

Higher Education And Placement Prospects: In The Offing Or Far Off?

By- Rishika and Vidushi

Introduction

Employment plays an imperative role in incentivizing education. The trail of thought that motivates people to educate themselves; No qualification-No job-No livelihood-No standard of living, is a rough tool to understand that employment and education don't lie far from each other. However, a similar connection between different levels of education and campus placement is yet unfounded. As students gear up for the placement interviews that will land them the job best suited to their resumes, the companies draft criteria for selection of the new recruits. Of the many criteria, one could be the level of education. Do companies care about the number of degrees that their potential recruits possess? Do students go for higher education in search of better jobs and more offers? Through this research paper, we try to find the linkage, if any, between the level of education and campus placements.

Objectives

- 1) To determine the relationship between the level of education and campus placements.
- 2) To ascertain the relationship between affiliation of college i.e., government or private and campus placements and the number of college placements.
- 3) To find the effect of the number of recruiters on the average number of college placements.

Literature Review

The Trends in Education & Employment

While emotional intelligence, resilience, and learnability are a prerequisite for increasing chances of employment, the most in-demand jobs require graduate credentials. According to the data presented by Tomas Chamorro-Premuzic(2020), In the U.S., the number of graduate students has tripled since the 1970s, and according to some estimates, 27% of employers now require master's degrees for roles in which historically undergraduate degrees sufficed. However, another set of noteworthy data presented in the Tomas Chamorro-Premuzic(2020) include that most companies have people in place to upskill and impart essential knowledge required to the new recruits. Most Fortune 500 firms end up investing substantially to reskill and upskill new hires, regardless of their credentials. For instance, employers like Google, Amazon, and Microsoft all pointed out that learnability – having a hungry mind and being a fast and passionate learner – is more important than having acquired a certain expertise in college'. Tomas Chamorro-Premuzic(2020) also points that the value of a degree in a market, just like any other good, is measured by its supply-Just like the value of a master's degree is equivalent to the value of an undergraduate degree 30 years ago, if in 30 years a large proportion of the workforce obtains a master's, or Ph.D., employers may finally be forced to look at talent and potential beyond formal qualifications.

A basic order of business while deciding whether to attend Grad school is to weigh the financial returns of a master's degree over an undergraduate one. The statistics presented by Rebecca Radcliffe(2014) concluded that people with master's qualifications are more likely to find work than those with undergraduate degrees – and they're likely to earn a slightly higher wage. The numbers that supported the above statement go as follows

A) "the uplift is about £2-3k to start with, so first-degree graduates might be on around £17-22k six months after finishing their course, with master's grads on slightly more."

B)Of those graduating in 2011-12, data from the Higher Education Statistics Agency (Hesa) shows 86.6% of postgraduates were working in professional positions six months after graduating, compared with 64% of first-degree graduates.

Apart from the alluring figures in favour of a master's degree, Rebecca Radcliffe(2014) also covers areas in which a master's degree may not add anything to the employability chances of a student. A master's degree in a generic course as opposed to technical ones – medicine, pharma, etc, will not be of much use and employers will view you in the same way as a job aspirant with one less degree.

The economic cost of a Ph.D.

“Why doing a Ph.D. is often a waste of time” (2010 Christmas double issue, *The Economist*) tries to analyze and critique the need for a doctorate in academic as well as industrial professions. The article also makes a stark comparison between employment conditions and contracts of Ph.D. scholars and Ph.D. students and contract staff known as “postdocs”. Citing the findings of Dr. Freeman, the paper concludes that pre-2000 data shows, American faculty jobs in the life sciences were increasing at 5% a year, just 20% of students would land one. ‘In Canada, 80% of postdocs earn \$38,600 or less per year before tax – the average salary of a construction worker.’ The rise of the postdoc has created another obstacle on the way to an academic post.

While landing a job in academics is a difficult enough task for doctorates, the corporate sector complains about shortages of high-level skills, suggesting PhDs don’t furnish practical skills that can contribute to good placements. The fiercest critics compare research doctorates to Ponzi or pyramid schemes. ‘The organizations that pay for research have realized that many PhDs find it tough to transfer their skills into the job market. Writing lab reports, giving academic presentations, and conducting six-month literature reviews can be surprisingly unhelpful in a world where technical knowledge is in-demand.’ The data doesn’t tell a very different truth either, America produced more than 100,000 doctoral degrees between 2005 and 2009. In the same period, there were just 16,000 new professorships (*Higher Education? How Colleges Are Wasting Our Money and Failing Our Kids—and What We Can Do About It*, Andrew Hacker and Claudia Dreifus, 3rd August 2010). The research also gives evidence in support of how the value of a Ph.D. is contingent on socio-political developments of a country, ‘The post-Sputnik era drove the rapid growth in Ph.D. physicists that came to an abrupt.

halt as the Vietnam war drained the science budget. Brian Schwartz, a professor of physics at the City University of New York, says that in the 1970s as many as 5,000 physicists had to find jobs in other areas.’ Some statistical findings of the study by Bernard H. Casey (2009) that was later published in the journal of *Higher Education Policy and Management*, highlight the difference in wellbeing in monetary terms between that of undergraduates, graduates, doctorates, and those who never made it to college. British men with a bachelor’s degree earn 14% more than those who could have gone to university but chose not to. The earnings premium for a Ph.D. is 26%. But the premium for a master’s degree, which can be accomplished in as little as one year, is almost as high, at 23%. In some subjects, the premium for a Ph.D. vanishes entirely. Contrary to what was reiterated in the previously reviewed papers, (Casey, 2009) writes that the premium for a Ph.D. is actually smaller than for a master’s degree in engineering and technology, architecture, and education. It considers the arguments that the gains accrued to the society as a whole from the research undertaken and the output produced by the scholars supersedes the personal gain to the individual Ph.D. holder. Social benefits, galore, and reimbursement for service, scarce.

The Question of Affiliation

This pioneering article (Dr. KJS Anand, 2017) takes the reader through a point-wise comparison between government and private colleges on the basis of – tuition fees, infrastructure, faculty, and placements. (Dr. KJS Anand, 2017) divides colleges into 3 categories namely, government institutions, private colleges, and Government-affiliated private colleges. The writer states that government colleges despite low fees and excellent faculty, lag behind in infrastructure development and placement prospects. The private colleges, on the other hand, tend to have higher fees but a motivated faculty, great infrastructure and provide students with every possible help during placements. Coming to, Government-affiliated private colleges, they are not entirely private and are affiliated with Government/public universities and offer the best of both worlds. 'While the degree they offer is backed by the Government, they are free to implement most of its policies and procedures like private colleges. They have the operational costs that are covered by students through fees and hence, they offer the same advantages that many private colleges offer. They provide good infrastructure, access to all possible resources required for professional training, innovative pedagogy, and the best possible help during placements. The students are provided with full support and guidance, which help in their holistic growth.' Hence, there is no one winner or loser based on all the above criteria. Placements alone, be that as it may, may, or may not tell otherwise.

Sources of data collection

The following is the list of colleges/ universities from which the data for this research paper has been collected.

1. SRCC
2. IIT Bombay
3. St. Stephens
4. Shiv Nadar University
5. Symbiosis
6. G.D. Goenka University
7. Delhi School Of Economics
8. IGIDR, Bombay
9. NMIMS University
10. St. Xaviers
11. Shaheed Sukhdev College
12. JNU
13. FMS
14. ISI, Kolkata
15. IIM Ahmedabad

The Econometrics Model

$$\ln(\text{plac}) = b_1 + b_2 D_{2i} + b_3 D_{3i} + b_4 \ln(\text{recr})$$

$$\ln(\text{plac}) = b_1 + b_2 \cdot \text{college} + b_3 \cdot \text{edu} + b_4 \ln(\text{recr})$$

Where the dependent variable is log of number of placements and,

The independent variables- 1) affiliation of college

2) level of education

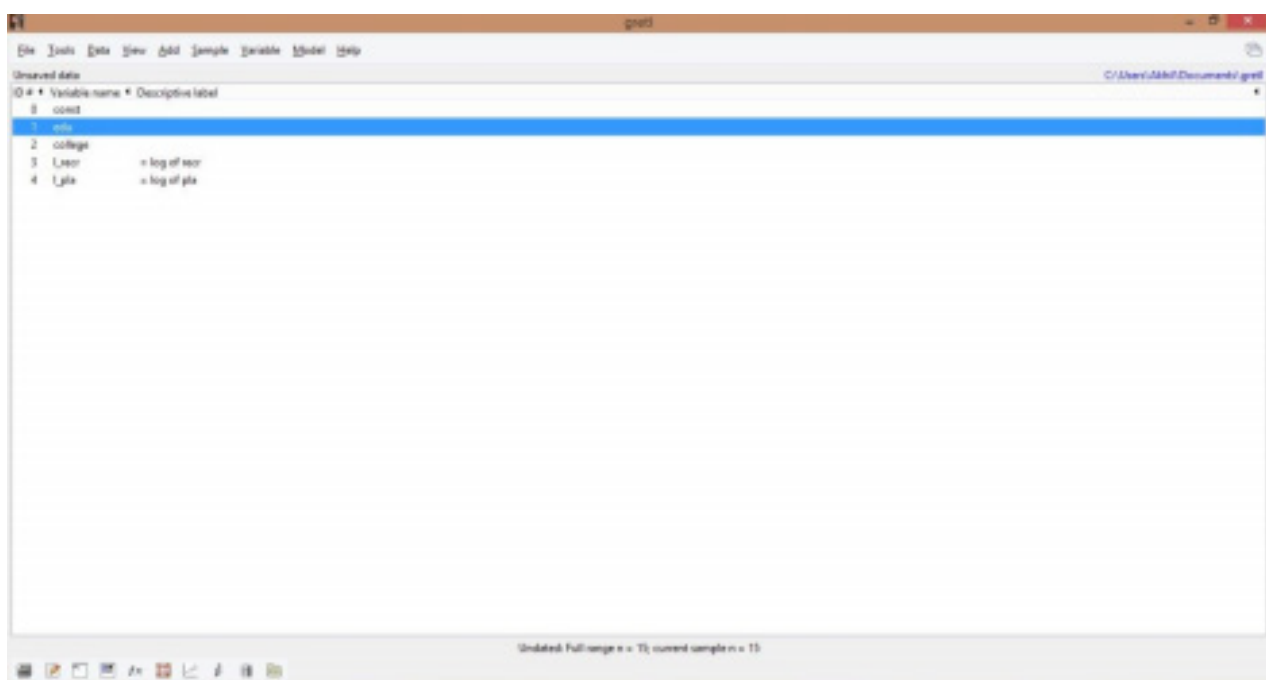
3) log of number of recruiters

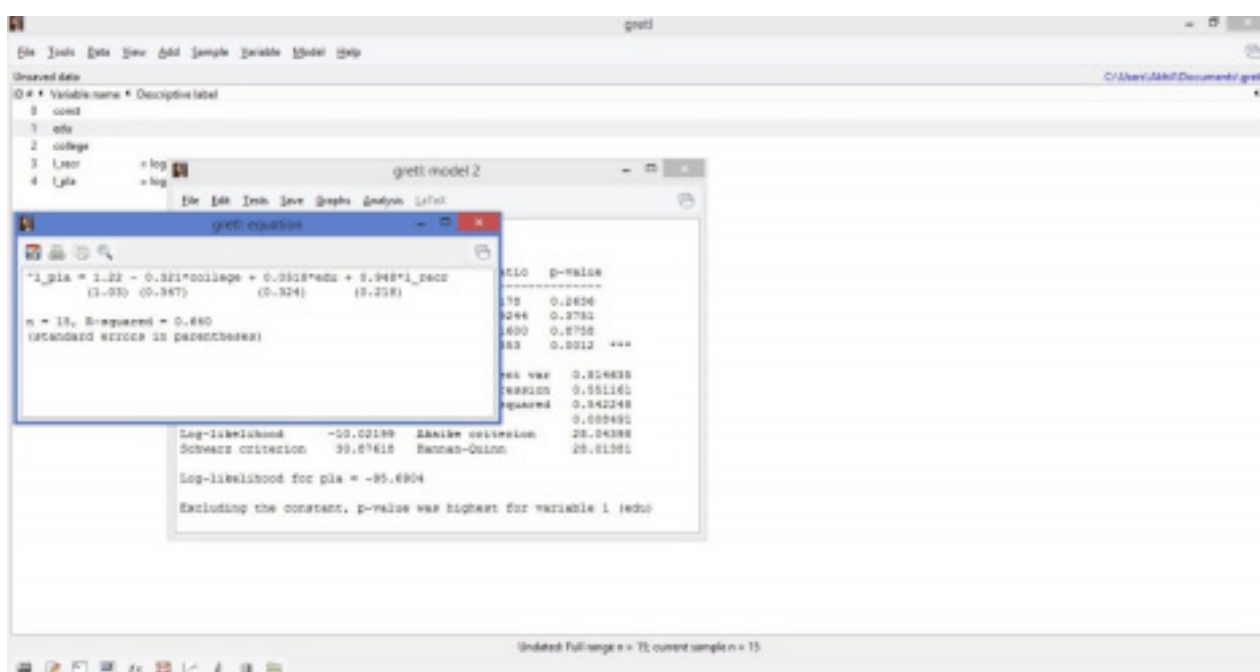
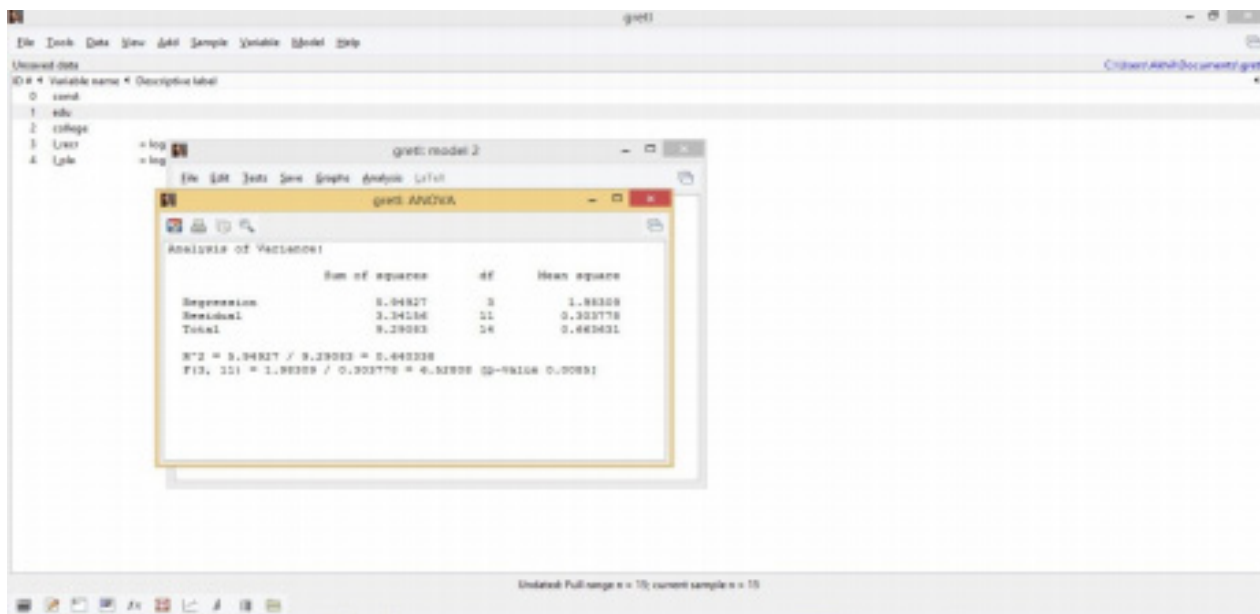
D_{2i} and D_{3i} dummy variables,

$D_{2i} = \begin{cases} 1, & \text{if government college} \\ 0, & \text{otherwise} \end{cases}$

$D_{3i} = \begin{cases} 1, & \text{if postgraduate} \\ 0, & \text{otherwise} \end{cases}$

Working of the Model





Resultant Econometrics Model

$$\log(pla) = 1.22 - 0.321(college) + 0.0518(edu.) + 0.948 \log(recr.)$$

Interpretations and Relations

1. Here, $b_1=1.22$ is the intercept coefficient which represents the average of $\log(\text{placements})$ when the college is non-government, the level of education is other than post-graduation and the $\log(\text{recruiters})$ is kept as zero.
2. Here, $b_2= -0.321$, represents that if it is a government college, the average of $\log(\text{placements})$ falls by 0.321 units, keeping other factors constant. The negative sign states that there is an inverse relationship between government colleges and campus placements.
3. Here, $b_3=0.0518$, represents that when one postgraduate student is placed, the average of $\log(\text{placements})$ increases by 0.0518 units, keeping other factors constant. The positive sign indicates a direct relationship between higher education and campus placements.
4. Here, $b_4=0.948$ represents that when the number of recruiters increases by 1%, the average $\log(\text{placements})$ increases by 0.948%, keeping other factors constant.

Hypothesis Testing

We have assumed a 5% level of significance.

1. $H_0: B_2=0$ i.e., there is no significant difference in average campus placement of government and private colleges

$$H_A: B_2 \neq 0$$

$$t(b_2) = \frac{b_2 - B_2}{\text{s.e.}(b_2)} \sim t_{n-4}$$

$$= \frac{-0.320880 - 0}{0.347117} \sim t_{11}$$

$$= -0.9244$$

$$t_{\text{tab}} = 2.201$$

$$t_{\text{tab}} > |t_{\text{cal}}|$$

Therefore, we do not reject the null hypothesis of $B_2=0$ at 5% level of significance with 11 degrees of freedom.

2. $H_0: B_3=0$

$$H_A: B_3 \neq 0$$

$$t(b_3) = \frac{b_3 - B_3}{\text{s.e.}(b_3)} \sim t_{n-4} = 11$$

$$= \frac{0.0517752}{0.323}$$

$$= 0.1600$$

$$t_{\text{tab}} = 2.201 > t_{\text{cal}}$$

Therefore, we do not reject the null hypothesis of $B_3=0$ at a 5% level of significance with 11 degrees of freedom.

3. $H_0: B_4 = 0$

$H_A: B_4 \neq 0$

$t(b_4) = \frac{b_4 - B_4}{s.e.(b_4)} \sim t_{n-4} = 11$

$= 0.947668 / 0.217715$

$= 4.353$

$t_{tab} = 2.201$

$t_{tab} < t_{cal}$

Therefore, we reject the null hypothesis of $B_4 = 0$ at 5% level of significance with 11 degrees of freedom.

Results

1. The data collected is limited and restricted to colleges situated in certain parts of the country and hence, the results are not generally applicable. 2. The model relies on data released by college placement cells and the university's in-house media houses, the credibility of which can run into question. 3. Due to the lack of secondary data on the topic, the randomization between government and private colleges in data collection is limited.

4. The data/model does not take into account the difference of courses among the various colleges and universities and the conditions of the job market at any given point in time.

Limitations and Drawbacks

1. The data collected is limited and restricted to colleges situated in certain parts of the country and hence, the results are not generally applicable.

2. The model relies on data released by college placement cells and the university's in-house media houses, the credibility of which can run into question.

3. Due to the lack of secondary data on the topic, the randomization between government and private colleges in data collection is limited.

4. The data/model does not take into account the difference of courses among the various colleges and universities and the conditions of the job market at any given point in time.

References

Tomas Chamorro-Premuzic. January 07, 2020. "Should you go to graduate school." Harvard Business Review

Rebecca Ratcliffe. 2014. "Will doing a master's get you a better job." The Guardian.

"Why doing a Ph.D. is often a waste of time". 2010. Christmas Issue. The Economist.

Bernard H. Casey. 2009. "The economic contribution of PhDs." Journal of Higher Education Policy and Management. Vol. 31.

Dr. KJS Anand. 2017. "Govt. vs private colleges". The pioneer. Winter, Stefan. 2013. "Externalities and subsidization of higher education." SSRN.