The Effect of Economic Gini Ratio, Lecturer Ratio, and Number of Universities Ratio on the Gross Enrollment Rate (GER) of Higher Education at Indonesia in 2020-2022

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A B S T R A C T

Gross Enrollment Rate is a statistical indicator used to measure educational attainment in a country in the form of a percentage. GER HE is a comparison between the number of people still studying at tertiary level regardless of age and the number of people aged 19 - 23 years. The research objective is to determine the effect of the unit in analysis, namely the Economic Gini Ratio, the Ratio of Lecturers, and the Ratio of the Number of Universities on the GER of HEs in Indonesia in 2020 - 2022. The research method used is a quantitative method with secondary data. The sample used is a saturated sample of an entire population of 102 samples. The technique of data analyzed using regression analysis of data panel. The data panel used is combined time series data from three years, namely 2020 - 2022. Then, data from several objects (cross section) is used, namely data from 34 provinces in Indonesia. Based on the results of the study using the Fixed Effect Model (FEM), it shows that the economic Gini ratio has a negative and significant effect on the GER for higher education institutions by -2.038873 in 2020-2022. Meanwhile, the ratio of lecturers and the ratio of the number of universities have no effect significantly to GER of HEs on 2020-2022 in Indonesia.

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INTRODUCTION

The education level is a factor that determines the quality a society's Human Resources (HR). It can be seen that a higher education level in a society, a better quality society. According to Istiqomah et al. (2018), BPS explains that the education level of a social area can reflect the standard of living in that area. High participation rates can indicate the quality and scope of government services to the community's right to education (Habibah et al., 2019). Understanding Gross Enrollment Rate Higher Education (GER HE) is important because high education is an important factor in improving a country's human resources (HR). If the GER HE is inadequate, it will be difficult to increase competition in other countries and compete in the world. According to Safira & Wibowo (2021), an increase in GER HE means that more children in higher education are getting higher education.

But in reality, according to the Director General at the Direktorat Jendral Pendidikan Tinggi (Ditjen Dikti), Prof. Nizam (Plt.), currently the value of GER HE is at 31 percent nationally. In fact, the GER is targeted in 2024 to be at 37 percent. The statistical data is also reinforced by data from the Badan Pusat Statistik (BPS). The GER data shows that the GER of HE’s scored the lowest, with a significant decline from other education levels. In fact, the GER of universities has decreased from 31.19 percent to 31.16 percent in 2021 to 2022. The value of GER HE reached 91 percent in 2020, still relatively low compared to other countries such as Singapore which increased significantly to reach 97 percent in 2022. Followed by Thailand with 49 percent and Malaysia with 43 percent (Saefuddin, 2022).

![Figure 1. Tertiary School Enrollment of ASEAN](image)

Similar topics have been raised in many studies, Fatah et al. (2021), found that the average Gross Enrollment Rate (GER) decreases with age and education level. This means that the largest decrease in GER occurs at the higher education level. In addition, according to Naharin et al.'s research, (2023) only
the primary school GER level has a high GER value. And this study shows that the variables of per capita expenditure and student-teacher ratio have a positive effect on GER growth.

This research uses data on HEs' participation in GER, which includes the entire population entering higher education. And data that is used in the research are from 34 regions in Indonesia. To fill the gap in previous research, where there is no data for the West Sulawesi and North Kalimantan regions. Previous studies only focused on GER levels below college such as elementary, junior high, high school, and vocational school. The variables used in this study use numbers in the form of ratios or percentages. Previous research has also focused on the influence of poverty rate, access, and economic growth. To enhance the previous research, the effect of the gini ratio on the GER HE will also be tested. According to BPS Tasikmalaya, the gini ratio is a more comprehensive indicator of the level of income and expenditure inequality in a region. Many factors influence the gini ratio, including economic factors such as economic growth, poverty rate, and income inequality. The gini ratio also takes into account social factors such as health and employment opportunities, as well as geographical factors such as participation rates (Shobrun, 2023).

LITERATURE REVIEW
Education Participation

Dreher et al. (2006) stated that school enrollment decisions in the education sector can be influenced by two factors: demand factors and supply factors. Demand factors considered include income per capita (by household), adult literacy rate (by parent), school population (by school) and urbanization rate (by region). Meanwhile, government factors such as the number of teachers and students, education spending and education sector spending are considered as supply factors. In summary, the aspects that can affect enrollment rates are:

1) Government aspects, which may include policies to support increased access to education.
2) School aspects, which include the availability of education facilities.
3) Household aspects, which are economic conditions related to access to education.
4) Regional aspects, many factors affect each region. In terms of population, and others.

This research will examine four aspects, namely, the government and regional aspects that will examine the ratio of lecturers per institution because each region has varying lecturer needs supported by the government. Meanwhile, the school aspect will examine the distribution of the proportion of the number of universities in Indonesia. Then, the household aspect will look at the Gini ratio in the economy, which shows income inequality.

METHODOLOGY

Methods that are used in the research is the use of quantitative methods to test the hypothesis that has been set. The analysis unit used in this research is
the gini ratio, the lecturer ratio, the number of universities ratio, and the GER HE in 2020 - 2022. With the dependent variable (Y) and influenced, namely the GER HE variable. Meanwhile, the independent variables (X) are the gini ratio (X1), the lecturer ratio (X2), the number of universities ratio (X3). The population of this study is X and Y variable data from 34 provinces in Indonesia. The sample used is a saturated sample. According to Sugino in Fitria & Ariva (2018) saturated samples are samples taken from all members of the population. Based on this sampling method, the number (n) of sets per year for data for the period 2020 - 2022 is 102 samples.

The technique of data selection that is used for this research was secondary data selection technique. The obtained data is obtained from Badan Pusat Statistik (BPS) website and the Higher Education Statistics publication published by the Pangkalan Data Pendidikan Tinggi (PDDikti). The data used is panel data which is a data set containing one sample of data from a region, city, state, country, and others in a certain period (Haya, 2022). In addition, panel data is group data which can be said to be the combination from time series and cross section of three years, namely 2020 - 2022 from 34 provinces in Indonesia. Panel data was chosen because it can provide more robust data (Naharin et al., 2023).

**RESEARCH RESULT**

<table>
<thead>
<tr>
<th>No</th>
<th>GER</th>
<th>Gini Ratio</th>
<th>Lecturer Ratio</th>
<th>Number Of Universities Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Mean</td>
<td>34.31324</td>
<td>0.345490</td>
<td>76.64706</td>
</tr>
<tr>
<td>2.</td>
<td>Median</td>
<td>32.59000</td>
<td>0.338500</td>
<td>75.00000</td>
</tr>
<tr>
<td>3.</td>
<td>Maximum</td>
<td>75.59000</td>
<td>0.459000</td>
<td>156.0000</td>
</tr>
<tr>
<td>4.</td>
<td>Minimum</td>
<td>14.73000</td>
<td>0.247000</td>
<td>42.00000</td>
</tr>
<tr>
<td>5.</td>
<td>Standar Deviasi</td>
<td>10.73154</td>
<td>0.041896</td>
<td>20.49663</td>
</tr>
</tbody>
</table>

*a. Gross Enrollment Rates Higher Education (GER HE)*

GER is a statistical indicator that measures a country's education level in percentage format (Afifah & Faradis, 2020). The gross enrollment rate (GER) compares the number of people who are still learning at a certain level, regardless of age, with the number of people who should be at that level of education. In the GER HE, what is compared is the number of people studying in higher education with the total population aged 19 - 23 years. Data was obtained from the Badan Pusat Statistik (BPS) website in 2020 - 2022. GER HE from 2020 - 2022 shows an average of 34.31324 percent from 34 provinces. The standard deviation of the GER HE index also shows a variation or spread of values of 10.73154 percent. The GER HE value of 75.59 percent was received by the Province of Yogyakarta Special Region on
2022. Meanwhile, its lowest value at 14.73 percent was received by Bangka Belitung Province in 2020.

**b. Economic Gini Ratio**

The Gini ratio is used for measuring the level of income distribution inequality (Dewi, 2019). This gini ratio is an index that measures the extent to which income is distributed and determines whether it deviates from a uniform distribution. A Gini ratio value close to zero (0) indicates perfect equity. Conversely, a ratio value of one (1) indicates extreme inequality. The data was obtained from the website of the Badan Pusat Statistik (BPS) for 2020-2022. The information above indicates the average of gini ratio of 34 provinces in Indonesia is 0.34590 points. The standard deviation of gini ratio variable of 0.041896 shows the variance or spread of values. The highest gini ratio value of 0.459 was obtained in Yogyakarta Special Region Province on 2022. Meanwhile, its lowest value is 0.247 obtained by Bangka Belitung Province in 2021. The median value is 0.3385 points.

**c. Lecturer Ratio**

The lecturer ratio refers to the average number of lecturers at higher education institutions including universities, institutes, colleges, academies, community colleges, and polytechnics compared to the number of higher education institutions. The data comes from higher education statistics published by PDDikti in 2020-2022. According to the processed results, the average value of the ratio of lecturers per institution from 34 provinces in 2020-2022 in Indonesia is 76.64706. The standard deviation of the variable ratio of lecturers per institution with a value distribution is 20.49663. The highest value of the ratio of lecturers per institution of 156 was obtained in Gorontalo Province in 2022. Meanwhile, the minimum value obtained by Bangka Belitung Province in 2020 was 42.

**d. Ratio of Number of Universities**

The number of university ratio shows the total number a country's higher education institutions. With an average distribution of universities, institutes, colleges, academies, community colleges, and polytechnics. Data obtained from higher education statistics published by PDDikti in 2020-2022. The number of HEs in 2020-2022 shows an average of 2.936647 percent in all 34 provinces in Indonesia. The standard deviation of the variable number of HEs also shows a variation value or distribution distribution of 3.084684 percent. With a center value of 1.701 percent. The highest total percentage value of HEs of 12.6
percent was received in West Java Province in 2021. Meanwhile, the lowest value of 0.25 percent was received in North Kalimantan Province in 2020.

**Regression Model Selection**

Three approaches are using to decide which regression model is best for cross-section or time-series model, i.e. Common Effect Model (CEM), Fixed Effect Model (FEM), or Random Effect Model (REM). The best model selection is done with the chow test, hausman test, and lagrange multiplier test. The panel data regression selection test results are as follows:

1. **Chow Test**

   A Chow test was used to test for the best models among the Common Effect Model (CEM) and Fixed Effect Model (FEM) for panel data regression. If probability value of cross section $F > 0.05$, a CEM approach will be chosen as a model. However, when probability value of cross section $F < 0.05$, a FEM approach should be chosen as the model.

<table>
<thead>
<tr>
<th>Effects Test</th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>505.785866</td>
<td>(33,65)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>566.316286</td>
<td>33</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

   Source: eviews 12 results of data processing

   According to the test results obtained above, one can conclude a cross-section F probability value of 0.0000 is below 0.05 as a significance value. Therefore, with the probability of value $0.00 < 0.05$, the estimation model of the Fixed Effect Model (FEM) model will be the model that is best than the Common Effect Model (CEM).

2. **Hausman Test**

   Test Hausman are used to choose a best model among REM model and FEM model. If probability value of random cross section $> 0.05$ that REM approach will be chosen as a model. However, when the probability of random cross section $<0.05$, a FEM approach will be chosen as the model.
Table 3. The Results of the Hausman Test

<table>
<thead>
<tr>
<th>Effects Test</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>35.249898</td>
<td>3</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: eviews 12 results of data processing

From the results of Hausman test at the top, one can conclude a random cross-section probability values lower than 0.0000 from 0.05 value of significance. Thus, for the probability values at 0.00 <0.05, the estimation model of a Fixed Effect Model (FEM) is a model that is best compared to a Random Effect Model (REM). Thus, according to Chow test and Hausman test, one can conclude that FEM model is the best regression estimation model. Therefore, an Lagrange Multiplier (LM) test is not applied when a Chow test and a Hausman test indicates that the best model is a FEM (Fixed Effect Model) approach.

Classical Assumptions Test

It is necessary to conduct further testing, namely the classical assumption test, from determining the best regression estimation model. The objective is to determine the feasibility of the regression model used in making interpretations. In panel data, classical assumption tests performed are normality, multicolinearity, and heteroscedasticity tests. Meanwhile, there is no autocorrelation test on panel data.

1) Normality Test

The normality test of the regression model tests the normal distribution on the independent and dependent variables. Required residual value using α = 0.05. Therefore, if the probability value on Jerque-Bera > 0.05, that means that data are normally distributed. Meanwhile, if value of Jerque-Bera probability <0.05, then the data are not distributed normally.

![Figure 2 Results of Normality Test](image_url)
In Figure 2 the results of data processing indicate that the probability value of 0.076675 that is greater from the jarque-bera probability coefficient of 0.05. With a probability value of 0.076675 > 0.05, this means a normal distribution of the data in this research.

2) Multicollinearity Test
This test aims to determine if there is a correlation among all the independent variables involved within a regression model. If a coefficient value among independent variables > 0.85, then multicollinearity can be suspected. Conversely, when the coefficient value among independent variables < 0.85, it can be assumed that there is no multicollinearity.

<table>
<thead>
<tr>
<th>Table 4 Results of Multicollinearity Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>X1</td>
</tr>
<tr>
<td>X2</td>
</tr>
<tr>
<td>X3</td>
</tr>
</tbody>
</table>

Source: Eviews 12 Results of Data Processing
The processing results in table 4, show the correlation coefficient between X1 and X2 of 0.330913 < 0.85, X1 and X3 of 0.377575 < 0.85, X2 and X3 of 0.317032 < 0.85. If all coefficient values are below 0.85, it is concluded that there is no multicollinearity.

3) Heteroscedasticity Test
The test for heteroscedasticity was used for determining whether or not there are deviations in classical assumptions. With an alpha value of 5%, if the significance coefficient is <0.05, it can be said that heteroscedasticity occurs. However, if the significance coefficient > 0.05, heteroscedasticity does not occur.

<table>
<thead>
<tr>
<th>Table 5 Results of Heteroscedasticity Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable: RESABS</td>
</tr>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>C</td>
</tr>
<tr>
<td>X1</td>
</tr>
<tr>
<td>X2</td>
</tr>
<tr>
<td>X3</td>
</tr>
</tbody>
</table>

Source: eviews 12 results of data processing
As a result of the data processing, it showed that a probability value for each independent variables (X1, X2, and X3) is greater than 0.05. With a coefficient value> 0.05, one can conclude that there are no heteroscedasticity symptoms.

**Analysis of Data Panel Linear Regression**

The analysis of data panel linear regression used on this research is by using fixed effect model. This selection of a fixed effect model a method of analysis for existing data panels is based on previous testing using a Chow test and a Hausman test. Thus, this fixed effect model is found as the best model to test the data panel in this study. With a regression equation as follows: 

\[ Y = \alpha - \beta_1 X_1 + \beta_2 X_2 - \beta_3 X_3 \]

According to the regression test shows that the regression model formed from the Economic Gini Ratio (X1), Lecturer Ratio (X2), Ratio of the Number of HEs (X3), to the APK PT (Y) is:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>40.81519</td>
<td>4.095842</td>
<td>9.965032</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1</td>
<td>-18.30263</td>
<td>8.976840</td>
<td>-2.038873</td>
<td>0.0455</td>
</tr>
<tr>
<td>X2</td>
<td>0.004871</td>
<td>0.005086</td>
<td>0.957633</td>
<td>0.3418</td>
</tr>
<tr>
<td>X3</td>
<td>-0.187933</td>
<td>0.858132</td>
<td>-0.219003</td>
<td>0.8273</td>
</tr>
</tbody>
</table>

Source: eviews 12 Data Processing Results

\[ Y = 40.81519 - 18.30263 (X1) + 0.004871 (X2) - 0.187933 (X3) \]

Referring to the results regarding the regression equation shown at the top, the following conclusions can be drawn:

a) The constant value obtained is 40.81519 which means if the value of the Gini Ratio variable (X1), the Lecturer Ratio (X2), and the Ratio of the Number of Universities (X3) increases by one unit on average, the GER HE variable (Y) will also increase by 40.81519.

b) The value of the regression coefficient of the Gini Ratio variable (X1) has a negative value (-) of 18.30263, meaning if the variable Gini Ratio (X1) experiences an increase of one (1) percent while other variables remain constant, the GER HE (Y) variable will decrease by 18.30263. If the Gini Ratio variable (X1) decreases by one (1) percent, the GER HE variable (Y) will increase by 18.30263.

c) The value of the regression coefficient for the Lecturer Ratio variable (X2) indicated a positive value (+) of 0.004871, meaning if the Lecturer Ratio variable (X2) increased to one (1) percent while other variables remain constant, the GER HE variable (Y) will also increase by 0.004871. Meanwhile, if the
Lecturer Ratio variable (X2) decreases by one (1) percent, the GER HE variable (Y) will also decrease by 0.004871.

d) The value of the regression coefficient of the variable Ratio of the Number of Universities (X3) is negative (-) amounting to 0.187933, it means that if the variable Ratio of Number of Universities (X3) increases by one (1) percent while other variables remain constant, the variable GER HE (Y) will decrease by 0.187933. If the variable Ratio of the number of universities (X3) decreases by one (1) percent, the variable GER HE (Y) will increase by 0.187933.

**Hypothesis Testing**

The last step of the data panel analysis regression technique was to conduct a hypothesis test. The tests carried out are the t-test and the determination coefficient test.

1) T-test

The partial test can be applied to calculate level significance partially or separately for the independent variables that affect to the dependent variable. Its significance value is 0.05 and df (n-k) were n is the total sample and k is the variable total. Therefore, it is obtained a df value of 98 with a t table of 1.984467455.

a. Gini Ratio to GER HE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>40.81519</td>
<td>4.095842</td>
<td>9.965032</td>
<td>0.0000</td>
</tr>
<tr>
<td>X1</td>
<td>-18.30263</td>
<td>8.976840</td>
<td>-2.038873</td>
<td>0.0455</td>
</tr>
</tbody>
</table>

Source: Eviews 12 Results of Data Processing

From the t-test with eviews, a t-test of -2.038873 was lower compared to t-table at 1.984467. In this case, a value of probability of 0.0455 is more than 0.05. Thus, with t-test< t-table on the probability value of 0.0455< 0.05. Thus, this conclusion can be drawn that the gini ratio significantly affects the GER of HEs.

b. Ratio of Lecturers per Institution to GER HE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>40.81519</td>
<td>4.095842</td>
<td>9.965032</td>
<td>0.0000</td>
</tr>
<tr>
<td>X2</td>
<td>0.004871</td>
<td>0.005086</td>
<td>0.957633</td>
<td>0.3418</td>
</tr>
</tbody>
</table>

Source: Eviews 12 Results of Data Processing
From table 7, the $t$-test is equal to 0.957633 which is lower compared to $t$-table at 1.984467. In this case, a probability values are 0.3418 is larger than 0.05. If, with $t$-test < $t$-table and the value of probability 0.3418 > 0.05. Thus, it could be summarized that lecturer ratio per university does not have the significantly influence to the GER of HEs.

c. Ratio of Number of HE to GER HE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>40.81519</td>
<td>4.095842</td>
<td>9.965032</td>
<td>0.0000</td>
</tr>
<tr>
<td>X3</td>
<td>-0.187933</td>
<td>0.858132</td>
<td>-0.219003</td>
<td>0.8273</td>
</tr>
</tbody>
</table>

Source: eviews 12 results of data processing

From the data processing results above, a $t$-count of -0.219003 is obtained which is smaller than the $t$-table of 1.984467. In this case, the probability value is 0.8273 greater than 0.05. So, with $t$-count > $t$-table and probability value 0.8273 > 0.05. It can be concluded that the percentage of the number of HEs has not a significant effect on the GER of HEs.

2) Coefficient of Determination ($R^2$)

A coefficient of determination refers to a measure to calculate a regression line's ability to explain the data. If that coefficient is close to one, then the regression model can explain the data correctly. If the coefficient is close to zero, then the regression model cannot explain the data well.

| R-squared | 0.997398 |
| Adjusted R-squared | 0.995956 |
| S.E. of regression | 0.682430 |
| Sum squared resid | 30.27117 |
| Log likelihood | -82.77809 |
| F-statistic | 691.9830 |
| Prob(F-statistic) | 0.000000 |

Source: eviews 12 results of data processing

Based on these data, shows the value of adjusted r-squared is equal to 0.995956 or 99.5956 percent. With an adjusted value of
r-squared that is almost one, this indicates a regression model that can explain the data well. The coefficient value can show an independent variable consists of an economic ratio, a ratio of lecturers per institution, and the number of universities under the Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi can explain the GER HEs variable by 99.5956% with the remaining 0.4044% explained with other variables that are not included in this research.

DISCUSSION

a. Effect of Gini Ratio on GER HE

From the testing results with eviews on table 7, it shows that t-test results which is at -2.038873 is smaller than the t-table of 1.984467. Also, the value of probability is 0.0455 which is higher compared to 0.05. So, with a t-test < t-table with the value of the probability at 0.0599 < 0.05. This means that it can be concluded that gini ratio significantly affects the GER of HEs.

This research is in accordance or aligned to the results of Rizkia Ramadanti (2021) which shows the results that poverty has a negative and significant direct effect on the high school APK in Indonesia of -1.897758. This is also in line with Sumarno's research, SE (2019) entitled Angka Partisipasi Sekolah Kasar Sma Rendah Dampak Dari Tingkat Kemiskinan Dan Upaya Mengatasinya di Provinsi Kepulauan Bangka Belitung with the results of the regression test showing that the poverty rate has a significant negative effect of 55.33%.

The higher the level of education, the more expensive it is, which makes it difficult for people to access higher education. Many people prefer to work rather than continue their education to a higher level. With the results of working, people will prioritize making a living rather than continuing higher education. In addition, it is also mentioned that people with low education tend not to invest enough in their education and that of their children (Ramadanti, 2021). Such people are still unable to think that higher education can also help increase their income in addition to gaining knowledge. This proves that the average income inequality value of 0.30 or moderate inequality can affect the GER HE.

b. Effect of Lecturer Ratio on GER PT

From the processing of data panels in table 8 shows that t-count is at 0.957633 which is smaller than the t-table of 1.984467. Then the value of probability with the value at 0.3418 is greater from 0.05. So, with t-count < t-table and the value of probability 0.3418 > 0.05. Therefore, it could be conclude a ratio of lecturers per institution does not significantly affect to GER higher education.
These results also align on Anggita Trideva Yanti, Sobrotul Imtikhanah, Khoirul Fatah (2023) with the title Pengaruh Belanja Pendidikan, Jumlah Guru, dan Tingkat Kemiskinan Terhadap Angka Partisipasi Sekolah, with the result that the number of teachers does not have a significant effect on APS. Then, research by Utriweni Mukhaiyar, Ferdy Rontos, Kurnia Handoko, Salma Kardiayanti with the title Analisis Faktor - Faktor yang Memengaruhi Angka Partisipasi Kasar SMA/Sederajat di Indonesia, which states of no linear correlation of student and teacher ratios with APS SMA / equivalent in Indonesia.

Based on the observations of Yanti et al. (2023), the total number of teachers is not significantly influential to the education participation rate. It could be due to any increase in the teacher ratio is not followed by a decrease in the school enrollment rate due to the uneven distribution of the teacher ratio. This unevenness can be reflected in provinces that have a high teacher ratio but the GER tends to be small, or vice versa. For example, West Java Province has a lecturer ratio of 117, but its GER is only 25 percent. As according to Al Qurtuby (2023) that the duties of lecturers are not only teaching in the classroom but also conducting research, writing works, and the burden of administrative activities regarding academic and non-academic activities that make lecturers exhausted and feel burdened. In the end, it can cause the teaching and learning process to be less qualified.

c. Effect of HE Number Ratio on GER HE

From the data processing results in table 9, the results show that the t-count is -0.219003 which is smaller than the small t-table of 1.984467. Then the probability value is 0.8273 which is greater than 0.05. So, with t-count < t-table and probability value 0.8273 > 0.05. So, it can be concluded that the percentage of HEnumbers does not have a significant influence on GER HE.

The results of this research are in line with the results of research by Siti Habibah, Yudha Perdana Putra, Yulindo Mandala Putra (2019) which explains that the number of universities does not have a significant effect on GER HE of -0.247363. Then, research by Niken Ajeng Lestari (2014) explains that the number of schools has a significant effect on GER and APS at all levels. Then, research by Hesti Pudyastuti, Euis Mulyaningsh (2021) also explains that the availability of educational facilities for junior high school GER does not have a significant relationship.

According to Lestari (2014), the number of universities in each province is considered to be quite large and capable of accommodating students who are continuing their education to
tertiary level. What the government is also doing is by merging or merging universities that have a small number of students and study programs.

CONCLUSIONS
This research aims to produce reliable and valid data regarding the test results of the influence of the economic Gini ratio, the ratio of lecturers per institution, and the percentage of the number of HEs to the GER of HEs in Indonesia in 2020 - 2022. Based on the results of the analysis that has been carried out, this research produces several conclusions are:

1. The economic Gini ratio does not have a negative and significant influence on HE's GER in Indonesia in 2020 - 2022. This is shown by the t-statistic value of -2.038873 and a probability value of 0.0599. This shows that if there is an increase in the Gini ratio by one percent with the assumption that other variables are constant, there will be a decrease in HE's GER by 2.03 percent.

2. The lecturer ratio does not have a significant positive influence on the GER of HEs in Indonesia in 2020 - 2022. With the resulting t-statistic value of 0.957633 and a probability value of 0.3418. If there is an increase or decrease in the lecturer ratio it will not have any effect on the GER of HE in Indonesia.

3. The ratio of the number of HEs does not have a significant influence on the GER of HEs in Indonesia in 2020 - 2022. With a t-statistic value of -0.219003 with a probability value of 0.8273. So, if there is an increase or decrease in the ratio of the number of HEs it will not have any effect on the GER of HEs in Indonesia.

ADVANCED RESEARCH
This research has several limitations which can still be investigated further in subsequent studies. The recommendations put forward are:

1. Future research can use data from the latest number of provinces, such as in 2024 there will be 38 provinces. Meanwhile, this research still uses a reference of 34 provinces in 2020.

2. Future research can also combine data from universities under the Kementerian Agama, because this research only uses data from the Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.

3. Pangkalan Data Pendidikan Tinggi (PD Dikti) should be quicker to upload Statistik Pendidikan Tinggi, because at the time of research in February 2024, the available publications were only until 2022.
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