THE IMPACT OF TUITION FEES CHANGE ON THE UNIVERSITY NEW STUDENT APLICANTS

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Abstract

This research started when a decline in the total of new student that applied to the university A in 2017/2018 occurred, and indicate due to a quite significant increase in tuition fees that was set by the university in that year. The research objectives are to find out the influence on tuition fees change affect the total of new student applicants at a university. This research use quantitative method with the total of student applicants and the total of tuition fees since 2016/2017 academic year to 2018/2019 academic year on informatics engineering study program. The analysis is done by using elasticity formula. The research result shows that student applicants who applied to informatics engineering program are very sensitive towards tuition fees raise with -1.848 elasticity level, which means IDR 1.000.000,- increase in tuition fees would reduce the number of students applicants as much as 1.8 people. On the other hand, when the tuition fees is decrease 13.27 % lower from the previous year causes an increase in the total of new applicants to 45.3 %.

The Rector of private university needs to be vigilant before deciding to rise the tuition fees.

Keywords: tuition fees, student applicants, elasticity.

INTRODUCTION

Research Background

This research started as a result of writer's curiosity regarding the decrease in the total of new student applicants in a private university in 2017/2018 academic year. In the previous years, the total number of student applicants is constant, but in 2017/2018 academic year, a significant decrease in the total of new student applicant occurs. Although on June 2017, new and luxurious campus with 16 floors has been operated, this new building could not guarantee an increase in the total of new student applicants and even the situation occurred was the opposite. Based on this case writers assume that the decrease in the total of new student applicants possibly caused by a quite significant rise in tuition fees compare to 2016/2017 academic year. Hence, several students who wanted to study at this university decided to search the same program with the same accreditation in other universities that have cheaper tuition fees. This research analysis is limited to see how big the change in tuition fees might affect the number of new student applicants.

Research Objectives

This research aims to find out:

1. The effect of tuition fees changes towards the number of new applicants in Informatic Engineering Program of a private university.

2. Elasticity in tuition fees changes towards the change in the total of new applicants in a private university.

3. As the advice for the university in taking decisions especially the decision that related to tuition fees which would be paid by the student.

LITERATURE REVIEW

A private university is a non-profit institution who organizes higher education independently and mostly did not receive an aid from the government. Although private universities exist due to the limitation of quota for new students that available in public universities, nowadays there are many private universities that have outstanding quality and got targeted by new student applicants who wanted to study in that university. The total of university students in Indonesia is 5.890.187, and from that total 69% of student studied in private universities (https://forlap.ristekdikti.go.id, 2018).

Demand is affected by several factors such as the goods or services price, the price of the substitute or complementary goods, consumer income, advertising cost that was spent, consumer total/ number of consumer and other variables that might affect the demand. Demand function is a function that describes how much of a good will be purchased at alternative prices of that good and related goods, alternative income levels, and alternative values of other variables affecting demand (Baye & Prince, 2016).

The demand law stated that price has an inverse relationship with the total demand.

According to the demand law, when tuition fees become more expensive in a university the number of students that applied to the university would decrease.

The question is how big the tuition fees change in a private university would affect the change in the number of students that applied to the university. To answer the question, writers use elasticity concept with an assumption that other factors apart from the tuition fees are constant.

This assumption not only to limit the unit, but also because there is nothing change in the cost and advertising method that done by the university compared to the previous year. Moreover, in 2017 the new modern campus that highly represents this university was established and start to be used.

Furthermore, there is no significant difference from the side of the accreditation course programme in 2017 compared to 2016. Establishing tuition rates at institutions of higher learning is always of fundamental strategic importance to college administrators who are suffering

adverse financial effects from a reduced allocation from external sources and increased educational and facility cost (Bryan & Whipple, 1995). The longer time period negatively associated with the price of demand for higher education (Kiiashko, 2016).

It finds that applications decrease in response to higher fees, especially for courses with lower salaries and lower employment rates after graduation (Filipa, 2014).

Elasticity is used to find out how sensitive the change in demand for a product as a result of a change in a factor that affected the product. Price elasticity is a comparison between the total demands towards a change in the price of a product. Price elasticity of demand plays such an important role in business decision making that managers should understand not only how to use the concept to obtain information about the demand for the products they sell, but also how to recognize the factors that affect price elasticity (Thomas & Maurice, 2016).

Theoretically, when there is an increase in tuition fees, the number of new student applicants would decrease, but the thing that wants to perceive is how big the percentage change of a rise in tuition fees would cause how many percents drops in the percentage of the new student applicants. The reason is new students who wanted applying in private university have a different response in terms of a change in tuition fees compare with the student who applied to a public university. This opinion is similar to other researchers who stated that Candidates applying to private schools are more responsive to changes in tuition (Havranek, et.al. 2017).

RESEARCH METHOD

This research used a quantitative method by using tuition fees data and the number of applicants and continue with an analysis that uses elasticity formula which was count by dividing the percentage change in the total of applicants and percentage change in the tuition fees since 2016/2017 academic period until 2018/2019 academic year period.

Calculation formula that used is:

E   = % δQ / % δP   (Baye & Prince, 2016)

E   = elasticity

% δQ   = Percentage change in the total of applicants

% δP   = Percentage change in the tuition fees

DATA AND ANALYSIS

The data that was utilise is a data from the past three years with a consideration that in three years may occur a quite significant variation or change in the total of year one tuition fees. Assumptions that used are other influential factors such as payment method and university advertising models considered as no change, no significant difference in the total population of new student applicants in Bandung and the surrounding compared to previous year. Additionally, the university accreditation is still the same, course that used as a sample is informatics engineering course where the accreditation for that course did not change and categorise as one of the popular course in this university. Promotion strategy is still the same, student's parent's income apparently did not have a significant difference, the number of informatics engineering course in other private universities with the same accreditation score/grade remains the same.

Academic year data that applied are from 2016/2017 to 2017/2018 because in those years the university quite significantly increased their tuition fees around IDR 7.500.000 more than previous year tuition fees for the 1st year student. However, in 2018/2019 academic year the university reduce the tuition fees for the 1st year student from IDR 27.500.000 to IDR 23.850.000 or in other words it decreased by IDR 3.650.000.

Academic Year	Year one tuition fees	New student applicants total
2016/2017	IDR. 20.200.000,-	795
2017/2018	IDR. 27.500.000,-	437
2018/2019	IDR. 23.850.000,-	635

Referring to the data above the elasticity of new applicants could be calculated by dividing it with the total change in tuition fees for 2015/2017 and 2017/2018 academic year as follows:

$E = \% \delta Q / \% \delta P = (Q2-Q1)/(P2-P1) \times (P2+P1)/(Q2+Q1)$

$Q2$ = total applicants in 2017

$Q1$ = total applicants in 2016

$P2$ = total fees/cost that need to be paid by students in the first year on 2017/2018

$P1$ = total fees/cost that need to be paid by students in the first year on 2016/2017

$E = (437-795)/(27.500.000-20.200.000) \times (27.500.000+20.200.000)/ (437+795)$

$E = (-358/7300000) \times (47700000/1232)$

E = (-0.000477 x 38717.52)

E = -1.848

For the change in the total of 2018/2019 academic year tuition fees towards 2017/2018 academic year can be calculated as follows:

E = (635 - 437)/(23.850.000 - 27.500.000) x (23.850.000+27.500.000)/ (635+437)

E = (198/3.650.000) x (51350000/1072)

E = 2.4

According to the calculation above, it could be concluded that a change in tuition fees possibly has a great impact on the total of new applicants in informatics engineering course at this university with the elasticity of -1.848. When the management increase the tuition fees 36% higher from the previous the number of applicant student decrease 45% from the previous number. Based on the result it could be stated that IDR 1.000.000 rise in the total tuition fees would cause a decrease in the total of new applicants around 1.8 people.

On the other hand, when the tuition fees were reduced by around 13.27 % causes an increase in the total of new applicants to 45.3 %. When the tuition fee reduce an inverse effect would occur and cause an increase in total applicants 2.4 times of the tuition fees reduction. In another word the reduction of IDR1.000.000 on tuition fees likely cause a rise in the number of applicants who wanted to study at this university as much as 2.4 applicants. Hence, it might conclude that the applicants who applied to informatics engineering at this university highly influence by the total of tuition fees on year one that needs to be paid by students.

These results are similar to another research that stated Enrollment rates would be negatively associated with prices charged student, especially tuition prices (Leslie & Brinkman, 1987). The sensitivity of new applicants regarding the rise in tuition fees is indicated to be related with the student's parent's income in that university, according to the data, the student's parent's income in general is approximately IDR 3.000.000 or less per month. Therefore, around 52% of students are highly sensitive to the rise in tuition fees.

The percentage of this research result is higher than the research that was conducted by Geven in England (2015) which concludes that enrolment declined by 15 % in the treated groups as a result of the tuition fee increase. Finance affects the enrolment rate of students (Matsolo, et.al. 2018). For developed countries such as Amerika and England, the percentage of decrease in the number of applicants is not as big as the percentage of a rise in tuition fees and tends to be more inelastic. One of the research results that was mentioned by Hem melt & Marcote (2011) which concluded a $100 increase in tuition and fees would lead to a decline in enrollment of about 0.25 percent. Another related research stated that High school graduates from college-educated family backgrounds are not affected by moderate tuition, their peers whose parents do not have a college degree are sensitive to tuition (Kroth, 2015). For the university which the students come

from medium and low social economic income the tuition fees has a big impact, but for the university with majority students come from high economic income will have smaller impact when the university increase the tuition fees for the new students.

CONCLUSION

Based on the analysis it could be concluded that:

1. Student applicants who wanted to apply in informatics engineering course programme at university A highly affected by the total cost of tuition fees in year one that must be paid by the student.

2. Tuition fees elasticity towards the number of new student applicants at Informatic Engineering Program of 2016/2017 academic year to 2017/2018 is -1.848. This means that increasing Rp. 1.000.000,- on tuition fees will reducing 1.848 number of student comparing with the previous year. On the other hand, when the tuition fees is decrease 13.27 % lower from the previous year causes an increase in the total of new applicants to 45.3 %. It means that decreasing Rp. 1.000.000,- on tuition fees will increasing 2.4 number of student.

3. The rector/director of private university needs to be vigilant before deciding to raise the tuition fees for new students because the decrease in the total percentage of students that want to enter the university is higher than the percentage of tuition fees rise.

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