

Best of the Best: Differentiators in Outcomes of Selective Private Business Schools

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Introduction

MBA programs are unique among other higher degree programs because it has become common practice for applicants to have at least two years of work experience, if not more, before enrolling. As such, enrollment in traditional MBA programs carries an intrinsic opportunity cost as time in school can mean a two-year hiatus from the workforce. The decision to enroll in an MBA program is a wager by the individuals that the earnings after receiving the degree will outpace the earnings gained had they not left the workforce. We seek to discover what factors contribute to MBA student's immediate post-graduate success as defined by their earnings in their first job after graduation. We hypothesize that out of all the variables we control for, cost of tuition and years of prior work will have the largest impact on the outcomes of business school as measured by median base salary in the first year after graduation.

Background

Prior studies evaluated several important variables that impact outcomes for business school students:

- Salary: hierarchical regressions show that obtaining an MBA has a statistically significant effect on current salary, the percentage change in salary, and the number of promotions received by the worker¹.
- Pre-MBA Experience: business school students with 4 years of work experience earn more after the MBA than those with 12 years experience prior to enrollment².
- Program Selectivity and Ranking: the financial returns to attending top-ranked institutions are increased by 19%³.
- Curriculum: factors like curriculum and classroom learning are considered somewhat irrelevant⁴.

Data & Model

Our data comes from three sources: the Which MBA Rankings published annually by The Economist, the employment reports published by each school, and the Census Bureau.

$$\text{Median base salary}_{it} = \beta_0 + \beta_1 \text{geography}_{it} + \beta_2 \text{tuition}_{it} + \beta_3 \text{class size}_{it} + \beta_4 \text{average age}_{it} + \beta_5 \text{work experience}_{it} + \beta_6 \text{work experience}^2_{it} + v_i + u_i$$

The dependent variable is the median base salary for university i in the first year after graduation in year t , measured in dollars, and this equation is modeled to examine the impacts of six independent variables on median base salary: geography, tuition, class size, average age of students, work experience, and work experience. Finally, the model includes dummy variables to control for the fixed effects of each year from which the data originates, represented by the variable v_i .

Results

| Median Base Salary | Linear Regression Model | | | | | |
|-----------------------------------|-------------------------|------------------|-------|-------|----------------------|-----------|
| | Coef. | Robust Std. Err. | t | P> t | [95% Conf. Interval] | |
| Geography | 456.3736 | 2306.077 | 0.20 | 0.844 | -4208.107 | 5120.854 |
| Tuition | 0.5513228 | 0.1798134 | 3.07 | 0.004 | 0.1876158 | 0.9150297 |
| Class Size | 10.6562 | 4.968289 | 2.14 | 0.038 | 0.6068822 | 20.70551 |
| Average Age | -4002.262 | 1983.165 | -2.02 | 0.050 | -8013.591 | 9.06814 |
| Average Work Experience | -54345.33 | 34720.88 | -1.57 | 0.126 | -124574.9 | 15884.28 |
| Average Work Experience (Squared) | 5025.049 | 3720.528 | 1.35 | 0.185 | -2500.429 | 12550.53 |
| Class: | | | | | | |
| 2016 | 243.96 | 3031.489 | 0.08 | 0.936 | -5887.805 | 6375.725 |
| 2017 | -2137.86 | 3695.084 | -0.58 | 0.566 | -9611.829 | 5336.196 |
| 2018 | -1118.042 | 4078.936 | -0.27 | 0.785 | 9368.468 | 7132.385 |
| 2019 | 5487.67 | 4852.675 | 1.13 | 0.265 | -4327.792 | 15303.13 |
| Constant | 304523.8 | 80943.93 | 3.76 | 0.001 | 140799.3 | 468248.4 |

Statistically Significant Variables:

- Tuition: a thousand dollar increase in tuition equates to a \$551 increase in median base salary.
- Class Size: For an increase of 100 students above the mean, there is an increase of \$1,065 in median base salary.
- Average Age: an MBA candidate who enrolls at 30 will make \$12,006 less than a candidate who enrolls at 27.

Conclusion

When examining the impact of an MBA program on an individual's first-year salary, excluding bonuses and other compensation, it is clear that there are three characteristics that influence our dependent variable: tuition, class size, and age. Geography, work experience prior to enrollment, and dummy variables for the years do not have statistically significant impacts on future earnings. MBA candidates could infer from this study that in order to earn the most money, they should simply enroll in the largest, most expensive business school on this list at either 27 or 28, regardless of how many years of work experience they have or where the school is located. However, given the recent sharp negative turn of the economy due to the COVID-19 pandemic, further research will need to be conducted to discover whether these variables all continue to impact the outcome of median base salary the same way they did over the last 5 years during the tail end of the US economy's longest expansion on record.

References

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- 3: Arcidiacono, P., Cooley, J., & Hussey, A. (2008). The Economic Returns to an MBA. *International Economic Review*, 49(3), 873-899.
- 4: Rapert, Molly Inhofe, et al. "The Meaning of Quality: Expectations of Students in Pursuit of an MBA." *Journal of Education for Business*, vol. 80, no. 1, 2004, pp. 17-24., doi:10.3200/joeb.80.1.17-24.