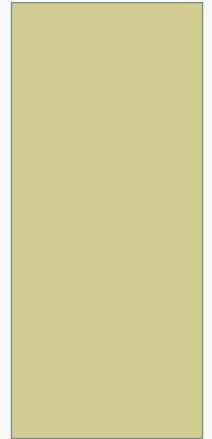


*FACTORS AFFECTING
RETENTION AT PRIVATE
BACCALUAREATE ARTS
AND SCIENCES COLLEGES*

TARUN FERNANDES



ABSTRACT

- This paper attempts to analyze the explanatory variables that best explain retention among private liberal arts colleges. Using the model's estimated parameters, the effects of acceptance rate, average loans, average grants and educational related expenditures were calculated using a panel data model. We found that increases in average grants and average loans led to higher levels of retention among Baccalaureate Private Colleges. We found that a college's acceptance rate is negatively correlated with retention rate. Taken together, these calculations indicate the degree of importance each explanatory variable has on retention across Private Liberal Arts Colleges. This analysis is intended to help Baccalaureate Private Colleges understand the factors that lead to student drop out, as well as the factors that can enhance the college's ability to successfully retain its students.

THEORY

- The acceptance rate has a negative impact on retention because school's that are more selective, admit higher quality students who are more academically inclined
- Educational related expenditure has a positive effect on retention, as schools that spend more on student services, academic support, etc. are better able to cater to student needs
- Average Loans per student could positively or negatively affect retention depending on the size and time of the loan
- Average grants per student will positively affect retention as it lightens the financial burden placed on needy students, thus enabling them to continue their schooling

EQUATION AND VARIABLES

- Equation with hypothesized and expected signs –

$$RR_{it} = \beta_0 + \beta_1 ER_{it} - \beta_2 AC_{it} + \beta_3 AG_{it} \pm \beta_4 AL_{it} + v_{it}$$

- RR = The percentage of students who choose to return to the college the next year
- AC = The percentage of students who are accepted to the college
- ER = Expenditures on services that cater to students' needs
- AG = The average level of grants per student across the college
- AL = The average level of loans per student across the college
- v = Stochastic error term

RESULTS

- Regression carried out using 215 colleges, over five academic years, 2006/07 – 2010/11
- We used a fixed effects model to capture the unobserved impact of time invariant factors
- $RR_{it} = B_0 - 0.075AC_{it} - 6.21ER_{it} + 0.00018AG_{it} + 0.00021AL_{it} + v_{it}$

REGRESSION RESULTS

| VARIABLE | COEF. | STD. ERROR | T- STAT | PROB. |
|-----------------------|-----------|--------------------------------|-----------|--------|
| C | 81.68060 | 1.935743 | 42.19600 | 0.0000 |
| AC | -0.075421 | 0.019678 | -3.832848 | 0.0001 |
| ER | -6.21E-06 | 3.34E-05 | -0.186108 | 0.8524 |
| AG | 0.000180 | 6.35E-05 | 2.828611 | 0.0048 |
| AL | 0.000212 | 0.000120 | 1.765029 | 0.0779 |
| R ² = 0.85 | | Adjusted R ² = 0.81 | | |

SUMMARY

- Acceptance is negatively correlated to retention, and is significant at a 5% level
- Educational related expenditure was negatively correlated to retention. This goes against our theory, and was found to be insignificant.
- Average grants is positively correlated to retention, and is significant at a 5% level
- Average loans is positively correlated to retention, and is significant at a 10% level