.63 | 240.35 | 237.71 | 266.12 | 329.86 |

Year ended on 31st March, Source: Annual reports of Infosys, for the years 2005-06 to 2011-12

Table-12
Indices for total asset per employee

| Particulars | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|--------|--------|--------|--------|--------|--------|--------|
| Total asset | 6897 | 11162 | 13490 | 17846 | 22268 | 28854 | 35815 |
| Total asset-Index | 100.00 | 161.83 | 195.59 | 258.75 | 322.86 | 418.35 | 519.28 |
| Total asset per employee | 0.13 | 0.15 | 0.14 | 0.17 | 0.19 | 0.22 | 0.23 |
| Total asset per employee-index | 100.00 | 115.38 | 107.69 | 130.76 | 146.15 | 169.23 | 176.92 |

For the year ended on 31st March, Source: Annual reports of Infosys, for the years 2005-06 to 2011-12.

Group two: predictor variables: The human resource value is a result of multiparty impact. Or, putting it the other way, the value of HRV depends upon a large number of variables. These variables are termed as predictor variables. These groups of predictor variables represent those variables which we are not directly quantifiable in monetary terms but significantly affect the predictor variables included in the analysis are: Total number of employees, Education Index, Discount Rate.

For the entire statistical analysis here SPSS 20 software package is used.

Simple Correlation Analysis: The human resource value is a result of multiparty impact. It depends on number of factors. The aim of the present study is directed towards identifying the significance relationship between all such variables with the human resource value per employee. The relationship of each variable, that are the pointer of present business profitability and efficiency, as well as factors influencing the human asset value, with the human asset value is premeditated with the help of a simple correlation study. Therefore, human resource value consider as the influential variable for the simple correlation study. Simple correlation study is carried out in the preferential series, from the highest to lowest amount of relationship.

Correlation between HRV per employee and financial variables: The correlation between HRV per Employee and Financial Variables has turned out to be no significant as shown in the table 13.

Value Added per Employee and HRV per Employee: According to table 13 and figure 1, there is no significant relationship between value added per employee and human asset value per employee in Infosys within this period of study. The value added per employee is the ratio of total value added divided by the number of employees. The value added is the income without considering employee cost. The amount of value added is the result of the sum of expenses which includes software development expenses, selling and distribution expenses, administrative expenses other than employee cost, deducting from the total revenue including other incomes. This means that the present income is not related with the human resource value.

Table -13

Correlation between value added per employee and HRV per employee

| | | Value added per employee |
|------------------|---------------------|--------------------------|
| HRV per employee | Pearson correlation | -.092 |
| | Sig. (2-tailed) | .844 |
| | N | 7 |

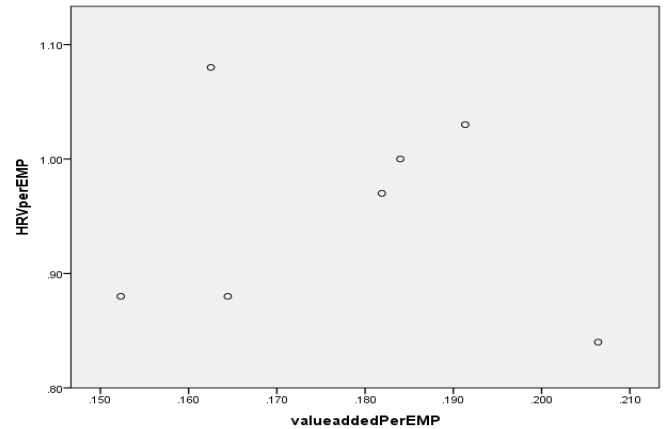


Figure- 1
Scatter diagram of value added per employee_ HRV per employee

Cost per Employee and HRV per Employee: According to table 14 and figure 2, there is no significant relationship between cost per employee and HRV per employee within period of the study in Infosys.

Table -14

Correlation between cost per employee and HRV per employee

| | | Cost per employee |
|------------------|---------------------|-------------------|
| HRV per employee | Pearson correlation | .218 |
| | Sig. (2-tailed) | .639 |
| | N | 7 |

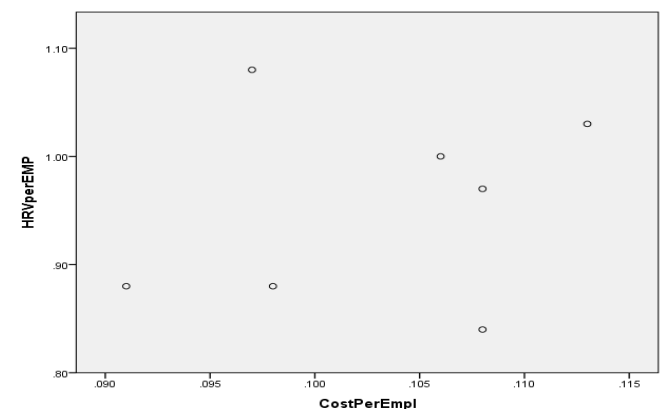


Figure- 2
Scatter diagram of cost per employee_ HRV per employee

Turnover per employee and HRV per employee: According to table 15 and figure 3, there is no significant relationship between turnover per employee and HRV per employee within period of the study in Infosys.

Table -15
Correlation between turnover per employee and HRV per employee

| HRV per employee | Turnover per employee | |
|------------------|-----------------------|-------|
| | Pearson correlation | -.316 |
| | Sig. (2-tailed) | .490 |
| | N | 7 |

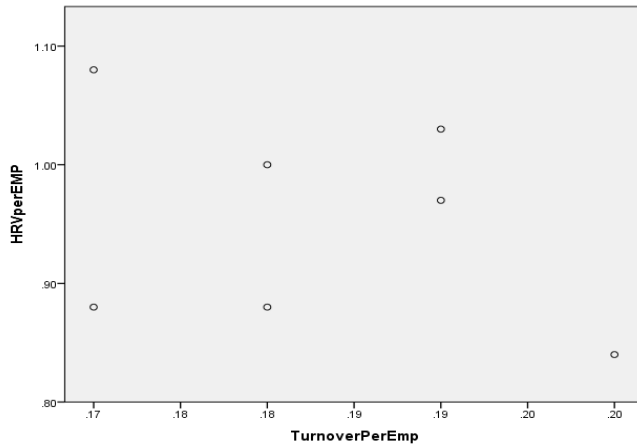


Figure-3
 Scatter diagram of turnover per employee_ HRV per employee

Return on HRV and Human Resource Value per Employee: HRV is negatively related with the return on HRV. To have a better idea about profitability and efficiency, Return on HRV has been calculated as profit after tax (PAT) divided by HRV. The Bivariate correlation study establishes negative relation at a high degree of influence of human resource value per employee with the Return on HRV per employee. . As PAT increased at higher rate [by 3.29 times] compared to HRV which increased by 2.69 times, this disproportionate increase in PAT and HRV has established such negative relationship.

Table-16
Correlation between return on HRV per employee and HRV per employee

| HRV per employee | Return on HRV per employee | |
|------------------|----------------------------|--------|
| | Pearson correlation | -.831* |
| | Sig. (2-tailed) | .021 |
| | N | 7 |

*Correlation is significant at the 0.05 level (2-tailed)

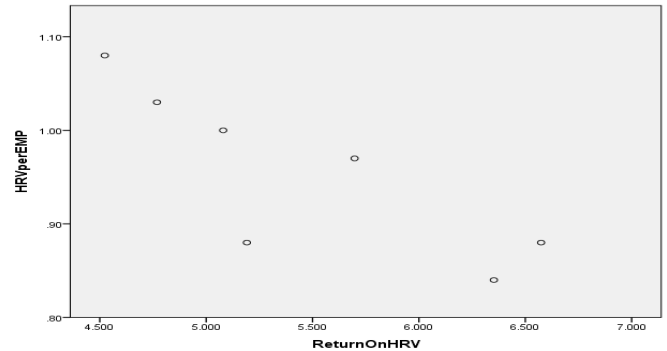


Figure- 4
 Scatter diagram of return on HRV_HRV per employee

Net income per employee and Human Resource value per Employee: According to table 17 and figure 5, there is no significant relationship between net income per employee and HRV per employee within period of the study in Infosys.

Table -17
Correlation net income per employee and HRV per employee

| HRV per employee | Net income per employee | |
|------------------|-------------------------|-------|
| | Pearson correlation | -.005 |
| | Sig. (2-tailed) | .991 |
| | N | 7 |

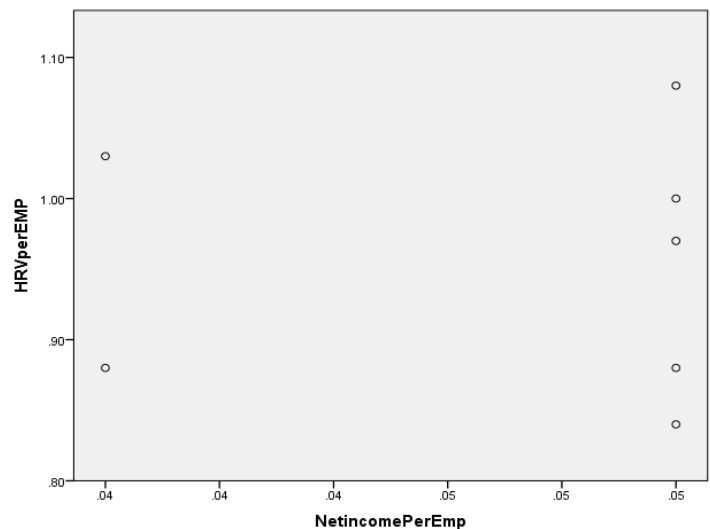


Figure-5
 Scatter diagram of net income per employee

Correlation between HRV per Employee and predictor variables: The following table represents the results of bivariate correlation results of human resource value per employee with the predictor variables:

Discount rate and HRV per employee: There is no significant relationship between discount rate and HRV per employee in this period of time in Infosys (table-18, figure-6).

Education Index and HRV per employee; The education Index shows a negative, or rather insignificant relationship with HRV (table-20, figure-8).

Table-18
Correlation discount rate and HRV per employee

| HRV per employee | Discount rate per employee | |
|------------------|----------------------------|------|
| | Pearson correlation | .346 |
| | Sig. (2-tailed) | .447 |
| | N | 7 |

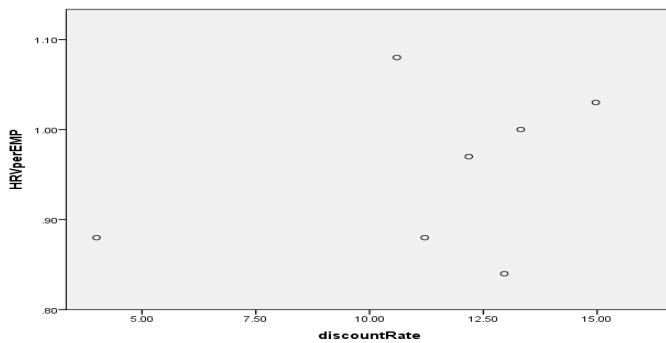


Figure -6

Scatter diagram of discount rate_HRV per employee

Total number of employee and HRV per employee: According to the table 19 and figure 7, the total number of employee shows insignificant relationship with HRV per Employee.

Table-19
Correlation total number of employee and HRV per employee

| HRV per employee | Total number of employee per employee | |
|------------------|---------------------------------------|-------|
| | Pearson correlation | -.072 |
| | Sig. (2-tailed) | .878 |
| | N | 7 |

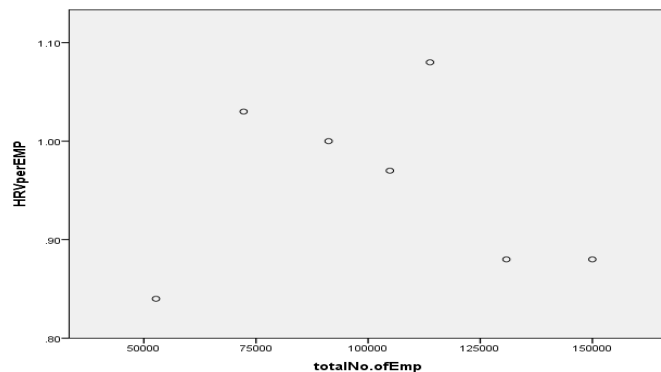


Figure-7

Scatter diagram of total number of employee_HRV per employee

Table-20
Correlation Education Index and HRV per employee

| HRV per employee | Education Index | |
|------------------|---------------------|-------|
| | Pearson correlation | -.071 |
| | Sig. (2-tailed) | .880 |
| | N | 7 |

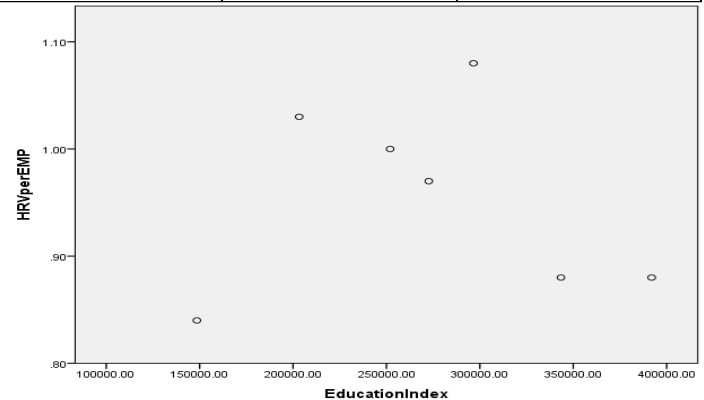


Figure -8

Scatter diagram of education Index_HRV per employee

Conclusion

The researcher rejects all the alternative hypotheses except hypothesis 4. The simple correlation analysis as examined in the study reveals that the insignificant relationship between financial variables, predictor variables and HRV per employee except in return on HRV. HRV is negatively related with the return on HRV. As PAT increased at higher rate [by 3.29 times] compared to HRV which increased by 2.69 times, this disproportionate increase in PAT and HRV has established such negative relationship.

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