DETERMINANTS OF AMOUNT HOME OWNERSHIP LOANS IN SOUTH SULAWESI

Nurhafika¹
Rifki Khoirudin²*

Ekonomi Pembangunan, Ekonomi dan Bisnis
Universitas Ahmad Dahlan
* rifki.khoirudin@ep.uad.ac.id

ABSTRACT
This research aims to determine the effect of economic growth, loan interest rates, loan to deposit ratios, loan to value, and inflation on the number of mortgage loans in South Sulawesi, this type of research is secondary obtained from the Centra Statistics Agency, Bank Indonesia, and the Financial Services Authority. The data analysis technique used is multiple linear regression analysis, the results of the study show that loan to deposit ratio an loan to value have a positive and significant effect on housing loans in South Sulawesi, loan interest rates have a negative and significant effect on housing loans in South Sulawesi, while economic growth and inflation do not affect housing loans in South Sulawesi, it is hoped that when setting loan interest rates more consider the surrounding economic conditions and are expected to continue to observe the loan to deposit ratio so that funds can be channeled optimally, and it is hoped that the loan to value policy will continue to have the desire to apply for home ownership loans.

INTRODUCTION
The building used as a place to live and to support the family is the definition of a house according to the Republic of Indonesia Law. Number 4 of 1991 concerning housing. Housing is one of the most important needs, in addition to the need for food and clothing in the life of the entire community of a country so that it must be fulfilled (Budi, 2009). After the development of the times, apart from the house being defined as a place to live, the owner of the house and land are considered as items that are invested for a long time, usually for the middle class to the upper class. In most countries, housing is generally the largest investment in households (Kusuma, 2018).

Along with the times and the development of the population, which is related to the growing need for housing (Budi, 2009), making a house and owning a house is currently quite difficult for the community to realize. Currently the land supply is decreasing even though the demand for houses is still very high so that land costs are expensive (Djati and Kamal, 2017), which encourages people to spend large enough funds to own a house. With that, buying a house by way of credit in the community is made the right choice (Utami, 2013).

Seeing this situation, the government has formed a policy so that lower-middle income people can own a house by looking at their purchasing power by providing housing loans (KPR)
(Sandria, Adnan and Yuliana, 2016) which includes consumption credit (Gantheri and Syafri, 2018) so that people who If you want to own a house, you can buy it on credit, where the credit comes from banks to non-bank institutions as credit providers.

Economic developments are expected to affect the circulation of housing loans if government assistance grows. People in general will think about their hidden needs, one of which is owning a house (Djati and Kamal, 2017). High economic development determines salaries and measures of people's purchasing power which leads to expanded public use, including the satisfaction of lodging needs (Khoirudin, 2017).

What people must pay attention to before applying for credit is to look at the loan interest rate first. High interest rates reduce people's purchasing power, so banks regulate mortgages to be more careful in extending credit because it can harm banks (Djati and Kamal, 2017).

In relation to the 2012 risk mitigation target, BI as the central bank has implemented a fully LTV strategy aimed at enabling finance work, while still focusing on fair standards and buyer insurance. In 2012 BI formulated a 'value lending' policy.

Galih (2011) states that the loan to deposit ratio is identified with loans because this policy can fulfill the bank's temporary commitment, replace all contributors who take cash when they need it, and fulfill credit requests that have been submitted so that the LDR is used as a benchmark to see that banks are anything can limit it (Amelia and Murtiasih, 2014). While inflation will also affect the cost of housing, seeing the high costs that are not coordinated with salary increases, the community needs more assets than before to overcome these community problems.

Assuming a house is a very important basic need, consumers who want to own a house with cash and credit can adjust it according to their respective abilities by looking at their income level, and basically a person owns a house is influenced by the consumption and level of investment motivation of each community. For the first time, BI formulated the LTV policy starting in 2012 so that researchers wanted to examine the development of housing loans when the policy was implemented and to find out the factors that influence housing loans in the province of South Sulawesi.

THEORETICAL BASIS AND HYPOTHESIS

Housing loans include consumer loans for the purchase of landed houses, flats, and apartments but do not include loans for office buildings and retail space with housing guaranteed by the bank (Bank Indonesia). Mortgage is a credit allocated by the bank to customers who will buy or repair a house.

Economic growth is an action where the economic state of labor and products is created by increasing society (Sukirno, 2012). Economic growth is the process of changing monetary conditions that occur for the better in connected countries towards a more valuable value condition for an indefinite period of time. Economic growth is an indicator of achieving the progress of an economy (Ma’ruf and Wihastuti, 2008). (Afriel, 2015) Economic growth is an increase in the economy that causes labor and products to be delivered to the public.

The loan interest rate is the payment obtained by the bank from the borrowed community. The cycle will occur if the client agrees and can pay the income that has been provided by the bank (Sandria, Adnan and Yuliana, 2016). The loan interest rate is the normal amount paid by the customer for the assumption of recognition from the bank which is applied consistently in percent (Khoirudin, 2017).

The loan to deposit ratio describes the relationship between credit fulfillment and third party assets or deposits owned by the bank, as stated by Dianny (2019). This ratio will reveal whether a bank can use general assets such as current accounts, savings accounts, time deposits, and other quick commitments as loans. LDR is a ratio that measures a bank's ability to replenish reserves issued by depositors using credit provided to the general public as a source that can pay for immediate development needs, according to the generally accepted understanding of experts.

The ratio between the value of credit or support a bank can provide and the value of collateral as property at the time of providing credit or funding is known as property loan to value,
according to the latest cost evaluation. With the value of collateral at the time of borrowing, the LTV strategy limits the amount of credit that can be disbursed by banks (Budiyanti, 2015). While inflation is a term used to describe an overall and sustained increase in goods and services over a certain period of time. An increase in the price of some commodities alone does not constitute inflation unless it results in a significant increase in the price of other goods.

Housing growth will be more complicated, the tendency to buy homes of higher quality and quantity will increase, and there will be no major economic downturn or inflation, if individual wages rise. As a result, there will be a greater demand for housing loans as the economy expands. As a result, housing loans and economic growth are positively related.

According to Siravati (2018) and Khoirudin (2017), mortgages are positively and significantly influenced by economic growth.

Ho: There is no effect of economic growth on housing loans.
Ha: There is an effect of economic growth on housing loans

Changes in BI interest rates have an impact on deposit interest rates and bank lending rates on the interest rate channel (Zubair, 2017). The cost or price of money available for credit is the loan interest rate, demand for credit is inversely related to the interest rate on credit. In other words, the lower the loan interest rate, the higher the demand for credit, and conversely, the higher the loan interest rate, the higher the costs faced by customers.

Research Sandria et al. (2016), Siravati (2018), Ganthari and Syafri (2018), and Khoirudin (2017) find that the loan interest rate variable has a negative impact on housing loans.

Ho: There is no effect of loan interest rates on home ownership loans
Ha: There is an effect of loan interest rates on home ownership loans

This ratio shows the ability of banks to use loans as working capital to pay withdrawals from the general public (Mulyono, 1995). Demand for housing loans will be influenced by higher lending to banks compared to public deposits in banks. The community will then demand more credit, in this example from KPR. As a result, there is a positive correlation between housing loans and the ratio of loans to mortgages. According to Siravati (2018), the loan to deposit ratio variable has a positive influence on housing loans.

Ho: There is no effect of the loan to deposit ratio on housing loans
Ha: There is an effect of the loan to deposit ratio on housing loans

Since a smaller down payment is required, potential buyers are more likely to buy a home if the LTV ratio is higher. The down payment is determined by the bank's ability to provide a credit score and the value of the building at the time of loan repayment. With the adoption of Bank Indonesia's policy, mortgage loans are used as a consideration for applying for mortgages at commercial banks, which is another aspect of regulating the growth of real estate loans. This will affect the number of mortgage loans.

According to research by Wenten and Nadi (2021) shows that the value of the LTV variable has a positive influence on mortgage offers.

Ho: There is no effect of loan to value on home ownership loans
Ha: There is an effect of loan to value on home ownership loans

Theoretically, since it is well recognized that inflation means rising prices, inflation has an impact on the world. As intermediaries, banks are very vulnerable to inflation risk posed by their liquidity. Inflation, as defined by Sukirno (2004) in Kurniawan (2017), is an increase in prices that are common in an economy from one period to the next.

This occurs as a result of the fact that wages do not rise as fast as prices, which causes inflation to lower the actual wages of those on fixed incomes. Inflation will indirectly have an impact on home loans based on this causal relationship (Kurniawan, 2017). According to Siravati (2018), the inflation factor has a detrimental impact on housing loans.

Ho: There is no effect of inflation on housing loans
Ha: There is an effect of inflation on housing loans
METHOD
This study uses secondary data published on websites and in publications that have been previously collected and published by an institution, in this study obtained from the Central Statistics Agency (BPS), Bank Indonesia (BI), and the Financial Services Authority (OJK). This study uses time series data, which is data that is arranged chronologically from time to time for a certain variable, in this study the researchers chose quarterly data.

The data analysis technique in this study is multiple linear regression analysis, which is an analytical technique used to see the impact of economic growth, loan interest rates, loan to deposit ratios, loan to value, and inflation on housing loans using inferential analysis. This analysis includes classical assumption test (multicollinearity test, autocorrelation test, heteroscedasticity test, normality test) and statistical test (F test, determinant coefficient test, a priori test, t test). The following is a multiple linear regression analysis by Khoirudin (2017) transforming the model into a linear form using the natural logarithm (ln) so as to produce the following equation:

\[ \ln Y = \ln \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \mu \]

Where:
- \( Y \) = mortgage loan
- \( 0 \) = Constant
- \( \beta_1, \beta_2, \beta_3, \beta_4, \beta_5 \) = Parameters to be estimated
- \( X_1 \) = Economic Growth
- \( X_2 \) = Credit Interest Rate
- \( X_3 \) = Loan to Deposit Ratio
- \( X_4 \) = Loan to Value
- \( X_5 \) = Inflation
- \( \mu \) = Error term

RESULTS AND DISCUSSION
Multicollinearity refers to a condition in which the independent variables in the model have a strong relationship or correlation (Sholihin and Anggraini, 2021). Multicollinearity according to Siravati (2018) research, is the existence of a perfect and unambiguous linear relationship between any or all of the variables that explain the regression model. Because there will be a very strong correlation between independent variables, a multicollinearity test is needed to determine whether or not there are independent variables similar to other independent variables in one model.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient Variance</th>
<th>Uncentered VIF</th>
<th>Centered VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>7625.580</td>
<td>922.1497</td>
<td>NA</td>
</tr>
<tr>
<td>PE_X1</td>
<td>1.525542</td>
<td>9.097259</td>
<td>1.589229</td>
</tr>
<tr>
<td>R_X2</td>
<td>17.88064</td>
<td>309.7269</td>
<td>1.851848</td>
</tr>
<tr>
<td>LDR_X3</td>
<td>0.361141</td>
<td>338.5111</td>
<td>1.041635</td>
</tr>
<tr>
<td>LTV_X4</td>
<td>0.274321</td>
<td>220.3947</td>
<td>2.745086</td>
</tr>
<tr>
<td>INF_X5</td>
<td>5.614293</td>
<td>14.18107</td>
<td>2.725110</td>
</tr>
</tbody>
</table>

Source: Data processed, 2022

Based on the results of the multicollinearity test in table 1, the variable of economic growth is 1.589229, credit interest rates are 1.851848, loan to deposit ratio is 1.041635, loan to value is 2.745086 and inflation is 2.725110. This means that the value of Centered VIF is less than 10. So it can be said that the multicollinearity problem with the research model does not exist.

Because observations on time series data follow natural inter-time affairs sequentially containing intercorrelation, then the autocorrelation test is only needed for regression analysis with...
power covering more than one period (Sholihin and Anggraini, 2021) and (Khoiruddin, 2017). A situation known as autocorrelation occurs when confounding variables are connected to each other (Siravati, 2018). Knowing whether confounding variables exist or not in a certain period with the previous period is the purpose of testing autocorrelation in a model (Khoiruddin, 2017). The table of autocorrelation test results below shows the results of autocorrelation, which is used to determine whether or not there is an autocorrelation problem.

Table 2. Autocorrelation Test Results

| Breusch-Godfrey Serial Correlation LM Test: Null hypothesis: No serial correlation at up to 2 lags |
|---|---|---|
| F-statistic | 1.501217 | Prob. F(2,32) | 0.2381 |
| Obs*R-squared | 3.431114 | Prob. Chi-Square(2) | 0.1799 |

Source: Data processed, 2022

There is autocorrelation if the Chi-Square Prob value is less than 0.05. Given that the autocorrelation test results are 0.1799, which is greater than 0.05, it can be said that the regression model does not have an autocorrelation problem.

Heteroscedasticity was analyzed to see that the model predicting the residuals of one observation was different from other observations (Khoiruddin, 2017). Heteroscedasticity occurs if the obs*R-Squared prob chi-square is less than 5%. On the other hand, there is no heteroscedasticity if the obs*R-Squared prob chi-square value is greater than 5%.

Table 3. Heteroscedasticity Test Results

| Heteroskedasticity Test: Glejser Null hypothesis: Homoskedasticity |
|---|---|---|
| F-statistic | 1.648728 | Prob. F(5,34) | 0.1738 |
| Obs*R-squared | 7.805803 | Prob. Chi-Square (14) | 0.1673 |
| Scaled explained SS | 8.432200 | Prob. Chi-Square (14) | 0.1340 |

Source: Data processed, 2022

From the above test, it can be seen that the obs*R-Squared prob chi-square is higher than 5%, namely 0.1673 > 0.05, so the conclusion is that there is no heteroscedasticity.

Normality test was conducted to determine whether the data analyzed in this study was normal or not. The data is not normally distributed if the probability of giving a result is below 5%. The data is considered normally distributed if the probability value of the normality test is greater than 5%.

Table 4. Normality Test Results

| Jarque-Bera | 0.254500 |
| Probability | 0.880513 |

Source: Data processed, 2022

The jarque-bera probability value on the findings of the normality test above is greater than 0.05, indicating that the data is normally distributed. To determine whether the independent factors collectively and simultaneously affect the dependent variable significantly, a statistical F test was performed. When the prob F statistic value
is less than 0.05, the effect is substantial and simultaneous. On the other hand, if the F statistic is greater than 0.05, it does not affect the dependent variable simultaneously.

Table 5. F Test Results Statistics

<table>
<thead>
<tr>
<th>F-statistic</th>
<th>123.5690</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

Source: Data processed, 2022

The value of the prob F statistic in table 5 shows a value of 0.000000 which is smaller than 0.05, it is clear that the independent factors have a significant effect simultaneously on the dependent variable.

To find out how much variation in the dependent variable can be explained by the independent variable, the determinant coefficient test is used.

Table 6. Determinant Coefficient Test Results

<table>
<thead>
<tr>
<th>R-squared</th>
<th>0.947840</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R-squared</td>
<td>0.940170</td>
</tr>
</tbody>
</table>

Source: Data processed, 2022

Based on the results in table 6, it is 0.947840, consequently, 94.8% of the variance in the independent variable can be explained by variations in the dependent variable, and the remaining 5.2% is explained by factors not included in the model.

The a priori test compares whether the signs between the variables and the hypothesis match. The preparation of the hypothesis is based on considering the previous research concerned. The estimated model can be said to be successful if the results support the hypothesis.

Table 7. Results of Apriori Test Analysis

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Hypothesis</th>
<th>Analysis Results</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE_X1</td>
<td>+</td>
<td>-</td>
<td>It is not in accordance with</td>
</tr>
<tr>
<td>R_X2</td>
<td>-</td>
<td>-</td>
<td>In accordance</td>
</tr>
<tr>
<td>LDR_X3</td>
<td>+</td>
<td>+</td>
<td>In accordance</td>
</tr>
<tr>
<td>LTV_X4</td>
<td>+</td>
<td>+</td>
<td>In accordance</td>
</tr>
<tr>
<td>INF_X5</td>
<td>-</td>
<td>-</td>
<td>In accordance</td>
</tr>
</tbody>
</table>

Source: Data processed, 2022

The test results in table 7 above show the independent variables of credit interest rates, LDR, LTV and inflation show appropriate results because they show a positive sign. Meanwhile, the economic growth variable shows negative results which means that it is not in accordance with the hypothesis.

To ensure that the independent variable affects the dependent variable, the t-statistic test is used. Ho is accepted and Ha is rejected if the probability value of t is greater than the significance level of 0.05. however, Ho is rejected while Ha is accepted if the probability value of t is less than 0.05. The results of the statistical t test found by testing with the Eviews 12 program are as follows:
Table 8. Statistical t-test results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE_X1</td>
<td>-3.432904</td>
<td>1.235128</td>
<td>-2.779390</td>
<td>0.0088</td>
<td>Not significant</td>
</tr>
<tr>
<td>R_X2</td>
<td>-27.97877</td>
<td>4.228550</td>
<td>-6.616633</td>
<td>0.0000</td>
<td>Significant</td>
</tr>
<tr>
<td>LDR_X3</td>
<td>4.053086</td>
<td>0.600950</td>
<td>6.744467</td>
<td>0.0000</td>
<td>Significant</td>
</tr>
<tr>
<td>LTV_X4</td>
<td>4.894198</td>
<td>0.523757</td>
<td>9.344409</td>
<td>0.0000</td>
<td>Significant</td>
</tr>
<tr>
<td>INF_X5</td>
<td>-1.063749</td>
<td>2.369450</td>
<td>-0.448943</td>
<td>0.6563</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

Source: Data processed, 2022

Table 9. Multiple Linear Regression Results

<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>-179.4006</td>
<td>87.32456</td>
<td>-2.054412</td>
<td>0.0477</td>
</tr>
<tr>
<td>PE_X1</td>
<td>-3.432904</td>
<td>1.235128</td>
<td>-2.779390</td>
<td>0.0088</td>
</tr>
<tr>
<td>R_X2</td>
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<td>0.0000</td>
</tr>
<tr>
<td>INF_X5</td>
<td>-1.063749</td>
<td>2.369450</td>
<td>-0.448943</td>
<td>0.6563</td>
</tr>
</tbody>
</table>

R-squared: 0.947840
Adjusted R-squared: 0.940170
Mean dependent var: 213.1905
S.D. dependent var: 74.35420
S.E. of regression: 18.18719
Akaike info criterion: 8.776794
Schwarz criterion: 9.030126
Log likelihood: -169.5359
Hannan-Quinn criter.: 8.868390
F-statistic: 123.5690
Durbin-Watson stat: 1.486391
Prob(F-statistic): 0.000000

Source: Data processed, 2022

Based on the results of linear regression above, the regression equation in this study is as follows:

\[ \ln Y = \ln \beta_0 + \beta_1 \ln X_1 + \beta_2 \ln X_2 + \beta_3 \ln X_3 + \beta_4 \ln X_4 + \beta_5 \ln X_5 + \mu \]

\[ \ln Y = -179.4006 + (-3.432905)X_1 + (-27.97877)X_2 + 4.053086X_3 + 4.894198X_4 + (-1.063749)X_5 + \mu \]

\[ \ln Y = -179.4006 - 3.432905X_1 - 27.97877X_2 + 4.053086X_3 + 4.894198X_4 - 1.063749X_5 + \mu \]

The results of the analysis show that the amount of KPR is not influenced by varying economic growth. The research hypothesis which states that economic growth has a good and large impact on mortgages is contrary to this hypothesis. The fact that the majority of customers are from the lower middle class may have prevented the impact of economic growth on the demand for loans. This is in accordance with the opinion of Maha and Yuliarmi (2011) that GRDP does not have a significant impact on mortgage distribution.

The results of the analysis show that the loan interest rate variable has an effect on the number of mortgages. This finding supports the research hypothesis, which states that loan interest rates have a significant and negative effect on mortgages. This is in line with the assertion of quoted in Khoirudin (2017), that credit demand decreases along with the increase in loan interest rates, the
higher the costs that must be borne by the customer, and conversely along with the decrease in loan interest rates reflecting lower costs. to be borne by the customer. Credit will be more sought after because the cost is cheaper.

The results of the analysis show that the loan to deposit ratio has an effect on the number of mortgages. This supports the research hypothesis that the loan-to-deposit ratio has a favorable and significant impact on housing loans. This is in accordance with previous research by Siravati (2018) and supports the supply theory, which states that producers provide more products at high prices. On the other hand, producers will produce less if prices are too low.

Based on the results of the analysis, LTV has an effect on KPR. This supports the research hypothesis that loan to value has a large and positive effect on housing loans. This result is in accordance with previous research by Wenten and Nadi (2021), who found that when the loan-to-value ratio increases, the value of residential housing also increases, and vice versa, if the loan value is low, the value of housing loans also decreases. Since only a small down payment is required, consumers have a greater chance of buying a home.

Based on the results of the analysis, inflation is not significantly related to the number of mortgages. The research hypothesis which states that there is a fairly large and detrimental effect on housing loans does not support this. The sign of the coefficient is negative, in line with the research hypothesis. This is due to the fact that when inflation increases, people will consider their actions before accepting credit because they are aware of the cost of interest. Conversely, if inflation falls, it is possible that consumers will like credit because the interest paid can still be paid. This finding is in line with previous research by Dewi (2016) which found that mortgages did not change due to changes in inflation, so inflation had no impact.

CONCLUSION

From the results of data processing that has been carried out, the following conclusions are obtained:

The number of mortgages is not influenced by the variable of economic growth. This can be due to the fact that most of the customers are from the lower middle class so that economic growth does not affect the demand for credit.

Home ownership loans are affected by fluctuations in loan interest rates. This implies that the demand for loans decreases as interest rates on loans rise, as is the case involved. Conversely, the demand for credit will increase because the cost-effectiveness of borrowing is reflected in lower interest rates.

The number of housing loans is influenced by the loan to deposit ratio. This means that the more goods available, the higher the price of the goods. On the other hand, the quantity sold decreases as the price of the goods decreases.

Loan to value has an effect on mortgages. In other words, mortgage loans will grow if LTV increases. On the other hand, a low loan value will result in a low housing loan.

Inflation has no effect on the number of mortgage loans (KPR). It is suspected that people will think before taking credit when inflation rises given the amount of interest paid. On the other hand, if inflation falls, people are more likely to take credit because the interest can still be borne.

After paying attention to some of the results of the above data processing, the researchers can provide suggestions, among others, in order to encourage people to apply for home ownership loans, it is hoped that when determining the loan interest rate, it is determined by taking into account the economic conditions of the surrounding environment.

It is expected to continue to observe the loan to deposit ratio to see that the collected funds have been channeled to the maximum so that it will increase lending and it is hoped that the loan to value distribution through Bank Indonesia Regulation (PBI) No. 23/2/PBI/2021 will be maintained considering the easing of loan to value being the highest 100% for all types of property, it is hoped that the community will still have the desire to apply for a home ownership loan (KPR).
REFERENCES
Galih, T. adhitya (2011) ‘Pengaruh dana pihak ketiga , capital adequacy ratio , non performing loan , return on assets , dan loan to deposit ratio terhadap jumlah penyaluran’.