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Returns to Investment on Management Education Programs

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Abstract—We are living in the competitive world where competition is increasing day by day. After the period of Globalization, every organization whether it is profit making or not for profit is looking for the well-equipped and dynamic individuals, who can play a significant role in the overall development and growth of organization. The management and business schools provide such kind of students to fulfill the requirements of those organizations. This paper provides estimates of the cost and annual salary of 120 students who were completed MBA in private management institutions of Allahabad city in Uttar Pradesh, India. Since the descriptive statistics and ANOVA test used for data analysis and hypothesis testing. The estimates show that the evidence of substantial educational streams, gender, age and caste differences in the total cost and annual salary to management education program. The return to investment in technical courses and commerce students is more profitable than the other students and investment on female students is more than the male. The investment on SC & ST students is more beneficial as compare to General and OBC category respondents.

Key Words- *Management Education, Human Capital Theory, Total Cost, Annual Salary*
JEL Classification-B13, B16, C12, I29, J24.

INTRODUCTION

The beginning of twentieth century, Marshall pointed that “the most valuable of all capital is that invested in human beings and knowledge is our most powerful engine of production which facilitates us to subdue nature and force him to fulfill our desires” (Marshall 1920, pp-138-39). Theoretical understanding is very important on the education contribution in the economic growth. The neo-classical growth theory did not consider education as a main input for production and hence education was not included in the growth models (Solow, 1956). Because the Solow model of economic growth was not focused on human capital; initially it was greatly focused on physical capital accumulation.

The importance of education in the benefit of the country is more clearly recognized

since the heralding of the human capital theory by Theodore Schultz. Education is an investment for human capital formation that contributes to economic growth. The education transform raw human into productive human capital which makes individuals more productive member of society by imparting of knowledge (Schultz, 1961). The concept of investment on human capital helps to explain some patterns of behavior and economic phenomenon. The various activities such as formal schooling can be analyzed using the cost-benefit analysis (CBA) (Becker, 1964). The purpose of Human capital theory to balance resources through investment in education with results measured by cost-benefit analysis. The CBA has been used in several countries in new policies of financing of education. This represents the main way in

which government in both developed and developing countries are currently using CBA to guide and formulate policies for vocational education (Hough, 1993). If we compare the rates of return on education investment of the global pattern, data shows that developing countries have higher average rates of return than industrialized countries (Psacharopoulos, 1995). The CBA may point to the need for a change in favor of the allocation of resources that offer the highest rate of return on education. The cost-benefit analysis is a systematic approach to estimate the strength's and weakness the alternatives. The CBA can suggest ways to increase the benefits of education, either by increasing its benefits or reducing costs (Woodhall, 2004). Without knowledge of private and community expenditure on education, the total effect of the country in supportive to education cannot be determined. The private cost of education different socio-economic group of population like between backward caste and rural – urban areas. The cost is less than weaker sections compared to their counterpart (Tilak, 1985). The CBA is capable to dealing only with those cost and benefit which are quantifiable and measurable in monetary terms. The post graduate program of Indian Institute of Management Ahmedabad (IIMA) has a higher net present value when its net benefits discounted at 10 percent (Paul, 1970). The CBA can be usefully applied to management education as a basis for investment decision. The salary of IIMA post graduate was much higher than the average salary of university graduates in India (Paul, 1972). The international trends towards the technical subject reflected the notion that technical education contribute to economic growth. The scientific basis of this notion was examined the criteria for social choices in education efficiency, employment effects, social demand, satisfaction and flexibility benefits

(Psacharopoulos, 1980). The ratio of status to post-graduate courses in professional education increased much faster than general education during the period 1956-57 to 1975-76 (Chalam, 1986). The higher education takes more time and money cost but gives more benefits as well as monetary and non-monetary benefits (Dubey, 1987). In return to education, the earnings are found to be positively associated with education and experience (Malathy & Duraisamy, 1993). Rate of return to women education are marginally greater than the rates for men (Psacharopoulos, 1994; Duraisamy, 2000; Psacharopoulos & Patrinos; 2018). The declining quality of education and controlling the supply of educated people imposed on educated unemployment in India (Blaug, Layard & Woodhall, 1969). The return for those working in the private sector of the economy is higher than for those working in the public sector (Psacharopoulos & Patrinos, 2018). The diversified job structure and job opportunities in primary & secondary sector are generating the job searcher to select non-preferred job with low wages and without any kind of social security (Sikdar, 2019). There are challenges ahead for India to take full advantage of the ongoing boom & globalization of the knowledge sector. The role of private sector to meet these challenges (Sanat, 2006). The lack of communication skills, lack of industry-institute interaction, inappropriate selection of students, lack of competent and obsolete curriculum as the main problems for low employability among students aspiring to make career in MBA students (Natrajan & Kandel, 2014). The employability skills are must for all the MBA students to getting the job. Skills required by employer are problem solving skills, interpersonal skills, communication skills, field knowledge expertise, decision making skills, leadership skills, team players skills etc. Skills can be developed through conducting skill

development program. The concept of domain knowledge, effective summer internship program and interface of industry employers and management institutes etc. (Ravan, 2016). The employability skills as perceived by the industry is low in comparison to the level of employability skilled perceived by the students. The main reason of gap is the course curriculum of management institutions and universities that is not updated along with latest industry requirements. The practical aspect which required to be given more importance is absent from the curriculum (Bansal, 2018). Because management is beneficial for development of country and individual also to some extent. It can make students efficient but the productivity cannot be increases by management only. The students go for management education to learn about managerial skills, to enhance their knowledge and abilities. So they are able to decide and take decision efficiently. The management colleges / institutions give the more opportunities to training, activities, summer training and other creative works that's very expensive so the real question the returns on investment in management education program.

Objectives:

1. To study cost and salary of students based on their streams.
2. To compare cost and salary of students between male and female students.
3. To estimate cost and salary of students within different age group.
4. To estimate cost and salary of students based on different caste group.

Hypothesis:

1. There is no difference between cost and salary of MBA students with in different streams.
2. There is no difference between cost and salary of males and females.

3. There is no significant difference between cost and salary among age group.
4. There is no significant difference between cost and salary among caste group.

Methodology & Data Analysis

The study covers the city of Allahabad, Uttar Pradesh, India. In this city, the management institutes have been selected by using purposive sampling. The study has explored total cost and annual salary of MBA students in private management education institute. The total cost of MBA students acquired in the individual domain includes cost acquired by the students and or by their parents such as on books, stationery, fees, hostel fees, uniform, coaching fees, transport, training and others. The Primary data source has been used in this study. MBA students have been selected for sampling who have already got campus placement. Thus, the total number of respondents selected from private management institutions was 120. For analysis and hypothesis testing, descriptive statistics and ANOVA test has been applied. The significant F value shows that the population's means are not probably equal.

Stream wise Analysis of Cost and Salary

The most of the respondents had MBA after the degree of Art and minimum science background. The mean value of cost is maximum of the Art background respondents (2.559) but in case of salary is maximum of commerce background respondents. It is shows that return to investment is maximum of technical and commerce background respondents. Other side, the mean value of cost is minimum of the technical courses respondents (2.332) and salary is minimum of science background students (2.058). The P value is more than 0.05; the null hypothesis is accepted at 5 percent level of significant with regards to cost (0.797). Hence it is concluded that there is significant difference among different streams respondents with respect to their cost. On the other side, in case of salary the P value is less than 0.10, the null hypothesis is rejected at 10 percent level of significance

with regards to salary (0.080). Hence it is concluded that there is significant difference

among different streams with respect to their salary (Table: 1).

Table: 1 Stream wise analysis of cost and salary

Cost & Salary	Stream	No. of Respondent	Mean value of Cost & Salary (In Lac)	Standard Deviation	F Value	P Value
Cost	Commerce	26	2.472	1.222	0.340	0.797
	Science	24	2.450	0.749		
	Technical Course	34	2.332	0.788		
	Art	36	2.559	0.968		
Salary	Commerce	26	2.592	0.961	2.313	0.080
	Science	24	2.058	0.501		
	Technical Course	34	2.533	0.898		
	Art	36	2.496	0.752		

Data Source: Field Survey, 2017-18

Gender wise Analysis of Cost and Salary

The mean value of the cost of female respondent is 2.342 and that of the male is 2.516. It means that male respondent have higher cost than female. This may also be because the parents are keener to get their male child admitted to professional colleges, even if they have to enrol them in private institutions where the fee structure is much than that of the government colleges while no such initiatives is taken for the girls. On the other side, the mean value of the salary of female respondent is 2.40 and that of the male is 2.46. It shows that male respondent have higher salary in comparison to female. The SD

of females both in the cost as well as salary component is found to be much higher than that of the males thereby implying not more homogenised series for them. This is probably because the job profile for the females is more diversified than that of the male and as such has much more variations. Since P value is more than 0.05, and therefore, the null hypothesis is accepted at 5 per cent level of significant with regards to both cost (0.331) and salary (0.698). Hence it is concluded that there is no significant difference between male and female with respect to their cost and salary (Table: 2).

Table: 2 Gender wise Analysis of Cost and Salary

Cost & Salary	Gender	No. of Respondent	Mean value of Cost & Salary (In Lac)	Standard Deviation	F Value	P Value
Cost	Male	77	2.516	0.876	0.954	0.331
	Female	43	2.342	1.039		
Salary	Male	77	2.46	0.757	0.151	0.698
	Female	43	2.40	0.927		

Data Source: Field Survey, 2017-18

Age wise Analysis of Cost and Salary

The perusal of the above table once again substantiates our point that the cost of 23 to 25 year respondents (2.721) is much higher than

that the cost of others. The high mean value of 23 to 25 year respondents was also found to be significant at 10 percent level. The high SD value also shows much diversified fee structure of this age group. This incidentally rejects our null hypothesis hence it is presented that there is a significant difference between respondent age group with respect to their cost and salary. The mean values of salary derived by the above 29 years age group respondents is much higher than that of the

other age group respondents and the difference was found to be significant at 10 percent level. The low value of SD for 26 to 28 years age group respondents shows their poor diversified portfolio while the high SD for above 29 years age group respondents reflects their large diversified portfolio. The difference between the two was also found to be statistically significant at 10 percent (Table: 3).

Table: 3 Age wise Analysis of Cost and Salary

Cost & Salary	Age	No. of Respondent	Mean value of Cost & Salary (In Lac)	Standard Deviation	F Value	P Value
Cost	22 Year and below	48	2.155	0.778	3.810	0.012
	23-25 Year	62	2.721	1.005		
	26-28 Year	8	2.269	0.835		
	Above 29 Year	2	1.975	0.459		
Salary	22 Year and below	48	2.301	0.562	2.154	0.097
	23-25 Year	62	2.588	0.956		
	26-28 Year	8	2.007	0.474		
	Above 29 Year	2	2.900	1.838		

Data Source: Field Survey , 2017-18

Caste wise Analysis of Cost and Salary

Based on mean score, general category respondent have high cost (2.532) in comparison to cost of OBC, SC and ST respondent. Similarly, high value of the mean of salary for Gen (2.48) and OBC (2.42) reflects their diversified job portfolios than the one compared to SC (2.05) and ST (2.38). The above table reveals that the P value is more than 0.05, that null hypothesis accepted at 5 percent level of significant with regards to

cost. Hence it is concluded that there is no significant difference among caste groups with respect to their cost. The P value of salary is greater than 0.05, and subsequently accepts the null hypothesis at 5 percent level of significant with regards to salary, which indicates that the salary reaped by the Gen and OBC respondents are significantly higher than the ones recorded by the SC and ST respondents (Table:4).

Table: 4 Caste wise Analysis of Cost and Salary

Data Source: Field Survey, 2017-18

Cost & Salary	Caste	No. of Respondent	Mean value of Cost & Salary (In Lac)	Standard Deviation	F Value	P Value
Cost	General	85	2.532	0.946	1.415	0.242
	OBC	24	2.425	1.006		
	SC	9	1.907	0.518		
	ST	2	1.970	0.410		
Salary	General	85	2.487	0.824	0.749	0.525
	OBC	24	2.420	0.905		
	SC	9	2.057	0.550		
	ST	2	2.385	0.162		

Findings and Discussion

There is a significant difference in the salary of different streams and also the MBA students of commerce streams were better placed than science, technical courses and art streams. After the cost and salary analysis we found that the total cost of management education is higher in art background students, but higher salary in commerce and technical courses students than the art streams student. The salary of science background students is too lowest among all streams students while in the cost analysis of all streams students we found not big differences. In return on investment ranking, Technical and commerce background students got higher rankings while other background students got lower rankings due to their cost and salary. The cost of female respondents is less as compared to male respondents. It is shows that the parents are low education investment on girls compared to the boys. The big reason behind this the patriarchal mind set of parents and family and another girls students are spend less pocket money as compare to boys. The salary of female respondents also less than the male respondents but there is no huge difference. The job market is more homogeneous for male than the female respondents. The age wise comparison of cost and salary, we found that the below 22 years students and above 29 years students got higher monetary benefits. The job profile of below 22 years students is less diversified as compared to other age

group students. The cost for General and OBC students could largely because of their better economic conditions that allows them to seek admission irrespective of the higher fees; while this may not be true depicts their job diversification profile while the students of other categories have much lesser job diversified portfolios. The salary of General and OBC respondents have also higher than the others.

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