INTERNATIONAL COMPETITIVENESS OF INDONESIA'S

HIGHER EDUCATION SERVICES TRADE

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Abstract :   Asia is one of the fastest growing destinations for international students. Therefore, this paper was conducted by conducting a comparative study and empirical study with the aim to find out Indonesia's international competitiveness for the higher education service trade aspect, which is compared with seven other countries. To measure the international competitiveness in the higher education services trade, data from 2010 to 2017 on the number of sending and receiving students in a country and other more complex data have been used to obtain valid results. A comparative study conducted by calculating data from eight countries using the IMS, TCI and RCA measurement methods, and empirical analysis conducted using a questionnaire survey with 302 respondents' data obtained to find out the significant factors that influence the competitiveness. The results show that although Indonesia's higher education service trade is unstable every year, it still has certain competitiveness in the international scope. In addition, culture, quality of higher education and cost of living have a significant impact on the international competitiveness of higher education service trade. On this basis, this paper puts forward some countermeasures and suggestions on how to improve the international competitiveness of Indonesia's higher education service trade, including: promoting the development of Indonesian culture, improving the quality of higher education, reducing tuition fees and living costs, increasing the employment opportunities for foreign students and promoting the balanced growth of Indonesian economy.

Keywords: International Competitiveness; Service Trade; Higher Education; Indonesia;

1. COMPARATIVE STUDY

1. 1. International Market Share (IMS)

The purpose of calculating this indicator is to find out the proportion of total exports a country of international students for higher education to the total exports in the world of international students who also go abroad for higher education, which is can reflect changes in international competitiveness or international competitive position and is a direct indicator of international competitiveness and this measurement has changed into:

$$IMS_{ij} = \frac{X_{ij}}{X_{wj}}$$

j   : International students who go abroad to take higher education

IMS_{ij} : International market share of i country for j international students (go abroad)

X_{ij} : Total of International students who go abroad to take higher education from i country (country of origin)

X_{wj} : Total of International students who go abroad to take higher education in the world

Table 1-1 Total of International Students (Higher Education) From Country of Origin in The World

TOTAL OF INTERNATIONAL STUDENTS (HIGHER EDUCATION) FROM COUNTRY OF ORIGIN IN THE WORLD						
COUNTRY OF ORIGIN	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
AUSTRALIA	249,588	249,868	266,048	294,438	355,512	381,202
CHINA	288,979	296,409	306,217	323,127	337,527	357,108
FRANCE	271,399	228,639	235,123	239,409	245,349	256,389
GERMANY	178,873	196,619	210,542	228,756	244,575	258,026
INDONESIA	39,586	40,731	49,688	51,389	53,464	56,171
MALAYSIA	56,203	78,491	99,648	111,443	124,133	100,765
SOUTH KOREA	59,472	55,536	52,451	54,540	61,888	73,461
THAILAND	20,309	25,875	26,196	28,734	31,571	35,277
WORLD	4,058,385	4,230,286	4,495,944	4,787,696	5,085,893	5,085,159

The above data is data on the number of international students from sending countries who continue their studies with a higher education level to outside of their country. From these data it can be seen that the number of students who continue their education abroad is dominantly

increasing every year. From the eight countries, from 2012 to 2015 the number of students from China was ranked first compared to seven other countries, but from 2016 to 2017 the number of students from Australia was ranked first for two years.
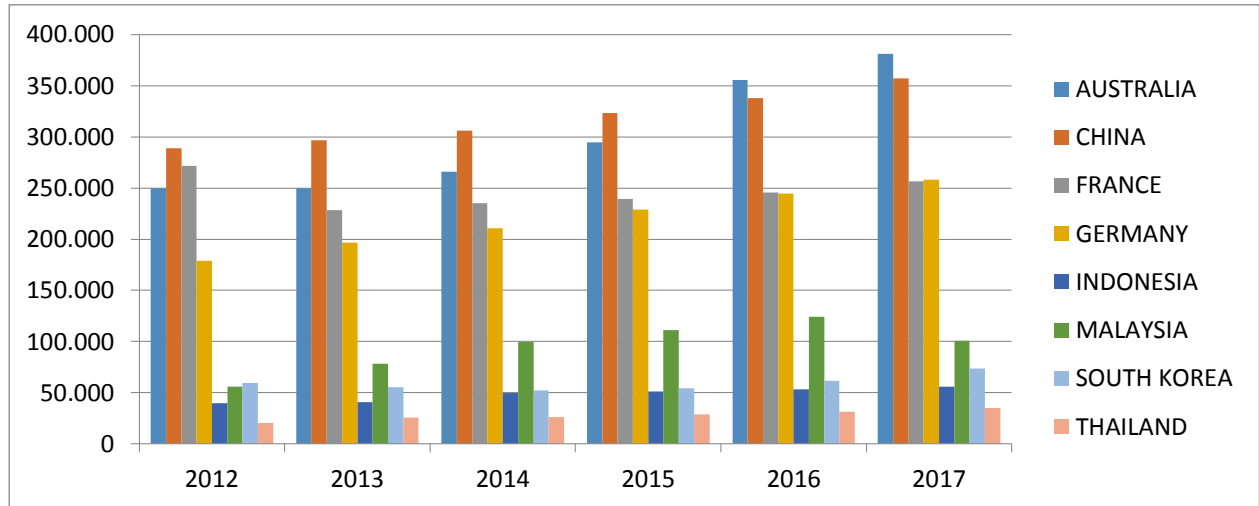

Figure 1-1 International Students (Higher Education) From Country of Origin In The World

The number of students from China who take higher education in the world continues to increase every year with an increase in the average number of 13.6 thousand students. An increase in numbers also occurs annually for students from Australia with an average increase of 26.3 thousand students each year from 2012 to 2017. The increase also occurs for the number of students from Germany with an average of 15.8 thousand students. Then for the number of students from Indonesia who take higher education in the world also increases every year from 2012 to 2017 with an average increase of 3.3 thousand students. Increases occur every year for the number of students from Thailand with an average growth of 2.9 thousand students.

Instability occurred for the number of students from French, Malaysia and South Korea. The decline occurred in 2013 for the number of French's students from 271,399 students in 2012 to 228,639 students. However, the increase has slowly returned from 2013 to 2017. The number of students from Malaysia has increased in 2012 to 2016 but there has been a drastic decline in 2017. The instability in the number of students from South Korea occurred with a drastic decline and increase in 2012 and 2016.

Table 1-2 International Market Share (IMS)

COUNTRY	2012	2013	2014	2015	2016	2017	Mean Value	Identification
AUSTRALIA	6.15	5.91	5.92	6.15	6.99	7.50	6.44	Extremely Strong
CHINA	7.12	7.01	6.81	6.75	6.64	7.02	6.89	Extremely Strong
FRANCE	6.69	5.40	5.23	5.00	4.82	5.04	5.36	Extremely Strong
GERMANY	4.41	4.65	4.68	4.78	4.81	5.07	4.73	Very Strong
INDONESIA	0.98	0.96	1.11	1.07	1.05	1.10	1.05	Weak
MALAYSIA	1.38	1.86	2.22	2.33	2.44	1.98	2.03	Relatively Strong
SOUTH KOREA	1.47	1.31	1.17	1.14	1.22	1.44	1.29	Weak
THAILAND	0.50	0.61	0.58	0.60	0.62	0.69	0.60	Very Weak

(The table header spans "INTERNATIONAL MARKET SHARE (IMS)")

From the results of the calculation of the International Market Share, it can be seen that from the 8 countries, only Germany showed an increase in stability with an average increase of 0.13 per year. The biggest increase occurred in 2013 and 2017 with each value being 4.65 and 5.07. For Australia, China, France, Indonesia, Malaysia, South Korea and Thailand, these 7 countries each year show instability for the annual International Market Share value. The IMS value for Australia experienced the most decline in 2013 where this value decreased by 0.24, and the most increase occurred in 2016 with an increase of 0.84 compared to 2015.
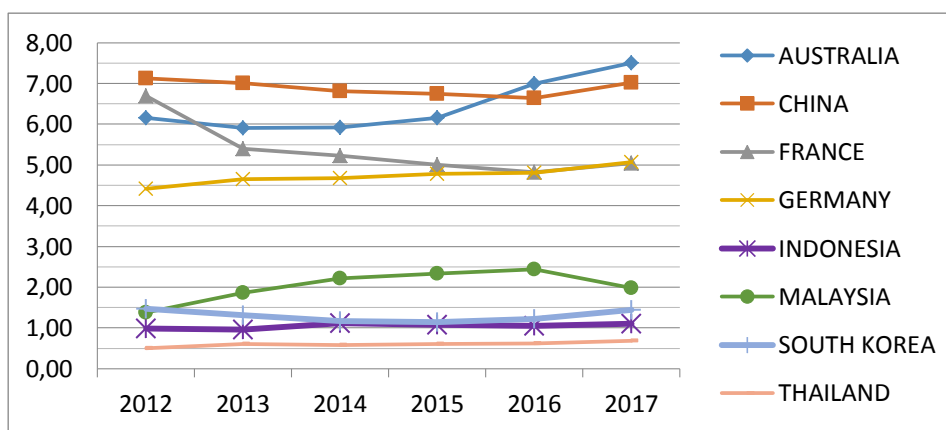

Figure 1-2 International Market Share (IMS)

China experienced a considerable decline of 0.20 in 2014 and increased again by 0.39 in the year 2017. France has decreased every year except in 2017 which has increased in value by 0.22 from 2016. Indonesia's market share is also small, in 2012 Indonesia's market share did not reach 1%, but continued to grow to more than 1% since 2014 and has declined in the next two years until 2017 has increased again. Indonesia showed instability with the biggest increase of 0.14 in 204 and a decrease in value of 0.03 in 2015. Malaysia had an increase of 0.47 in 2013, but

also decreased in value by 0.46 in 2017. South Korea has decreased by 0.15 in 2012 2014 and increased value in 2017 as much as 0.23 compared to 2016. The calculation has showed that Thailand's market share is very low which the value did not reach 0.7. The IMS value for Thailand showed a decline of 0.03 in 2014 and increased by 0.07 in 2017.

From these data it can be seen that Indonesia's market share experiences instability and Germany's market share has continues to increase every year. From the market share value stated in the table, it can be seen that China has the largest market share value from 2012 to 2015. In 2016 and 2017 the largest market share value is owned by Australia. Whereas the lowest market share's value is owned by Thailand, Indonesia, South Korea and Malaysia.

1. 2. Trade Competitiveness Index (TCI)

The trade competitiveness index is one of the more commonly used measures for the analysis of international competitiveness. It indicates the difference between the import and export trade of a country and the total volume of import and export trade. In the context of services for higher education, what is meant by the number of exports is the number of students of the country of origin studying in other countries, while import is the number of foreign students studying in the destination country. The understanding of the indicator will change into:

$$TCI_{ij} = \frac{X_{ij} - M_{ij}}{X_{ij} + M_{ij}}$$

J : International students who go abroad to take higher education

TCI_{ij} : The trade competitiveness index of i country for j international students (go abroad)

X_{ij} : Total of International students who go abroad to take higher education from i country (country of origin)

M_{ij} : Total of International students who go abroad to take higher education from the world in i country (country of destination)

The data is a total of international students from all countries in the world who took the higher education study period in the destination country. This data shows that from the eight destination countries, the number of international students in China ranked first compared to seven other countries. From these data, it can be seen that the number of international students in the world is taking a higher education in 8 countries of destination which continues to increase every year is China and France. The number of international students who take higher education in China every year has increased by an average of 34 thousand students, with the largest increase

occurring in 2014 with a total increase of 51.4 thousand students. The number of international students who take higher education in France every year has increased by an average of 5.3 thousand students, with the largest increase occurring in 2014 with a total increase of 5.4 thousand students.

Table 2-1 Total of International Students (Higher Education) From All Countries in Country of Destination

TOTAL OF INTERNATIONAL STUDENTS (HIGHER EDUCATION) FROM ALL COUNTRIES IN COUNTRY OF DESTINATION						
COUNTRY OF DESTINATION	2012	2013	2014	2015	2016	2017
AUSTRALIA	11,137	11,987	12,369	12,138	12,783	12,713
CHINA	698,401	719,065	770,516	819,524	866,072	869,387
FRANCE	64,169	76,576	82,057	86,690	90,543	90,717
GERMANY	118,157	120,150	118,494	117,104	119,088	119,021
INDONESIA	36,009	39,417	39,549	44,847	47,317	45,206
MALAYSIA	59,452	59,844	62,536	64,767	64,861	64,187
SOUTH KOREA	121,198	113,799	110,024	107,762	104,992	105,360
THAILAND	26,416	25,845	26,450	29,205	30,375	29,884
WORLD	4,058,385	4,230,286	4,495,944	4,787,696	5,085,893	5,085,159

The number of international students in the world who take higher education in Australia, Germany, Indonesia, Malaysia, South Korea and Thailand shows instability with the increase and decrease every year. The highest number of international students who choose to take higher education in Australia is in 2016. Germany has the highest number of international students from all over the world in 2013. South Korea has the highest number of international students from all over the world in 2012. The number of international students from all over the world taking higher education in Indonesia, Malaysia and Thailand which was the most in 2016. The country with the least number of international students from these eight countries is Thailand with more than twenty thousand and this number has experienced instability from 2012 to 2017.

To calculate the higher education service trade competitiveness of a country, the author uses the data in table 14 and table 16 to get the results as below. When TC result is higher than 0, it means that productivity for higher education service in a country is higher than international level, and its international competitiveness is strong. This happens when the total number of students from origin countries who continue their study abroad is more than the number of foreign students studying in the country. For simplicity, it can be interpreted as more exports than total imports. If the result of TC is equals to 0, it means that productivity from a country to a higher education service is equivalent to the international level, where the amount of import and export occurs only as a balanced exchange. If the result of TC is lower than 0 indicates that productivity for higher education in a country is lower than international level and international

competitiveness is low because more international students come to the country to take higher education.
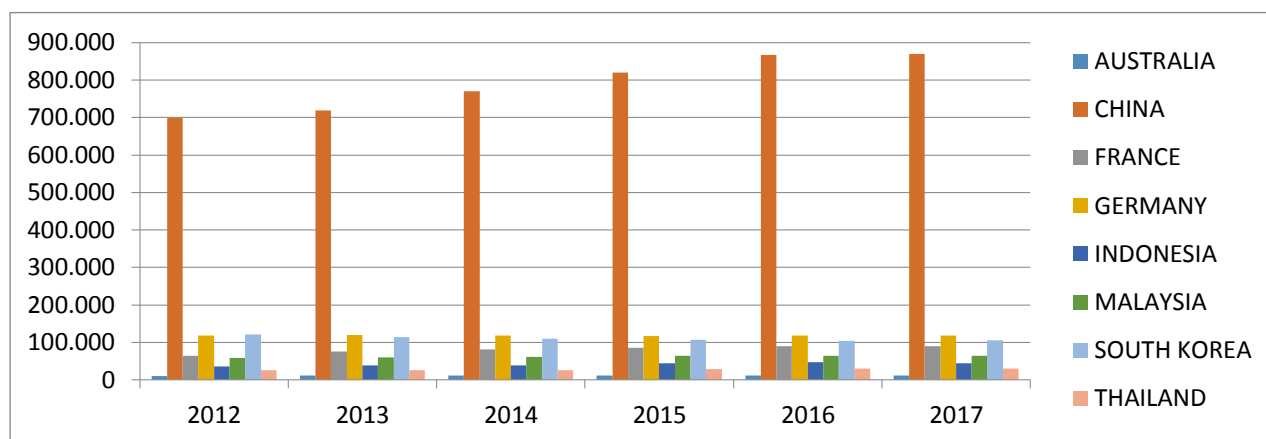

Figure 2-1 International Students (Higher Education) From All Countries in Country of Destination

Table 2-2 Trade Competitiveness Index (TCI)

TRADE COMPETITIVENESS INDEX (TCI)								
COUNTRY	2012	2013	2014	2015	2016	2017	Mean Value	Identification
AUSTRALIA	0.91	0.91	0.91	0.92	0.93	0.94	0.92	Balance
CHINA	0.41	0.42	0.43	0.43	0.44	0.42	0.43	Balance
FRANCE	0.62	0.50	0.48	0.47	0.46	0.48	0.50	Balance
GERMANY	0.20	0.24	0.28	0.32	0.35	0.37	0.29	Balance
INDONESIA	0.05	0.02	0.11	0.07	0.06	0.11	0.07	Balance
MALAYSIA	-0.03	0.13	0.23	0.26	0.31	0.22	0.19	Balance
SOUTH KOREA	-0.34	-0.34	-0.35	-0.33	-0.26	-0.18	-0.30	Low
THAILAND	-0.13	0.00	0.00	-0.01	0.02	0.08	-0.01	Low

From the above table, it can be seen that the trade competitiveness index of 8 countries consists of Australia, China, France, Germany, Indonesia, Malaysia, South Korea and Thailand. By using the TCI formula, the results show that only one country is close to 1. Australia with the value of its trade competitiveness is more than 0.9. From 2012 to 2017 it was stable with a value of 0.91, and experienced an increase of 0.004 every year from 2012 to 2017. For France, the value of the competitiveness of the trade shows the instability, and it has decreased every year from 2012 to 2016. The decline in value has been very drastic as much as 0.12 from 2012 to 2013. Furthermore, there has been a slight increase of 0.02 in 2017. German experienced a steady increase every year with an increase in average of 0.033. For trade competitiveness in Indonesia, Indonesia experiences instability every year. From 2012 to 2013 it decreased by 0.03 but it has

increased in 2014 with a value of 0.097. The decline occurred again in 2015 and 2016 with each value being 0.046 and 0.007. Until 2017, it increased slightly by 0.047.
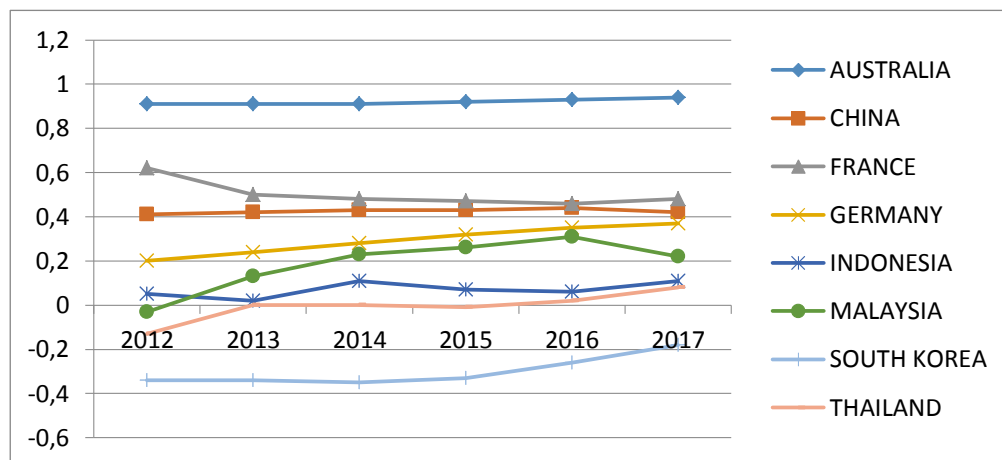

Figure 2-2 Trade Competitiveness Index (TCI)

Trade competitiveness of China shows that the competitiveness is the lowest of the 8 countries. It has decreased from 2012 to 2016 and in 2017 China only experienced a very slight increase. The competitiveness from South Korea has also experienced an imbalance from 2012 to 2017, but has experienced an increase in 2017 with a value of -0.18. This is also the same for Thailand which also has an unstable competitiveness. Thailand experienced a fairly good increase in 2013 and 2017. Malaysia showed excellent competitiveness with an increase that occurred every year from 2012 to 2016, but decreased by 0.09 in 2017.

1. 3. Revealed Comparative Advantage Index (RCA)

The revealed comparative advantage is a method adopted by the American economist, Balassa Bela in 1965 to measure the comparative advantages of international trade, which can reflect the comparative advantage of a certain country's trade. It expresses the ratio of the industry's share of the country's exports to the share of the world's total trade in world trade, excluding the effects of fluctuations in national aggregates and world aggregates, which can better reflect the comparative advantage of the export of a certain industry in the country compared with the average export level of the world. So the revealed comparative advantage refers to the share of the export value of a certain commodity or services in a country to the total value of all exports of the country, and the proportion of the world's exports of such commodities or services to the world's total exports of all commodities or services. In this case the formula is specific only to examine revealed comparative advantages in education services that change to:

$$RCA_{ij} = \frac{\dfrac{\Sigma X_{ij}}{\Sigma X_i}}{\dfrac{\Sigma X_{wj}}{\Sigma X_w}}$$

RCA_{ij} : The revealed comparative advantage index of i country for j international students (go abroad)

X_{ij} : Total of International students who go abroad to take higher education j from i country (country of origin)

X_i : Total of people who go abroad from i country (country of origin)

X_{wj} : Total of International students who go abroad to take higher education j in the world w

X_w : Total of people who go abroad in the world w

Table 3-1 Total of People Who Go Abroad from Country of Origin in the World

TOTAL OF PEOPLE WHO GO ABROAD FROM COUNTRY OF ORIGIN IN THE WORLD						
COUNTRY OF ORIGIN	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
AUSTRALIA	8,212,000	9,052,000	9,480,000	9,807,000	10,380,000	10,932,000
CHINA	83,182,700	98,185,000	116,593,000	127,860,000	135,130,000	143,035,000
FRANCE	25,317,000	26,062,000	27,919,000	26,648,000	26,483,000	29,055,000
GERMANY	30,411,000	31,545,000	32,999,000	34,970,000	35,555,000	37,452,000
INDONESIA	8,044,000	8,802,000	9,435,000	10,407,000	11,519,000	14,040,000
MALAYSIA	25,033,000	25,715,000	27,437,000	25,721,000	26,757,000	25,984,000
SOUTH KOREA	13,737,000	14,846,000	16,081,000	19,313,281	19,713,800	24,100,000
THAILAND	5,721,485	5,969,913	6,443,736	6,794,327	8,203,521	8,963,000
WORLD	1,246,000,000	1,311,000,000	1,334,000,000	1,398,000,000	1,475,000,000	1,567,000,000

*Source: World Tourism Organization, Yearbook of Tourism Statistics, Compendium of Tourism Statistics and data files **Invalid source specified.**.*

From the above data of the total number of people who go abroad in the world from 8 countries of origin it can be seen that the people from Australia, China, Germany, Indonesia, South Korea and Thailand have experiences an increase every year. China occupies the largest increase compared to other countries. This number is increasing every year with an average growth of 11.9 million people each year. The highest number of growth occurred in 2013 with an increase of 18.4 million people; Total citizens from Germany experienced an increase every year with an average growth of 1.4 million people. The largest number of people from German origin abroad occurred in 2015 with an increase of 1.97 million people;

People from South Korea also experienced growth with an average of 2.07 million per year. The most increase occurred in 2017 as much as 4.38 million from 2016; Citizens from Indonesia

with the growth of the population that went abroad on average increased by 1.19 million per year. The biggest increase occurred in 2017 as many as 2.5 million people; Australia with an increase in the number of people who go abroad, increasing by an average of 544 thousand people each year. The highest increase occurred in 2013 by increasing the number of 840 thousand people from 2012; Thailand has increased in number with an average of 648 thousand people per year. The highest increase occurred in 2016 as many as 1.4 million from 2016.
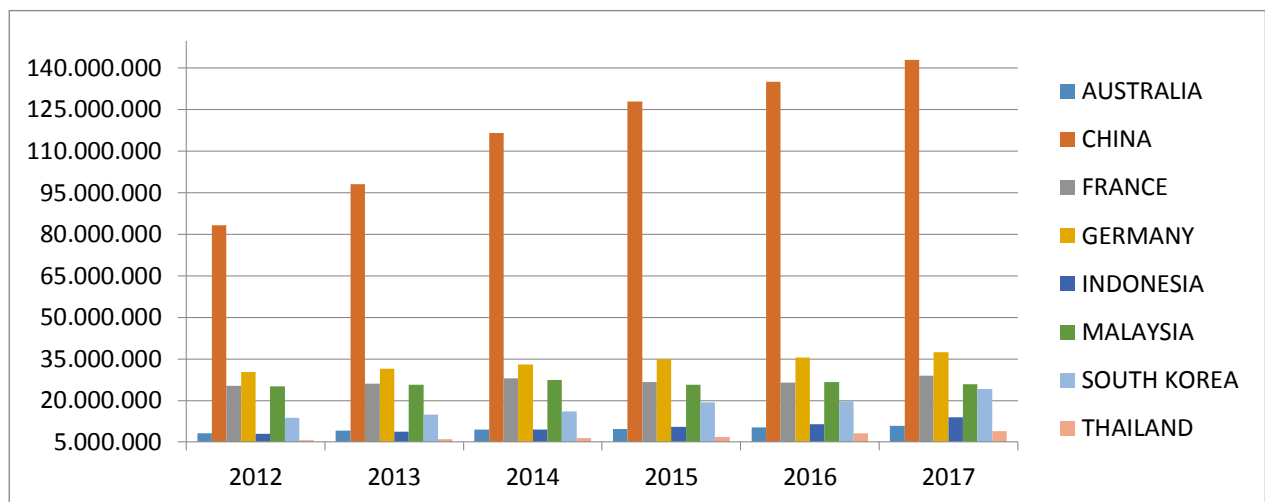

Figure 3-1 Total of People Who Go Abroad from Country of Origin In The World

The instability of the number of people in the country occurred in France and Malaysia. The number of people from France who go abroad has increased for the third year in a row from 2012 to 2014. However, this number has decreased in 2015 and 2016, but again there has been an increase of 2.57 million people in 2017 which also have the largest number of people who have left the country since 2012 with 29 million people; Malaysia also has an increase from 2012 to 2014, then experiences instability every year from 2015 to 2017.

To calculate the higher education service trade competitiveness of a country using this RCA formula, the author uses the data in table 15 and table 18 to get the results as below. When a country's RCA index of more than 2.5 indicates that the country's international competitiveness is extremely strong; RCA between 2.5 and 1.25 indicates that the country has a very strong international competitiveness; RCA between 1.25 and 0.8 means that the country's international competitiveness is relatively strong; An RCA of less than 0.8 indicates that the country's international competitiveness is weak.

Table 3-2 Revealed Comparative Advantage Index (RCA)

COUNTRY	2012	2013	2014	2015	2016	2017	Mean Value	Identification
AUSTRALIA	9.33	8.55	8.33	8.77	9.93	10.75	9.28	Extremely Strong
CHINA	1.07	0.94	0.78	0.74	0.72	0.77	0.84	Relatively Strong
FRANCE	3.29	2.72	2.50	2.62	2.69	2.72	2.76	Extremely Strong
GERMANY	1.81	1.93	1.89	1.91	1.99	2.12	1.94	Very Strong
INDONESIA	1.51	1.43	1.56	1.44	1.35	1.23	1.42	Very Strong
MALAYSIA	0.69	0.95	1.08	1.27	1.35	1.20	1.09	Relatively Strong
SOUTH KOREA	1.33	1.16	0.97	0.82	0.91	0.94	1.02	Relatively Strong
THAILAND	1.09	1.34	1.21	1.23	1.12	1.21	1.20	Relatively Strong

From the results of revealed comparative advantage available in the table, it proves that 8 countries have instability every year. Australia shows a very high RCA value compared to 7 other countries, which is more than 8 each year, even in 2017 it has reached 10.75. In 2013 and 2014 there was a decline in values of 0.78 and 0.23, then there was an increase in 2015, 2016 and 2017 of 0.44, 1.17 and 0.81. The value of RCA for China has decreased in value from 2013 to 2016 with an average decline in value of 0.085 and in 2017 showed an increase of 0.04 compared to the previous year. While the value of RCA for France also decreased in value in 2013 and 2014 with an average decline in value of 0.39 and increased in 2015 to 2017 with an average increase of 0.07. The value of RCA for Germany in 2012 was 1.81 and became 1.93 in 2013. This RCA value declined in 2014 with only 1.89, but again increased in 2015 to 2017 with an average increase of 0.076 per year.

The value of RCA for Indonesia in 2012 is 1.51 and this figure has decreased as much as 0.08 in 2013. Indonesia has the highest RCA value in 2014 which is 1.56, but since 2015 to 2017 this value has decreased by an average of 0.1 per year. The value of RCA for Malaysia has increased from 2013 to 2016 with an average increase of 0.16 per year, but has decreased in value by 0.15 in 2017. The value of RCA for South Korea has decreased since 2013 to 2015 with an average decline in value of 0.16, and again shows an average increase of 0.057 for 2 years in 2016 and 2017. The value of RCA for Thailand experiences very unstable changes, increases and decreases in value continue to occur each year as shown in the table.

1. 4.   Summary

The results of calculation that have proven that Indonesia's international market share suffered instability from 2012 to 2017, a decline occurred in 2013 and increased again in 2014, but decreased again in 2015 and 2016 and subsequently increased again in 2017. The mean value of IMS is 1.045 which is can be concluded that in terms of international market share, Indonesia has shown that the competitiveness of education service trade is indeed low, this is due to the small

number of students from Indonesia who go abroad to take higher education and have such a large comparison with the total abroad to take higher education throughout the world.

From the calculation results for the trade competitiveness index shows that Indonesia experienced instability in these six years. The decline occurred in 2013, but again increased dramatically in 2014. Setbacks occurred again in 2015 and 2016 then increased again in 2017 with the same value that occurred in 2014. In terms of trade competitiveness index, Indonesia with a TCI value equal to 0 from 2012 to 2017 which is 0.07 for the mean value of TCI, and it has shown that the number is equivalent to the international level. This result was obtained from the number of students from Indonesia who went abroad to study in higher education and the number of international students to Indonesia to take higher education was directly proportional, where the number of students was almost the same, and the TCI value of Indonesia is equivalent or balance to the international level.

While in terms of revealed comparative index, Indonesia proves that its competitiveness has decreased to be relatively strong in 2017, with the mean value of RCI since 2012 to 2017 is 1.42, and from this result it can be concluded that the revealed comparative advantage for Indonesia is unstable but strong to International competitiveness. The research conclusions have proven that Indonesia's international competitiveness for higher education service trade shows instability every year by using international market share formula measurements, trade competitiveness index and revealed comparative index.

2. EMPIRICAL STUDY

2. 1. Description of Analysis

Total participants who filled out the questionnaire were 302 people consisting of 126 men and 176 women who came from various countries with appropriate age limits to pursue higher education in a country. These questionnaires are distributed randomly by distributing questionnaire links to people who are continuing their education outside their home country, people who are preparing to continue their education abroad, and people who have finished their higher education abroad.

The questionnaire consists of nine questions consisting of mandatory content and free content questions. Of the nine questions, three of them are related to self-identity, and six questions are related to the determining factors of a person's consideration of continuing higher education abroad. In the questionnaire there are questions about higher education institutions, selection of educational majors, consideration factors in choosing a country as the destination country for furthering higher education, and the chosen destination country.

2. 2.   Analysis of Selection Factors of Higher Education in a Country

The author had collected data using a questionnaire to support writing on this topic. The total number of participant who filled out the questionnaire amounted to 302 people, consisting of 176 women (58.28%) and 126 men (41.72%). Participants who filled out this questionnaire consisted of various age ranges. The age range of participants aged <18 years was 7 participants (2.32%), aged 18-25 years was 201 participants (66.56%), aged 26-30 years was 59 participants (19.54%), 31-40 years was 33 participants (10.93%), and 41-50 years was two participants (0.66%).
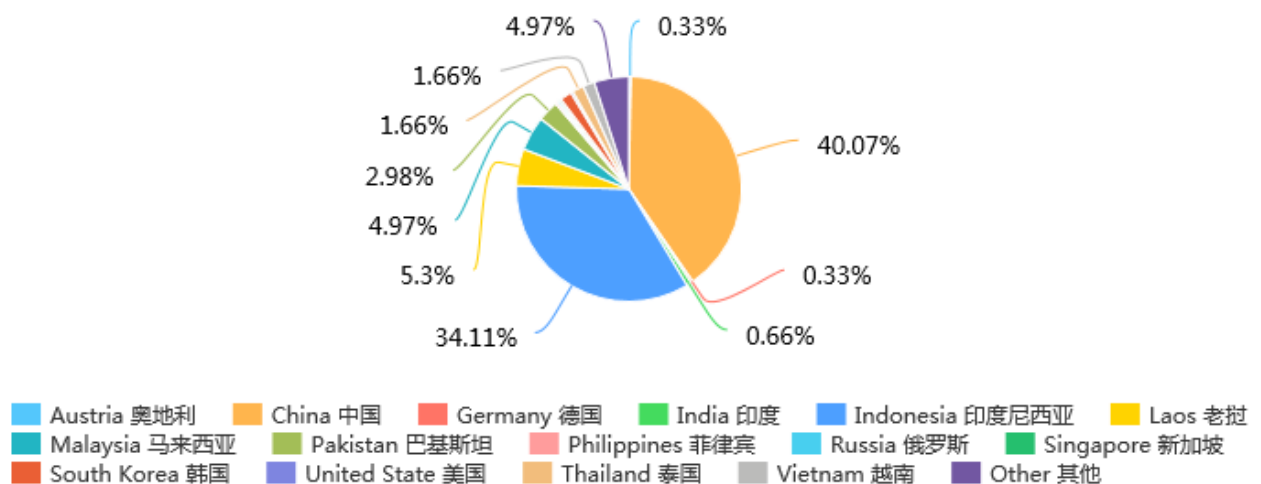

Figure 2-3 Nationality of Participant

The graphic shows that there were 122 participants who filled in the questionnaire which were Chinese citizens, 102 participants were Indonesian citizens, 16 participants were Laos's nationality, 15 participants were Malaysian citizens, 9 participants were Pakistani citizens, and participants were less than five are citizens of other countries. Of the total 302 participants, there were 267 people (88.41%) who stated their willingness to continue their education on abroad and the remains of participants did not want to continue their education abroad.

The graphic below is the answer of multiple choice questions about the destination country chosen by 267 participants who expressed their willingness to continue their education abroad. It was found that the country of destination with the highest percentage were China (37.45%), Australia (26.97%), United Kingdom (29.96%), United State (27.34%) and Germany (22.1%). Apart from the countries listed in the graphic, Cuba, Norway and Sweden are also the destination countries chosen by participants to continue their education.
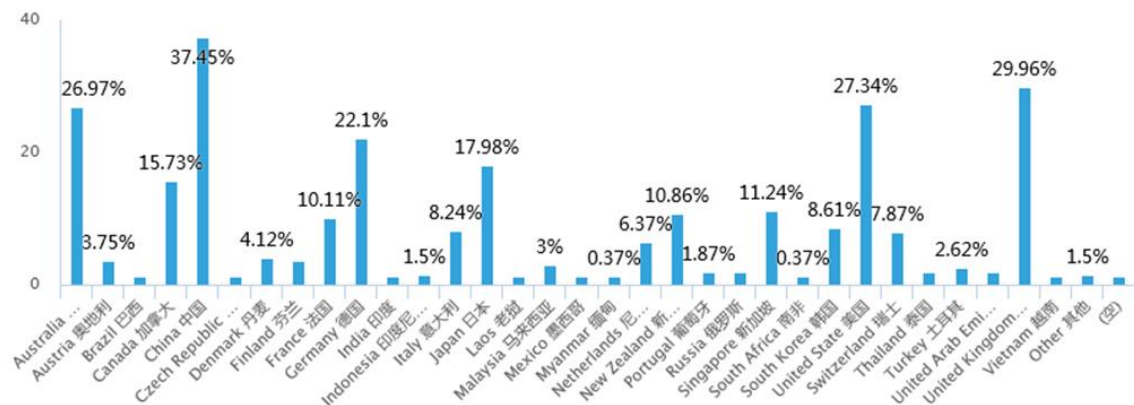
Figure 2-4 Percentage of Country of Destination

The participants chose a country as the destination country to continue their education considering many factors. From the results of the questionnaire conducted by 302 participants from various countries, it was found that culture is the main sequence of factors for them to choose a destination country to continue their education. Culture includes food, language, people and habits. Participants choose the quality of education in a country as the second order from the selection factor of the country. The next important sequence chosen by the participants is the cost of living and employment opportunities.
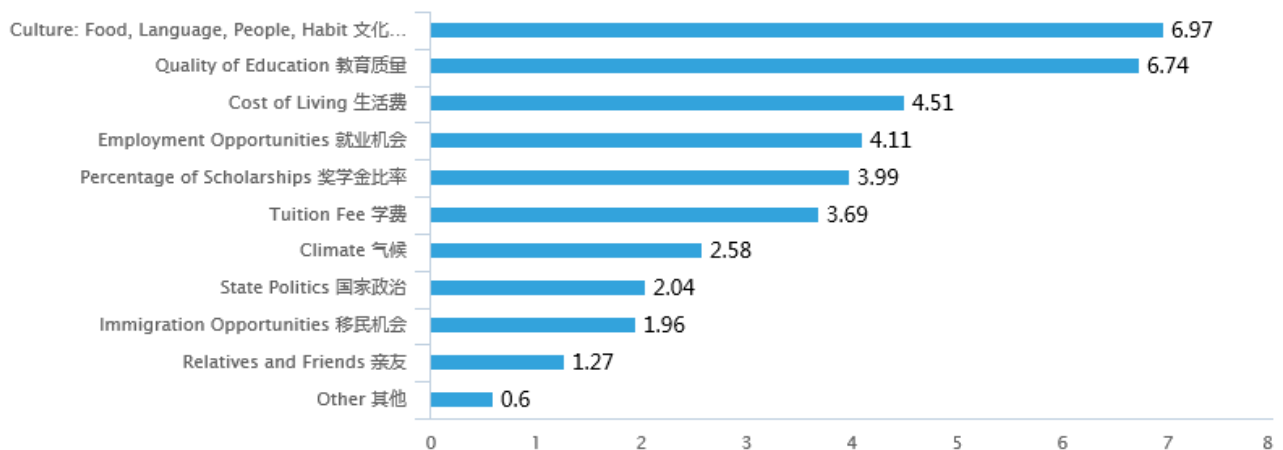

Figure 2-5 Factor of Consideration for Choosing Destination of Country

Regarding the choice factor about the quality of education, there were 21.85% choosing language and culture as professional fields to be chosen by the participants. In addition, the most chosen professional field participants were finance and economics (12.91%), management (9.27%), humanities and law (8.94%), teacher education (8.61%), medicine (6.95%), computer science (5.63%) and art (5.63%).
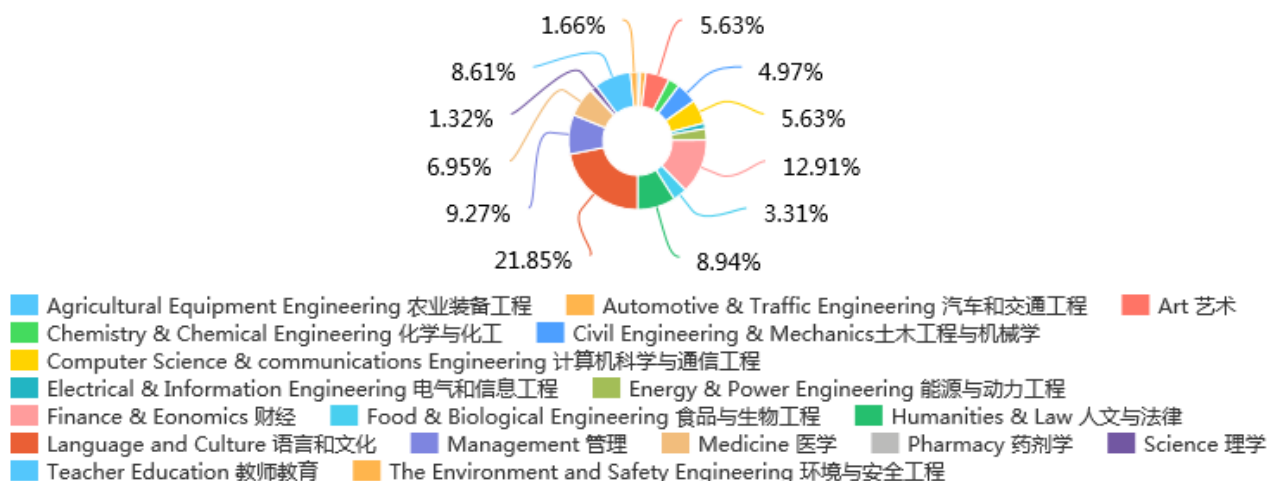
Figure 2-6 Professional Fields

For higher education institutions, there are 205 people (67.88%) who choose to continue their education at university, then 121 participants (40.07%) who choose college. There were 43 participants (14.24%) who chose the academy, 31 participants (10.26%) who chose the institute, 14 participants (4.64%) who choose the community colleges and 12 participants (3.97%) who choose polytechnic.
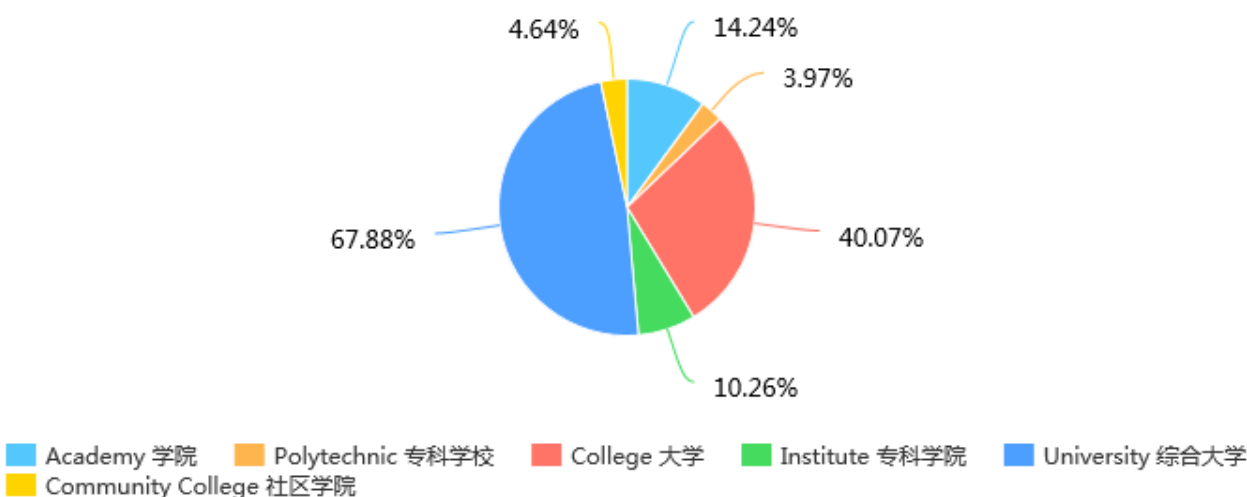

Figure 2-7 Percentage Selection of Higher Educational Institution

In a comparison to find out the competitiveness results of the seven selected countries, which of these results can be known as follows:

Table 2-3 Empirical Result of Seven Selected Countries

Destination		Participant		Consideration Item		Professional	
Country	Total	Nationality	Total	Option	Mean	Field	Total
AUSTRALIA	72	Indonesia	35	Quality of Education	7.39	Language and Culture	19
		China	20			Finance and Economics	11
CHINA	100	Indonesia	55	Culture: Food, Language, People, Habit	6.64	Language and Culture	28
		Malaysia	10			Finance and Economics	24
FRANCE	27	Indonesia	12	Quality of Education	8.29	Language and Culture	6
		China	8			Management	5
GERMANY	59	Indonesia	28	Quality of Education	7.51	Language and Culture	11
		China	20			Finance and Economics	9
INDONESIA	4	Indonesia	2	Cost of Living	9.75	Language and Culture	2
		China	1			Finance and Economics	1
MALAYSIA	8	Indonesia	5	Culture: Food, Language, People, Habit	7	Finance and Economics	3
		China	2			Computer Science & communications Engineering	2
SOUTH KOREA	23	Indonesia	15	Quality of Education	8.3	Language and Culture	8
		Malaysia	5			Finance and Economics	4
THAILAND	5	China	2	Quality of Education	9.6	Finance and Economics	2
		Thailand	1			Humanities & Law	1

Nationality of the participants is drawn from the largest number of participants from a country that chooses the destination country. Whereas the consideration option taken is the highest option chosen by participants, and for the professional field only the highest two types are taken. In this case it seems very clear that what becomes a person's consideration for choosing a country as a destination country to continue higher education study is the choice of quality of education, and the selection of the most chosen professional fields is language-culture and finance-economics.

2. 3.   Analysis of Influencing Factor of Indonesia's Higher Education Trade

From 302 participants who filled out the questionnaire, it was found that only 4 participants (1.5%) showed the willingness to continue their education in Indonesia. From these results it can be concluded that participants who consider and choose Indonesia as one of the destination countries to continue their education show that the cost of living and employment opportunities play the role of the most important factors but quality of education and tuition fees are also the most important factors in them.

Table 2-4 Questionnaire results from participants who chose Indonesia as the destination country

NO. PARTICIPANT	1	2	3	70
SOURCE	Wechat app	QQ app	Wechat app	Wechat app
IP ADDRESS	223.68.82.117 Jiangsu-Zhenjiang	223.68.82.117 Jiangsu-Zhenjiang	202.120.121.109 Shanghai	203.210.84.129 Indonesia
GENDER	Female	Female	Male	Female
AGE RANGE	18-25	18-25	18-25	18-25
NATIONALITY	Indonesia	Indonesia	Pakistan	China
COUNTRY OF DESTINATION	1. Canada 2. China 3. Indonesia 4. Japan 5. Singapore	1. Australia 2. Indonesia 3. Singapore	1. Australia 2. Canada 3. China 4. Germany 5. Indonesia	1. Australia 2. Indonesia 3. United State
FACTOR TO CHOSE THE COUNTY OF DESTINATION	1. Tuition fee 2. Percentage of scholarship 3. Quality of education	1. Cost of living 2. Culture 3. Quality of education	1. Cost of living 2. Employment opportunities 3. Tuition fee	1. Quality of education 2. Employment opportunities 3. Cost of living
PROFESSIONAL FIELD	Language and culture	Finance and economics	Management	Language and culture
EDUCATIONAL INSTITUTION	University	University	University	University

2. 4. Comprehensive Analysis

From the seven countries selected, based on the results of the match between the comparative study for IMS, TCI and RCA with the results of empirical studies through questionnaires, it has been found that China has the largest international market among six other countries and this is directly proportional to the results of the questionnaire which also proves that China is the largest destination country among other countries. 100 participants have choosing China as the destination country, the main consideration is culture of China. Culture in this aspect consists of food, language, people and habits, and this is strong evidence that the culture of China does have a very strong appeal to encourage growth and increase international competitiveness for higher education service trade. This evidence is also supported by the professional fields chosen

by the participants, language-culture as the first choice, and finance-economics as the second choice.

72 participants have choosing Australia as their destination country. The participants considered that the quality of education in Australia deserves to be the main consideration, besides that language-culture and finance-economics were also the biggest choice of professional fields. The results of the empirical analysis are in accordance with the results of the comparative study with the largest RCA and the second largest IMS besides China.

Based on the results of comparative analysis using the IMS, TCI and RCI methods, it can be seen that higher education services in Indonesia are equivalent to the international level. However, based on the results of empirical analysis it is proven that there are only 1.5% of the total 267 participants who chose to continue their studies in Indonesia. There were only 4 participants who chose Indonesia as the destination country, with the main consideration being the cost of living in Indonesia which reached out, and the specialization of the same professional fields, language-culture and finance-economics. From the elaboration of the results of the analysis conducted, it was found that the selection of consideration and major options does indeed have an influence that can determine a country's international competitiveness for the higher education service trade category. From these two different analytical methods it is concluded that higher education in Indonesia does indeed have international competitiveness in the service trade sector.

From the results of the analysis conducted through the questionnaire it has been found that the quality of education, the culture, the cost of living and the percentage of scholarships in the destination country are sequential factors that are considered by participants to fill out the questionnaire to continue their higher education in the countries that most interest someone to be a destination country, such as Australia, China, France and Germany. Unlike the consideration factors chosen by participants who chose Indonesia as their destination country, they instead chose the cost of living and employment opportunities as the main consideration factors.

In addition, the selection of professional fields is also a big consideration. Language-culture, finance-economics, humanities-law, teacher education and management are the five majors that are the biggest choices for both those participants who choose other countries and Indonesia as their destination country to continue their higher education.

2. 5. Summary

From a total of 302 questionnaire participants there were 122 people from China, 102 people from Indonesia, and the rest were other citizens. There are 267 people who chose to continue their studies abroad with the main destination countries such as China, Australia, United Kingdom, United States and Germany. The main consideration factors of the participants in filling out the questionnaire in selecting the learning destination countries are culture, quality of education and the cost of living in that country. Study fields are the main choices are language-culture and finance-economics, with the choice to take a period of study at the university. Of the 267 participants only 4 participants chose to continue their studies at universities in

Indonesia due to factors of cost of living, tuition fees and quality of education, with the selection of the main study fields namely language and culture.

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