

The Effect of FTV Policy and Economic Factors on Home Ownership Financing in Indonesian Sharia Banking

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Abstract : This study aims to analyze the effect of FTV Policy, Financing Deposit Ratio (FDR), Non-Performing Financing (NPF), Gross Domestic Product (GDP) and Inflation on home ownership financing in Indonesian Islamic commercial banks for the period 2014-2021. The research method used is the Vector Error Correction Model (VECM). The results of this study indicate that the FTV Policy variable, Financing Deposit Ratio (FDR), Non-Performing Financing (NPF), Gross Domestic Product (GDP) and Inflation on home ownership financing at Indonesian Islamic commercial banks have no effect in the short-term. Meanwhile, in the long term, the variables FTV Policy, Non-Performing Financing (NPF), Gross Domestic Product (GDP) and Inflation significantly negatively affect housing ownership financing at Indonesian Islamic commercial banks. And the Financing Deposit Ratio (FDR) variable has an insignificant negative effect on home ownership financing at Indonesian Islamic commercial banks.

Keywords : **Home Ownership Financing; FTV Policy; Microeconomic; Macroeconomic; VECM**

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1. INTRODUCTION

Indonesia is a developing country with the fourth largest population density after the United States, India, and China, with a population of 276.4 million in 2021 (World Bank, 2022). According to the Central Bureau of Statistics, compared to last year, Indonesia's population has increased by around three million people, and the average growth of Indonesia's population has reached 1.22 per cent per year (BPS, 2022). The increase in population will impact the increasing living needs of the Indonesian population, including the need for housing (Dengah et al., 2014). This explains that housing needs are one of the most important factors in the framework of community welfare. However, the proportion of house ownership aligns differently with the increasing population. In 2016 the proportion of home ownership only grew by 0.02%. In 2017 it decreased by -2.97% and began to grow again in 2018 and 2019 by 0.41% and 0.05. But again, it decreased in 2020 by 0.06%.

One of the causes is the disparity between the increase in population which is not matched by the proportion of house owners due to the COVID-19 pandemic, which has had an impact on various aspects, from the health, social, educational, service, and economic perspectives. The government has handled this condition with

various efforts, including imposing Large-Scale Social Restrictions, which have an impact on reducing economic mobility (Aisyah & Maharani, 2020). These restrictions forced the company to limit its production so that the income received decreased and resulted in the termination of employment so that the company could survive in this situation. This underlies many unemployed and rising prices of goods resulting in decreased purchasing power due to an imbalance between limited income and rising prices. Thus, people tend to hold back their money and reduce consumption and be more careful in using their money. With the decline in people's purchasing power followed by income and on the other hand, house prices are increasingly soaring, causing limitations for the community to meet housing needs (Dewi, 2016).

To recover the economy due to the COVID-19 pandemic, Bank Indonesia launched a policy as a follow-up to the policy synergy of the Financial System Stability Committee, one of which is by loosening the Loan to Value (LTV) or Financing to Value (FTV) ratio for credit or property financing to a maximum of 100%. FTV serves as a benchmark for providing homeownership financing that banks will provide to their customers so that FTV can influence the amount of homeownership financing disbursement. Home financing provided to the community will make it easier for the community to meet their housing needs. In addition, housing finance will have a multiplier effect on other sectors, so many sectors will be moved by housing construction, boosting economic growth (Ullyana, et al., 2016).

Over-increasing home financing will have a negative effect on the economy. This situation will disrupt the banking financial system's stability, leading to economic stability through several factors. First, in terms of microeconomic factors that will be disrupted is the aspect of liquidity which can be described by the Financing Deposit Ratio (FDR). Excess financing distribution will reduce bank liquidity, which will disrupt the economy. However, with the amount of financing being channeled, the FDR value will increase, reflecting an increasing market share that will bring profits to the bank (Suryani, 2012). In addition, an increase in excess financing will trigger a high risk of financing, as described by Net Performing Financing (NPF). The NPF value is an indicator to describe the firm value of a bank. A high NPF will make the bank suffer losses because the bank's income will decrease (Anggreini & Oktaviana, 2022).

Conversely, the financial sector is very sensitive to macroeconomic developments and government policies. This underlies the second factor that influences home ownership financing, namely from a macroeconomic perspective which includes the Gross Domestic Product (GDP) and inflation (Syaputra & Tohirin, 2019). A conducive GDP level followed by stable inflation will stimulate the economy so that banking activities will run properly, including the distribution of financing. However, the economy is not conducive and is followed by an unstable inflation rate. In that case, it will trigger an economic downturn, hinder the disbursement of financing, and lead to a decline in banking performance (Asngari, 2013). Improved economic conditions reflect an increase in people's income. They will trigger people's purchasing power so that economic activities run well and ultimately increase the distribution of financing to support capital for production activities. Even so, a high inflation rate will have an impact on economic uncertainty and cause excess purchasing power so that prices will increase, which will ultimately reduce the value of the economy and make people unable to pay for bank financing so that, in the end, banks will limit the distribution of financing (Perdana et al., 2020).

Table 1 Value of FTV Policy Variables, GDP Growth, Inflation, FDR and NPF in 2015-2021

Year	FTV Policy (In Percent)	GDP Growth (In percent)	Inflation (In percent)	Financing Growth (In percent)	FDR (In percent)	NPF (In percent)
2015	70	4,65	3,35	6,08	88,03	4,84
2016	80	4,79	3,02	12,49	85,99	4,42
2017	90	4,83	3,61	8,66	79,61	4,76
2018	90	4,92	3,13	7,65	78,53	3,26
2019	90	4,78	2,72	8,78	77,91	3,23
2020	100	-2,11	1,68	9,1	76,36	3,13
2021	100	0,27	1,87	6,39	70,12	2,59

Source: Sharia Banking Statistics, OJK, BI and BPS

Table 1 shows the movement of variables influencing homeownership financing. When the GDP value experienced a declining development, the FTV policy experienced easing. This is, of course, to encourage an increase in home ownership financing, but in the field, the movement of financing growth has decreased even in 2019. It has been relaxed up to 100% but has not been able to recover the value of GDP in a positive trend. In addition, the decline in homeownership financing was driven by a declining inflation rate which illustrates the sluggishness of people's purchasing power to circulate their funds in the economy. This is reflected in the FDR variable. The decreased FDR illustrates a situation of decreased bank funds used for distribution to the public and reduced third-party funds collected by banks. Likewise, the NPF value, which decreases yearly, reflects that banks have low financing risk and can be used as an opportunity for banks to distribute more massive funds. However, the movement between variables slightly deviates from the existing theory.

Thus, it is suspected that home ownership financing is influenced by microeconomic factors, which include FDR and NPF values and macroeconomic factors, which include Gross Domestic Product and Inflation. Based on research conducted by Ganthari & Syafrii, and Dwianingrum, the FTV variable can significantly influence the disbursement of home ownership loans (Dwianingrum, 2014; Ganthari & Syafrii, 2018). However, contrary to the results of Morgan and Muthia's research, which concluded that the LTV/FTV variable had a negative effect and was not effective in controlling home ownership financing (Morgan et al., 2015; Muthia, 2019). Research on FDR and NPF variables also yields inconsistent results. Astuty & Nurjunah's research shows that the FDR and NPF variables have no effect on financing Islamic banking home ownership in Indonesia and Malaysia (Astuty & Nurjunah, 2018) *pub*. In contrast to the research by Syaputra & Tohirin, and Handoko, it has been found that NPF and FDR influence financing in Indonesia (Handoko et al., 2021; Syaputra & Tohirin, 2019).

Various microeconomic and macroeconomic factors can affect housing financing. Still, the FTV, FDR, NPF, GDP and inflation policy variables are different from other variables because these variables have been observed from 2014 to 2021, which contain abnormal movements. This research differs from others by using different methods and years from other studies. Based on the background and

differences in the research, the researcher aims to examine the effect of FTV, FDR, NPF Gross Domestic Product and Inflation policies on Home Ownership Financing.

2. THEORY AND METHODS

2.1 Home Ownership Financing

According to OJK Regulation No. 4/PJOK.05/2018 concerning Secondary Housing Financing Companies, Home ownership financing is a financing that functions to meet the needs of a house or place to live for people who wish to own a house by installments (OJK, 2018). In short, home ownership financing is a financing facility provided by banks to the public to meet housing needs. House ownership financing can be used for various contracts, including Murabahah contracts, Musyarakah Mutanaqisah (MMQ) contracts, Ijarah Muntakiyah Bit Tamlik (IMBT) contracts and Istishna contracts.

2.2 Financing to Value (FTV) Policy

LTV Policy/FTV is a ratio that compares the size of the loan value to the value of the property that will be used as collateral (Bank Indonesia, 2013). The FTV policy was issued by the Central Bank, namely Bank Indonesia in order to anticipate economic turmoil caused by excessive loan growth for housing loans (KPR) and motor vehicle ownership. In addition, to encourage a quality and balanced banking intermediary function that pays attention to the principle of prudence and to protect consumers and to be able to trigger economic growth so that it has positive momentum.

2.3 Financing to Deposit Ratio (FDR)

The Financing to Deposit Ratio (FDR) is part of the liquidity ratio. FDR is a comparison between disbursed financing and funds raised from third party funds (DPK). FDR is used to measure the extent to which bank financing has been disbursed from DPK. In addition, FDR also shows the bank's ability to pay off the funds that have been collected if customers withdraw their funds at any time (Antonio, 2005).

2.4 Net Performing Financing (NPF)

The financing risk can be measured using the Net Performing Financing (NPF) ratio. NPF is the percentage of the comparison between the amount of troubled financing and the total financing disbursed by the bank (Wahab, 2014). NPF reflects the bank's ability to manage its financing. Because problematic financing will cause losses for banks. This is because banks cannot receive profit sharing from the funds channeled so that it will reduce total banking revenue (Ismail, 2012).

2.5 Gross Domestic Product (GDP)

According to Case & Fair (2006) Gross Domestic Product (GDP) is the total value *output* a country calculated from consumption, domestic investment, consumption or government spending and export imports. A high GDP value reflects high production and high income which will then be followed by high purchasing power which will trigger high demand for both goods and services.

2.6 Inflation

Inflation is a condition where the prices of commodity goods experience an overall increase (Case & Fair, 2006). According to Keynes, inflation is caused by the large amount of money circulating in society, so prices will increase. As a result, money has no real value. Inflation that occurs continuously will be bad for individuals and for the economy. High inflation will trigger a reduction in productive activities so that these activities become unprofitable. Thus the owners of capital will divert their funds for speculative purposes such as buying houses, land and causing a reduction in investment products which will have an impact on the economic downturn which will then continue with unemployment.

2.7 Research Methods

The data analysis technique in this study used the Vector Error Correction Model (VECM) method. VECM is part of the restricted Vector Auto Regression (VAR) because VECM is used for data that is not stationary but cointegrated. VECM can provide short-term and long-term effects. To determine which model is more appropriate for this study, several steps must be carried out first, including a data stationarity test, optimum lag test, cointegration test, and VAR/VECM modelling.

3. RESULT AND DISCUSSIONS

3.1 Results of Data Analysis

This study uses time series data with object in Islamic Commercial Banks presented monthly from October 2014 to December 2021 from the FTV, FDR, NPF, Gross Domestic Product and Inflation Policy variables which are secondary data that have been published. This study uses the VECM method. In the VECM method, there are several tests, namely:

Data Stationarity Test

The stationarity test is important in the VECM analysis because this test affects the estimation model results, which could be better due to autocorrelation and heteroscedasticity (Widarjono, 2010.). His test is used to determine whether there is a stationary level of data on a variable. Stationarity data is data that does not contain a unit root. The data is said to be stationary if the probability value is <0.05 . To test the unit root is done with Augmented Dickey-Fuller (ADF).

Table 2 The results of the data stationarity test at the level and first difference

Variable	ADF t-Statistics	Probability	Information
Level			
House Finance	0,661954	0,9906	No Stationery
FTV Policy	1,718681	0,4183	No Stationery
FDR	-0,846055	0,8297	No Stationery
NPF	-0,801824	0,8132	No Stationery
GDP	-0,692551	0,8423	No Stationery
Inflation	-1,400869	0,5783	No Stationery

Variable	ADF t-Statistics	Probability	Information
1st Difference			
House Finance	-10,86311	0,0001	Stationery
FTV Policy	-9,450069	0,0000	Stationery
FDR	-11,36665	0,0001	Stationery
NPF	-4,514527	0,0004	Stationery
GDP	-8,173368	0,0000	Stationery
Inflation	-8,891551	0,0000	Stationery

Source: Processed Data E-views 10 (2023)

Table 2 describes the results of the data stationarity test on the variables studied. The variables for housing finance, FTV policy, FDR, NPF, GDP and inflation contain unit roots, which means that these variables are not stationary at levels. This can be seen in the probability value > 0.05 , meaning the variable contains a unit root. Then the stationary degree is raised to the first difference level. At the first difference level, the variables on housing finance, FTV policy, FDR, NPF, GDP and inflation do not contain unit roots, which means that these variables are stationary (prob. <0.05). So that testing can be continued at a later stage.

Optimum Lag Test

Determining the optimum lag in VECM analysis is very important. Lag will give a significant response in VECM analysis. If the lag is inappropriate, it will create an error mode (Ajija, 2011). The optimal lag will be selected based on the smallest lag value or the one with the most (*) marks.

Table 3 Optimum Lag Test Results

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-2.399.129	NA	5.23e+18	6.012.822	6.030.687	6.019.985
1	-1.958.730	803.7281*	2.13e+14*	50.01825*	51.26881*	50.51964*
2	-1.929.620	4.875.979	2.57e+14	5.019.049	5.251.297	5.112.164
3	-1.911.624	2.744.334	4.19e+14	5.064.060	5.403.499	5.200.151
4	-1.875.118	5.019.595	4.46e+14	5.062.795	5.509.425	5.241.861
5	-1.847.949	3.328.153	6.31e+14	5.084.873	5.638.694	5.306.916
6	-1.823.867	2.588.863	1.04e+15	5.114.667	5.775.679	5.379.686
7	-1.781.504	3.918.569	1.20e+15	5.098.760	5.866.963	5.406.754

Source: Processed Data E-views 10 (2023)

Table 1.3 shows the results of the optimum lag test among several criteria. There are several criteria, such as Likelihood Ratio (LR), Final Predictor Error (FPE), Akaike Information Criterion (AIC), Schwarz Criterion (SC) and Hanan and Quinn Criterion (HQ). The optimum lag test results show the sign (*) at most in the 1st lag. So, in this study, the optimum lag in VECM estimation is 1.

Cointegration Test

A cointegration test can be used to determine the analytical method used in this study. Cointegration test results will determine whether this research uses VAR or

VECM. The cointegration test uses the Johansen Cointegration method, where if the trace statistic value and the Max-Eigen value are higher than the critical value (0.05), then the data is integrated. If the data generated in this test does not find cointegration, then VAR is used. Whereas if it produces data that contains cointegration, then it uses the VECM method (Ajija, 2011).

Table 4 Cointegration Test Results

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	Critical Value	Prob.**
None *	0.343109	1.086.620	1.073.466	0.0409
At most 1	0.298315	7.294.191	7.934.145	0.1377
At most 2	0.177198	4.282.895	5.524.578	0.3818
At most 3	0.127791	2.625.056	3.501.090	0.3139
At most 4	0.098640	1.462.881	1.839.771	0.1557
At most 5 *	0.065976	5.801.483	3.841.466	0.0160

Source: Processed Data E-views 10 (2023)

Tabel 1.3 menunjukkan hasil dari uji kointegrasi. Hasil tersebut menunjukkan bahwa terdapat setidaknya ada dua nilai probabilitas yang lebih rendah daripada 0,05 critical value. Artinya terdapat dua kointegrasi dalam penelitian ini. Adanya kointegrasi ini menunjukkan bahwa terdapat hubungan jangka panjang pada variabel yang digunakan. Sehingga metode yang digunakan dalam penelitian ini adalah VECM.

VECM estimation

This study uses the VECM method to examine the long-term effect of variables on other variables. In this VECM method, research using t-table = 1.98734 from df = 86 with a significance level of 0.05 or 5%. If the t-statistic value is greater than the t-table value, it shows a significant result that the variable has a long-term or short-term influence.

Table 5 Long-Term and Short-Term VECM Estimation Results

Variable	Coeffsient	t-Statistics	Information
Long-Term			
D(Home Finance(-1))	1		
D(FTV Policy(-1))	-43,19091	-2,76972	Significant
D(FDR(-1))	-3,79156	-1,61491	No Significant
D(NPF(-1))	-54,55403	-4,23416	Significant
D(GDP(-1))	-0,128559	-5,45754	Significant
D(Inflation(-1))	-17,37034	-2,41749	Significant
C	1408443		
Short-Term			
CointEq1	0,001475	1,03167	No Significant
D(Home Finance (-1))	-0,174294	-1,40345	No Significant
D(FTV Policy(-1))	-6,01573	-0,25468	No Significant
D(FDR(-1))	20,12052	0,64361	No Significant
D(NPF(-1))	13,02619	0,0914	No Significant

Variable	Coeffsient	t-Statistics	Information
D(GDP(-1))	8,09050	0,29322	No Significant
D(Inflation(-1))	59,43224	0,74315	No Significant
R-Square	0,052131		

Source: Processed Data E-views 10 (2023)

Table 1.5 shows the results of the FTV, NPF, GDP and Inflation Policy Table 1.5 shows the results of the FTV, NPF, GDP and Inflation Policy variables tested in the long run, which significantly affect housing financing. The long-term VECM estimation results explain that the FTV policy variable significantly affects homeownership financing. The direction of influence of the FTV policy variable is negative with a coefficient of -43.19091, which means that an increase in the FTV policy by 1% will reduce housing financing by 43%. The FDR variable has no significant effect on home ownership financing. The direction of the influence of the FDR variable is negative with a coefficient of -37.91560 which means that an increase in FDR by 1% will reduce housing financing by 37%. The NPF variable has a significant effect on home ownership financing. The direction of the influence of the variable is negative with a coefficient of -54.55403 which means that an increase in the NPF of 1% will reduce the financing of home ownership by 54%. The GDP variable has a significant effect on home ownership financing. The direction of the influence of the variable is negative with a coefficient of -0,128559, which means an increase in GDP of 1% will reduce homeownership financing by 0.12%. The inflation variable has a significant effect on home ownership financing. The direction of the influence of the variable is negative with a coefficient -17,37034 which means an increase in NPF of 1% will reduce homeownership financing by 17%.

Then in the short term, all variables have no significant effect. CointEq1 for 0.001473 is the coefficient of the speed of adjustment to equilibrium. This means that the error is corrected by 0,00147% towards the optimal target for home ownership financing. This explains a corrective adjustment mechanism from the short to the long term. The R-Square coefficient in this study has a value of 0.052131, which means that as much as 5,213% of the FTV, FDR, NPF, GDP and inflation policy variables can explain their effect on home ownership financing. At the same time, the other 94.79% is explained by other variables outside the variables studied.

3.2 Discussions

a) The Effect of FTV Policy on Home Ownership Financing

The results of the VECM test explain that the FTV policy variable in the short term has no significant negative effect. This explains that the FTV Policy variable does not affect housing financing in the short term. While the results of the VECM test, in the long run, explain that the FTV policy variable has a significant negative effect, which means that the FTV policy variable will affect housing financing.

The results of the research conducted are in line with the research on home ownership financing conducted by Abdul Qoyum & Fauziyyah, (2018) and Muthia, (2019) shows that the FTV policy has a significant negative effect on home ownership financing. This shows that the higher the value of the FTV, the lower the financing for housing ownership because in implementing the FTV policy, there are still not ready, and the banks' targets need to be quite

right. The government has also prepared subsidized housing loans, but the FTV policy excludes these loans. Meanwhile, non-bank financing activities experienced a high expansion, resulting in competition between banks and non-bank institutions. So that the realization of the policy is not by expectations, which loosening the FTV policy or increasing the FTV ratio will increase homeownership financing has yet to be realized.

b) The Effect of FDR on Home Ownership Financing

The VECM test that has been carried out shows that the FDR variable has a negative but not significant effect on home ownership financing in the short term and long term. This means that even if the high or low FDR variable will not affect homeownership financing.

According to research results from Widuri & Fajariah, (2019) the FDR variable has no significant effect in a negative direction. The reason is that FDR can be assessed as the bank's ability to pay off its obligations to customers for the funds collected so that it can be said to be a reference in channelling funds to the funds raised (Cahyani et al., 2022). This means that if the funds raised increase, it would increase the disbursement of financing because the bank will consider the funds that will be channelled with the funds that have been collected so that there is no liquidity risk if, at any time, a customer withdraws funds. However, this research is different from previous studies. If FDR increases, it will reduce homeownership financing. This was due to the poor management of FDR due to the inaccurate distribution of financing for the funds raised, so a lot of idle funds were not distributed.

c) The Effect of NPF on Home Ownership Financing

Based on the VECM test conducted shows that the NPF variable has a negative influence on home ownership financing in the long term. This means that if the NPF value increases in the long term, the financing for home ownership will decrease. Meanwhile, the NPF variable does not affect homeownership financing in the short term. This means that the size of the NPF value will not affect the financing of home ownership.

Research from Qoyum & Fauziyyah, (2018) resulted in the NPF variable significantly negatively affecting home ownership financing. NPF reflects the bank's ability to manage its financing, called financing risk. This is because problematic financing will cause bank losses and threaten banking stability (Fajriani & Sudarmawan, 2022). A high NPF value means that a bank has a risk of bank financing, so to maintain bank stability, the bank will limit the funds disbursed to reduce the financing risk.

d) The Effect of GDP on Home Ownership Financing

Tests using VECM produce the GDP variable that significantly negatively affects home ownership financing in the long term. This means that an increase in GDP will decrease home ownership financing in the long run. Meanwhile, in the short term, the GDP variable does not affect the financing of home ownership, which means that the amount of GDP will not affect the financing of home ownership.

Results of research conducted by Nurpita & Oktavia, (2021) ; (Syaputra & Tohirin, 2019) and (Syahputra & Ningsih, 2020) state that GDP has a negative

influence on home ownership financing. This is based on the increasing population, which causes population density, which is not matched by the absorption of labour, thereby limiting the eligibility ability of customers to apply for financing.

e) The Effect of Inflation on Home Ownership Financing

The VECM tests carried out show that in the long-term inflation has a significant negative effect on housing financing in the long term. This means that the increase in the value of inflation will reduce the demand for home ownership financing. Meanwhile, in the short term, inflation does not affect homeownership financing. This means that an increase or decrease in the value of inflation will not affect homeownership financing.

According to research conducted by (Kholisudin, 2012) and (Syaputra & Tohirin, 2019) results that inflation has a negative effect on homeownership financing. The current inflation condition is still stable and within the scope of Bank Indonesia's provisions. Which means the value of inflation is still low. This low inflation causes the value of goods and services to be low so that it will attract people's interest in buying houses and applying for home ownership financing.

4. Conclusion

This study examines the influence of FTV policies and micro and macroeconomics on housing financing for Sharia commercial banks in the period 2014 to 2021 using the Vector Error Correction Model (VECM) method. The study found that the short-term policy variables FTV, FDR, NPF, GDP and inflation did not affect homeownership financing. Meanwhile, in the long term, the FTV, NPF, GDP and inflation policy variables have a significant influence in a negative direction. At the same time, the FDR variable has a negative effect that is not significant.

Based on the research results and conclusions, this study provides several suggestions for policymakers and managers of Islamic commercial banks in Indonesia. First, it is hoped that Bank Indonesia will continue to improve the setting of the FTV policy because this policy can reduce financing risks and the risk of unreasonably rising house prices. Second, banks need to pay attention to the soundness level of the bank, which can be seen from the FDR and NPF values. By controlling these two variables, you can reduce bad financing. This is because the bad financing caused the subprime mortgage incident and led to the economic crisis in America. Apart from that, suggestions for further research are expected to expand the object and increase the research variables because, in this study, only R-Square values were obtained 0.052, which means that as much as 5% of the FTV, FDR, NPF, GDP and inflation policy variables can explain their effect on home ownership financing.

REFERENCES

- Aisyah, E. N., & Maharani. (2020). Strategi Penanganan Pembiayaan Bermasalah Pada Umkm Di Masa Pandemi Covid-19. *Prosiding Senantias*, 1(1).
- Ajija, S. R. (2011). *Cara Cerdas Menguasai Eviews*. Salemba Empat.

- Anggreini, G. M., & Oktaviana, U. K. (2022). Faktor-Faktor Penentu Nilai Perusahaan Pada Bank Umum Syariah di Indonesia Periode 2016-2020. *Al-Intaj: Jurnal Ekonomi dan Perbankan Syariah*, 8(2), 227. <https://doi.org/10.29300/aij.v8i2.6842>
- Antonio, M. S. (2005). *Bank Syariah Dari Teori Ke Praktek*. Gema Insani Press dan Tazkia Group.
- Asngari, I. (2013). Pengaruh Kondisi Ekonomi Makro dan karakteristik Bank Terhadap Efisiensi Industri Perbankan Syariah di Indonesia. *Jurnal Ekonomi Pembangunan*, 11(2), 91-110. <https://doi.org/10.29259/jep.v11i2.4918>
- Astuty, P., & Nurjunah, N. (2018). Analisis Pengaruh Financing To Deposit Ratio (FDR), Non Performing (NPF), Suku Bunga Dan Bank Size, Terhadap Pembiayaan KPR Syariah (Studi Kasus Pada Bank Umum Syariah di Indonesia dan Malaysia Periode 2010-2016). *Jurnal Ekonomi*, 20(3).
- Bank Indonesia. (2013). *BI Sempurnakan Aturan Rasio LTV/FTV Untuk Stabilitas Sistem Keuangan Dan Ketahanan Perbankan*. https://www.bi.go.id/id/publikasi/ruang-media/news-release/Pages/SP_153113_DKom.aspx
- BPS. (2022). Laju Pertumbuhan Penduduk (Persen), 2020-2022. BPS. <https://www.bps.go.id/indicator/12/1976/1/laju-pertumbuhan-penduduk.html>
- Cahyani, A. D. D., Oktaviana, U. K., & Azizuddin, I. (2022). Analisis Pengaruh Penyaluran Pembiayaan Syariah dan Efisiensi Operasional Terhadap Profitabilitas Bank Umum Syariah di Indonesia dengan Non Performing Financing (NPF) sebagai Intervening. *Jurnal Ilmiah Ekonomi Islam*, 8(3).
- Case, K. E., & Fair, Ray. C. (2006). *Principles of Economics alih bahasa Prinsip- Prinsip Ekonomi*. Erlangga.
- Dengah, S., Rimate, V., & Niode, A. (2014). Analisis Pengaruh Pendapatan Perkapita dan Jumlah Penduduk Terhadap Permintaan Perumahan Kota Manado Tahun 2003-2012. *Jurnal Berkala Ilmiah Efisiensi*, 14(3).
- Dewi, Rr. A. P. (2016). Analisis Permintaan Kredit Pemilikan Rumah. *Jurnal Ilmiah Mahasiswa FEB*, 4(2).
- Dwianingrum, T. (2014). Determinasi Tingkat Penyaluran Kredit Pemilikan Rumah (Periode Setelah Kebijakan Loan To Value). *Jurnal Ilmiah Mahasiswa FEB*, 3(1), 17.
- Fajriani, N., & Sudarmawan, B. N. (2022). Microprudential Policy in Maintaining Bank Stability. *Journal of Economics, Finance And Management Studies*, 05(06). <https://doi.org/10.47191/jefms/v5-i6-18>
- Ganthari, S., & Syafrii. (2018). Faktor-Faktor Yang Mempengaruhi Kredit Perumahan di Indonesia. *Media Ekonomi*, 26(1).
- Handoko, D. O., Zulhelmy, Tirta, D., & Risa, F. (2021). Pengaruh FDR, NPF dan ROE Terhadap pembiayaan Mudharabah Pada Bank Umum Syariah di Indonesia. *Jurnal Tabarru': Islamic Banking and Finance*, 4(2).
- Ismail. (2012). *Akuntansi Bank Teori dan Aplikasi dalam Rupiah*. Kencana.
- Kholisudin, A. (2012). Determinan Permintaan Kredit Pada Bank Umum Di Jawa Tengah 2006-2010. *Economics Development Analysis Journal (EDAJ)*, 1(1), 9.
- Morgan, P., Regis, P. J., & Salike, N. (2015). Loan-to-Value Policy as a Macroprudential Tool: The Case of Residential Mortgage Loans in Asia. *SSRN Electronic Journal*, 526. <https://doi.org/10.2139/ssrn.2622433>

- Muthia, A. (2019). Macroprudential Policy Study: Loan To Value Ratio In Home Ownership Credit Control. *JJET (Jurnal Ilmu Ekonomi Terapan)*, 4(1). <https://doi.org/10.20473/jiet.v4i1.11915>
- Nurpita, A., & Oktavia, R. (2021). Analisis Hubungan Jumlah Penduduk, Pertumbuhan Ekonomi dan Inflasi Terhadap Kredit Pemilikan Rumah (KPR) dan Kredit Pemilikan Apartemen (KPA). *Jurnal Gama Societa*, 4(2), 14. <https://doi.org/10.22146/jgs.67512>
- OJK. (2018). *Peraturan Otoritas Jasa Keuangan Nomor 4 /POJK.05/2018 Tentang Perusahaan Pembiayaan Sekunder Perumahan*. <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwippvOlyrD8AhXXR2wGHUcyBTEQFnoECCcQAQ&url=https%3A%2F%2Fwww.ojk.go.id%2Ffid%2Fregulasi%2Fdocuments%2FPages%2FPerusahaan-Pembiayaan-Sekunder-Perumahan%2FPOJK%25204-2018.pdf&usg=AOvVaw0r6HPpZePdaMf-Id3JbZwG>
- Perdana, K., Hamzah, E., & Lubis, P. (2020). Pengaruh Tingkat Inflasi, Suku Bunga BI, dan Pertumbuhan Ekonomi Terhadap Pembiayaan Murabahah pada Bank Syariah di Indonesia (Periode Januari 2013 – Desember 2017). *Journal Najaha Iqtishod*, 1(1), 1–9.
- Qoyum, A., & Fauziyyah, N. E. (2018). In Search for Islamic Macroprudential Policy in Indonesia: The Case of Financing to Value (FTV) and Property Financing. *Ihtifaz: Journal of Islamic Economics, Finance, and Banking*, 1(1), 1. <https://doi.org/10.12928/ijiefb.v1i1.275>
- Suryani. (2012). Analisis Pengaruh Financing To Deposit Ratio (FDR) Terhadap Profitabilitas Perbankansyariah Di Indonesia (Rasio Keuangan pada BUS dan UUS Periode 2008-2010). *CONOMOCA*, 2(2).
- Syahputra, D., & Ningsih, S. (2020). Pengaruh Kredit Perbankan Konvensional Dan Pembiayaan Perbankan Syariah Terhadap Pertumbuhan Ekonomi Indonesia. *HUMAN FALAH: Jurnal Studi Ekonomi dan Bisnis Islam*, 7(1). <https://doi.org/10.30829/hf.v7i1.6806>
- Syaputra, A. A., & Tohirin, A. (2019). Pengaruh kebijakan Financing to Value dan faktor ekonomi terhadap pembiayaan pemilikan rumah di bank syariah. *Conference on Islamic Management, Accounting, and Economics (CIMAE) Proceeding*, 2, 190–199.
- Ullyana, C., Daryanto, H. K., & Saptono, I. T. (2016). Harga Properti Residensial & Pembiayaan Pemilikan Rumah Perbankan Syariah dan Konvensional Housing Price & Islamic and Conventional Housing Financing. *Jurnal Al-Muzara'ah*, 4(2), 97–109. <https://doi.org/10.29244/jam.4.2.97-109>
- Wahab, W. (2014). Analisis Pengaruh FDR, NPF, Tingkat Bagi Hasil, Kualitas Jasa dan Atribut Produk Islam Terhadap Tingkat Pembiayaan Mudharabah Pada Bank Umum Syari'ah di Semarang. *Economica: Jurnal Ekonomi Islam*, 5(2), 107–136. <https://doi.org/10.21580/economica.2014.5.2.772>
- Widarjono, A. (n.d.). *Ekonometrika Pengantar dan Aplikasinya* (Ketiga). EKONISIA.
- Widuri, T., & Fajariah, N. (2019). Pengaruh Inflasi dan Kinerja Keuangan Perusahaan terhadap Pembiayaan Bank Umum Syariah. *Wadiah: Perbankan Syariah*, 3(1).
- World Bank, T. (2022). Population, total—Indonesia. *The World Bank*. <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=ID>