



The Effect of Inflation Perception, Interest Rate, Investment Knowledge and Risk, On Customer Decisions to Invest in Bank BTN Manado Branch Office

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ABSTRACT

In 2014 Bank BTN opened its priority outlet in Manado City, North Sulawesi. For approximately 6 years, the Manado Branch Priority Outlet managed to raise funds with a total under management of IDR 189 billion consisting of several investment products. With a total of 325 customers, BTN Prioritas is here to facilitate customers in terms of wealth management with savings products, deposits, bonds, mutual funds, and bancassurance.

The purpose of this study is to see how much influence several factors have on making investment decisions for priority customers at Bank BTN Manado Branch Office. There are 4 independent variables in this study, namely risk perception, interest rate perception, investment knowledge, and risk perception. And one dependent variable, namely investment decisions. This study uses primary data, and the population used is priority customers of Bank BTN Manado Branch Office who have managed funds of more than or equal to five hundred million rupiah. The data collection technique in this study used a questionnaire with the Likert scale method to measure customer perceptions of each independent variable. The analytical method used in this study uses multiple linear regression analysis.

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The results showed that partially the perception of inflation, the perception of interest rates, and the perception of risk had an effect on investment decisions. The interest rate variable together with other variables has an effect on investment decisions.

INTRODUCTION

Background

Investment is a term that is familiar to the people of Indonesia. Many people invest with the aim of achieving a better level of welfare. Reducing the risk of inflation, reducing the risk of future uncertainty, and encouraging savings in tax payments (Tandelilin, 2001). Apart from these objectives, the community's basis for investing includes several things including the level of return, risk, and the balance between return and risk (Ekananda, 2019). In Keynes's theory in the field of investment, the interest rate is one of the main determining factors in determining the amount of investment value, besides that other supporting factors are the current state of the economy, projections of economic progress, progress and technological progress (Prawoto, 2019).

Inflation is one of the important indicators in a country's economy. The increase in inflation causes a decrease in people's purchasing power of the production sector. Inflation occurs due to an increase in the price of goods continuously over a certain period of time (Mankiw, 2006). Inflation is one of the causes of the decline in the value of money, therefore investing is the right step to avoid the problem of decreasing the value of money. Investment in this case differs in view, because this is done by the public by buying investment products in the hope of getting a return or return from these investment activities. The increase in interest rates caused by inflation is a momentum for people to increase their savings or savings in banks.

Interest rates are the basis for someone to determine the amount of investment in making investment decisions as explained in Keynes's theory of investment. The interest rate is an indicator of the calculation of return or income that someone will get in investing. Changes in interest rates are very influential in the economy, on the one hand will have a direct impact on the financial sector, and on the other hand also have indirect implications for the real sector (Kuncoro, 2020).

When people decide to invest, they must have a strong investment knowledge base. Therefore, knowledge about investment such as product types, product flow, risks and others must be understood and understood first. The public can access information about investment through print and electronic media. In addition, experience being an excellent teacher in terms of investment. So that people who have bought several investment products understand better and know more about investment instruments.

In addition to different levels of knowledge, the level of risk for each community is also different. This is what makes risk interesting to be used as one of the research variables. The level of risk or in investment known as the risk profile is the basis for every community to choose the appropriate investment instrument. Because in the risk profile, every community can know the level of tolerance for risk or the extent to which they can bear a risk. In general, the division of the risk profile in investing is divided into 3 groups, namely conservative, moderate and aggressive (Kumparan Online, 24 August 2018 14:41).

The State Savings Bank or known as Bank BTN is one of the banking institutions that sells investment products, both Bank BTN's own products and products in collaboration with investment managers and

insurance companies. Through BTN Prioritas, one of whose branches is in the city of Manado, North Sulawesi, Bank BTN sells investment instruments such as program savings, time deposits, mutual funds, both open end and protected mutual funds, primary market bonds and secondary market bonds, and bancassurance.

The determination of the community in terms of investing is influenced by the perception of each individual. Many things need to be considered if someone wants to buy a product or investment instrument. Based on the description above, the researcher is interested in examining the public's perception of inflation, interest rates, investment knowledge, and whether the risk affects people's decisions to invest.

Formulation of the problem

Based on the research background, the formulation of the problem in this study is:

1. How does inflation perception affect customer decisions to invest in Bank BTN KC Manado?
2. How does the perception of interest rates affect customer decisions to invest in Bank BTN KC Manado?
3. How does the customer's investment knowledge affect the customer's decision to invest in Bank BTN KC Manado?
4. How does risk perception influence customer's decision to invest in Bank BTN KC Manado?

Research purposes

Based on background and problem formulation, the purpose of this study is to determine the effect of inflation perception, interest rate perception, investment knowledge and risk perception on customer decisions to invest in Bank BTN KC Manado.

Benefits of research

The results of this study are expected to provide benefits including:

- 1 Theoretical Benefits

Theoretically, this research can provide benefits for the development of science in the investment field, more specifically related to investment instruments in the community
- 2 Practical Benefits
 - a) For the author, as a means to apply the knowledge that has been gained during college and experience working as a priority banking officer at Bank BTN through research conducted.
 - b) Readers, this research can be used as a reference and reference material for other researchers in conducting further research. In addition, it can be used as knowledge for readers about investing.
 - c) For Bank BTN as a reference to provide services and products that are in accordance with the profile of the Manado community so that investment instruments are right on target.

THEORETICAL BASIS

Investment and Investment Decision

Investment is an act of delaying the use of funds for current consumption activities into the future, such as placing the income earned into savings in the hope of earning more income. Investments are made to manage wealth or welfare effectively in order to protect investors' wealth from inflationary pressures, taxes, declines in the value of wealth caused by other factors. (Ekananda, 2019).

Investment is an investment for one or more assets owned and usually for a long period of time in the

hope of getting profits in the future (Sunariyah, 2003). The investment decision process is a series of activities that result in purchase of assets or securities (Harmono, 2018).

Inflation

Inflation is a process of increasing prices that generally apply in an economy (Sukirno, 1998). Inflation is the tendency to increase the price of goods and services in general and continuously (Natsir, 2014).

Tribal Level Flower

The interest rate is the price of using money or it can also be seen as a rent for the use of money for a certain period of time (Boediono, 1988). The interest rate is the interest rate expressed in percent and a certain period of time per month or per year (Marshall, 2003).

The classical theory of savings explains that as a function of interest rates, public interest in saving their funds in banks will be high when interest rates are high (Boediono, 2001). In contrast to Keynes's theory of interest rates, that the demand and supply of money determine the interest rate.

Investment Knowledge

Everyone must be able to study and understand investment management well so that the investment activities carried out by each investor take place appropriately and correctly. An understanding of the meaning of the financial market, which includes the money market and capital market, traded financial instruments and market participants, as well as the mechanism of transactions that occur are important elements to provide a basis for making decisions from a range of available investment alternatives. (Ekananda, 2019)

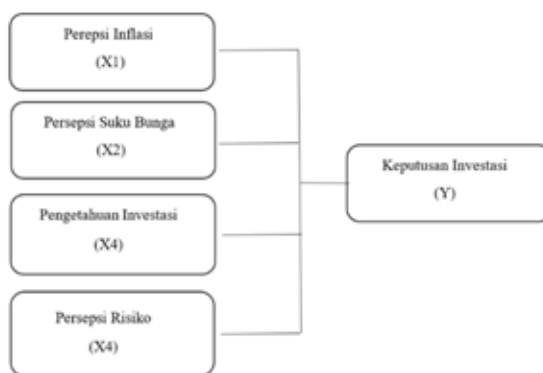
Risk

Risk is divided into 3 groups, namely conservative, moderate and aggressive (Kumpangan Online, 24 August 2018 14:41). Risk and return have a positive direction, the greater the risk borne, the greater the return that will be obtained (Sutedi, 2010).

Investment Development in Bank BTN

BTN Prioritas was present in Manado City on June 5 2014. Since its presence among the people of Manado, BTN Prioritas has succeeded in raising third party funds of Rp. 92 billion and the amount continued to increase until 2019 reaching Rp. 178 billion and with a total of 325 customers. In addition to third party fund products, BTN Prioritas also sells non-banking investment products such as mutual funds, bonds, and bancassurance.

Framework



Description :

- X1 : Inflation Perception
- X2 : Interest Rate Perception
- X3 : Investment Knowledge
- X4 : Risk Perception
- Y : Decision Investation

Hypothesis

- H1 : Inflation perception has a negative effect on investment decision making for Bank BTN KC Manado customers.
- H2 : Perceptions of Interest Rates have a positive effect on investment decision making for Bank BTN KC Manado customers.
- H3 : Investment knowledge has a positive effect on investment decision making for Bank BTN KC Manado customers.
- H4 : Risk perception has a negative effect on investment decision making for Bank BTN KC Manado customers.

RESEARCH METHODS

The scope of research

This study focuses on the factors that influence the investment decisions of Bank BTN customers at the Manado Branch Office with the independent variables being Inflation Perception, Interest Rate Perception, Investment Knowledge, and Risk Perception. This research was conducted in Manado, North Sulawesi using primary data through questionnaires distributed to Bank BTN customers.

Data Types and Sources

The data used in this study is primary data obtained by the author through a research instrument in the form of a questionnaire or questionnaire. The type of questionnaire used by the researcher is a Direct Questionnaire, which is a questionnaire in which the respondent answers about himself. (Hartono, 2019).

Sources of data from this study are customers from Bank BTN Manado Branch Office who already have investment instruments including deposits, bonds, mutual funds, and bancassurance.

Analysis Method

This study uses multiple regression analysis model which is a regression model used to determine the relationship between a dependent variable and several independent variables.

This study uses the Classical Assumption Test including the heteroscedasticity test, normality test, and multicollinearity test. Heteroscedasticity test with the aim of testing whether in the regression model there is an inequality of variance from the residuals of one observation to another observation (Ghozali, 2016). A good regression model is one with homoscedasticity or no heteroscedasticity. Normality test to test whether in the form of regression, confounding variables or residuals have a normal distribution, a good regression model has a normal distribution or is close to normal (Ghozali, 2016) Multicollinearity test to test whether the regression model found a correlation between the independent variables (independent), the model A good regression should not have a correlation between the

independent variables (Ghozali, 2016).

The Likert Scale method is used in filling out the questionnaire because it aims to determine the perceptions, opinions, and/or points of view of the respondents. Likert scale is as a scale intype of research datais always used to measure attitudes, opinions, and perceptions of individuals or groups related to social phenomena that are being developedresearch subject (Sugiono, 2014).

RESULTS AND DISCUSSION

Bank BTN

BTN Prioritas comes with 43 outlets spread throughout Indonesia. One of the BTN Prioritas outlets is BTN Prioritas Manado which was present on 5 June 2014 and became the 34th outlet. In the first semester of 2021 BTN Prioritas Manado has managed assets of Rp. 174 billion with a total of 325 customers and is managed by 2 officers called Priority Banking Officers. (PBO).

Respondent's Description

Of the 50 customers who have been sent questionnaires, 32 questionnaires have been filled in and form the basis for processing data analysis. Respondents were dominated by men with a total of 17 people 15 women. There are 20 respondents aged 31-50 years, 7 respondents aged 51-70 years, 2 respondents in the age range 71-90 years, 3 respondents under 30 years. 5 respondents with the last education of high school, 1 respondent is a D3 graduate and Respondents have a bachelor's (S1) and master's (S2) degree as many as 11 and 12 respondents, and there are 3 respondents with doctoral degrees. Profession of respondents as entrepreneurs as many as 18 respondents, retirees as many as 4 respondents, civil servants / ASN / BUMN employees as many as 4 respondents, private employees as many as 2 respondents, notaries, doctors, housewives,

Data Analysis Results

Dependent Variable: Y
Method: Least Squares
Date: 11/17/21 Time: 14:11
Sample: 1 33
Included observations: 33

Variable	Coefficient	Std. Error	t-Statistic	Prob.
X1	0.392577	0.093874	4.181956	0.0003
X2	0.208821	0.090704	2.302224	0.0290
X3	0.113900	0.184562	0.617138	0.5421
X4	0.459550	0.122437	3.753364	0.0008
C	-0.787713	0.903289	-0.872050	0.3906
R-squared	0.826381	Mean dependent var		4.234848
Adjusted R-squared	0.801578	S.D. dependent var		0.922673
S.E. of regression	0.411001	Akaike info criterion		1.198284
Sum squared resid	4.729805	Schwarz criterion		1.425027
Log likelihood	-14.77168	Hannan-Quinn criter.		1.274576
F-statistic	33.31815	Durbin-Watson stat		1.944712
Prob(F-statistic)	0.000000			

Based on the results of run data using eviews 8.0, the regression equation is

$$Y = -0.7877 + 0.3925X1 + 0.2088X2 + 0.1139X3 + 0.4595X4 +$$

1. Partially, the independent variables that significantly influence investment decisions are: Perception of Inflation (X1), Perception of Interest Rates (X2) and Perception of Risk (X4).
2. There is a probability of the influence of Inflation Perception (X1), Interest Rate Perception (X2) and Risk Perception (X4) partially on the decision to invest in Bank BTN KC Manado.
3. There is a positive relationship for Perception of Inflation (X1), Perception of Interest Rates (X2) and Perception of Risk (X4), meaning that the increasing customer perceptions of inflation, interest rates, and risk will increase investment decisions at Bank BTN KC Manado.
4. Judging from the probability of the magnitude of the effect, it shows that the probability of perception of inflation has the greatest influence on the decision to invest in Bank BTN KC Manado, followed by perceptions of interest rates and perceptions of risk.
5. Together, the probability of Perceived Inflation (X1), Perception of Interest Rates (X2), Investment Knowledge (X3) and Perception of Risk (X4) affect Investment Decisions (Y).
6. The coefficient of determination shows that 82.63% changes in investment decisions at Bank BTN KC Manado are influenced by Inflation Perception (X1), Interest Rate Perception (X2), Investment Knowledge (X3) and Risk Perception (X4). The rest is influenced by other variables not examined in this study.

7. Inflation Perception of Investment Decision

Perception of Inflation (X1) obtained a probability of 0.0003 ($0.0003 < 0.05$). Then H1 is rejected, meaning that the variable perception of inflation partially has a positive and significant effect on investment decisions, which is different from the hypothesis of this study. Perception of Interest Rates

8. Interest Rate Perception (X2) obtained a probability of 0.0290 ($0.0290 < 0.05$). Then H2 is accepted, meaning that the results of this study are in accordance with the hypothesis because the variable Perception of Interest Rates (X2) partially has a positive effect on investment decisions.
9. Investment Knowledge (X3) is significant at 0.5421 ($0.5421 > 0.05$). Then H3 is accepted, it means investment knowledge variable positive effect on investment decisions but not partially. Variable investment knowledge together with other variables affect investment decisions. Risk Perception
10. Risk Perception (X4) is significant at 0.0008 ($0.0008 < 0.05$). So H4 is rejected, meaning that the results of this study are different from the hypothesis because the Risk Perception variable (X4) partially has a positive effect on investment decisions.

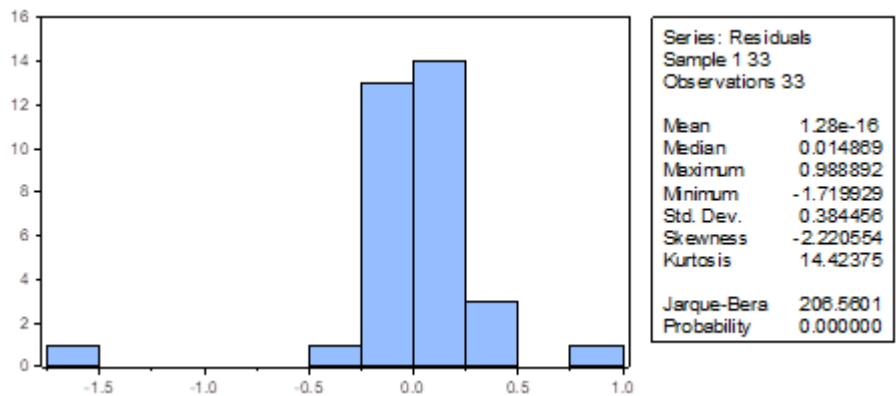
11. Investment Decision

Partially, the magnitude of the effect shows that the perception of inflation has the greatest influence on the decision to invest in Bank BTN KC Manado, followed by the perception of interest rates and then the perception of risk.

Inflation Perception Variables (X1), Interest Rate Perceptions (X2), Investment Knowledge (X3), and Risk Perceptions (X4) together influence investment decisions (Y). The coefficient of determination shows that 82.63% of changes in investment decisions at Bank BTN KC Manado are influenced by probabilities X1, X2, X3 and X4. The rest is influenced by other variables not examined in this study.

Classic assumption test

Normality test



The results of the residual normality test above are: the jarque fallow value of 206.5601 with a p value of 0.0000 where <0.05 so accept H1 or which means the residual is not normally distributed.

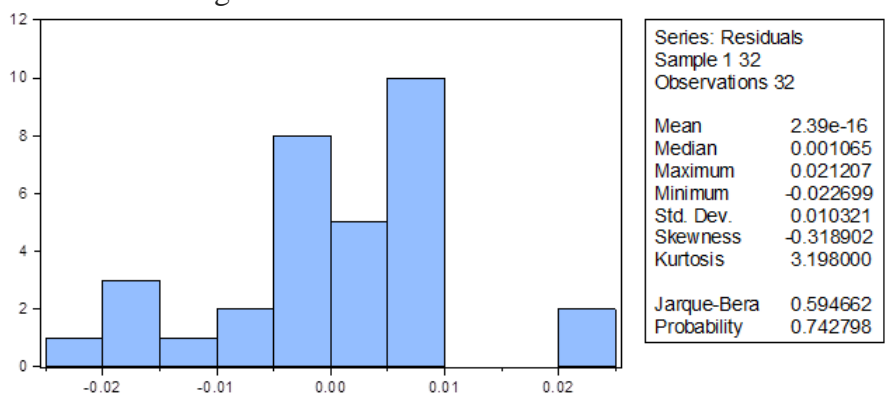
To overcome this, the data is logged and generates run data:

Dependent Variable: LOG(Y)
 Method: Least Squares
 Date: 12/02/21 Time: 21:56
 Sample (adjusted): 1 32
 Included observations: 32 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(X1)	0.218398	0.009184	23.78103	0.0000
LOG(X2)	0.199666	0.008560	23.32427	0.0000
LOG(X3)	0.331915	0.022401	14.81688	0.0000
LOG(X4)	0.187822	0.014747	12.73619	0.0000
C	0.092301	0.034880	2.646260	0.0134

R-squared	0.994413	Mean dependent var	1.465683
Adjusted R-squared	0.993585	S.D. dependent var	0.138082
S.E. of regression	0.011059	Akaike info criterion	-6.028529
Sum squared resid	0.003302	Schwarz criterion	-5.799508
Log likelihood	101.4565	Hannan-Quinn criter.	-5.952615
F-statistic	1201.447	Durbin-Watson stat	2.116515
Prob(F-statistic)	0.000000		

Normality test results after the log is as follows:



The results of the residual normality test above are: the jarque fallow value of 0.594662 with a p value of 0.742798 where <0.05 so reject H1 or which means the residuals are normally distributed.

Multicollinearity Test

Data not logged

Data in logs

Variance Inflation Factors
Date: 12/03/21 Time: 20:01
Sample: 1 33
Included observations: 32

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
LOG(X1)	8.43E-05	46.48786	2.079971
LOG(X2)	7.33E-05	35.72033	1.337412
LOG(X3)	0.000502	320.8966	1.117274
LOG(X4)	0.000217	126.9162	2.083124
C	0.001217	318.3140	NA

The above shows that the value of Centered VIF for inflation perception (X1), interest rate perception (X2), investment knowledge (X3) and risk perception (X4) is less than 10, so it can be stated that there is no multicollinearity problem in the prediction model. The same result that all variables are less than 10 is also found using the log model.

Heteroscedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	10.52970	Prob. F(4,28)	0.0000
Obs*R-squared	19.82236	Prob. Chi-Square(4)	0.0005
Scaled explained SS	95.78279	Prob. Chi-Square(4)	0.0000

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 12/02/21 Time: 22:11
Sample: 1 33
Included observations: 33

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.142541	0.791754	1.443051	0.1601
X1	-0.195580	0.082283	-2.376925	0.0245
X2	0.026850	0.079504	0.337717	0.7381
X3	0.218054	0.161773	1.347901	0.1885
X4	-0.302760	0.107319	-2.821132	0.0087

R-squared	0.600678	Mean dependent var	0.143327
Adjusted R-squared	0.543632	S.D. dependent var	0.533271
S.E. of regression	0.360252	Akaike info criterion	0.934699
Sum squared resid	3.633875	Schwarz criterion	1.161443
Log likelihood	-10.42254	Hannan-Quinn criter.	1.010992
F-statistic	10.52970	Durbin-Watson stat	1.759838
Prob(F-statistic)	0.000025		

The output results above, where the p value is indicated by the Prob value. chi square(4) in Obs*R-Squared is 0.0611. Because the p value is $0.0005 < 0.05$, then reject H_0 or which means the regression model is heteroscedasticity.

Using the log model generates

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	2.329106	Prob. F(4,27)	0.0816
Obs*R-squared	8.209113	Prob. Chi-Square(4)	0.0842
Scaled explained SS	6.422758	Prob. Chi-Square(4)	0.1697

Test Equation:
 Dependent Variable: RESID^2
 Method: Least Squares
 Date: 12/02/21 Time: 22:16
 Sample: 1 32
 Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000810	0.000453	1.788742	0.0849
LOG(X1)	-0.000140	0.000119	-1.176462	0.2497
LOG(X2)	-5.08E-05	0.000111	-0.457106	0.6513
LOG(X3)	-0.000127	0.000291	-0.436357	0.6660
LOG(X4)	-0.000163	0.000192	-0.852556	0.4014

R-squared	0.256535	Mean dependent var	0.000103
Adjusted R-squared	0.146392	S.D. dependent var	0.000155
S.E. of regression	0.000144	Akaike info criterion	-14.71632
Sum squared resid	5.57E-07	Schwarz criterion	-14.48730
Log likelihood	240.4611	Hannan-Quinn criter.	-14.64041
F-statistic	2.329106	Durbin-Watson stat	1.594085
Prob(F-statistic)	0.081596		

The output results above, where the p value is indicated by the Prob value. chi square(4) in Obs*R-Squared is 0.0842. Because the p value is $0.0842 > 0.05$ then accept H_0 or which means there is no heteroscedasticity problem.

Based on the classical assumption test, the next data analysis uses the logarithmic model:

$$\text{Log } Y = o + 1 \log X1 + 2 \log X2 + 3 \log X3 + 4 \log X4 +$$

Dependent Variable: LOG(Y)				
Method: Least Squares				
Date: 12/02/21 Time: 21:56				
Sample (adjusted): 1 32				
Included observations: 32 after adjustments				
Variable	Coefficient	Std. Error	t-Statistics	Prob.
LOG(X1)	0.218398	0.009184	23.78103	0.0000
LOG(X2)	0.199666	0.008560	23.32427	0.0000
LOG(X3)	0.331915	0.022401	14.81688	0.0000
LOG(X4)	0.187822	0.014747	12.73619	0.0000
C	0.092301	0.034880	2.646260	0.0134
R-squared	0.994413	Mean dependent var	1.465683	
Adjusted R-squared	0.993585	SD dependent var	0.138082	
SE of regression	0.011059	Akaike info criterion	6.028529	
Sum squared resid	0.003302	Schwarz criterion	5.799508	
Likelihood logs	101.4565	Hannan-Quinn Criter.	5.952615	
F-statistics	1201.447	Durbin-Watson stat	2.116515	
Prob(F-statistic)	0.000000			

CLOSING

Conclusion

From the results of the research and discussion above, the following conclusions can be drawn:

1. The perception of inflation partially has a significant positive effect on the investment decisions of priority customers of Bank BTN KC Manado.
2. Perceptions of Interest Rates partially have a significant positive effect on investment decisions for priority customers of Bank BTN KC Manado.
3. Investment knowledge together has a positive effect on investment decisions for priority customers of Bank BTN KC Manado.
4. Risk perception partially has a significant positive effect on investment decisions for priority customers of Bank BTN KC Manado.

Suggestion

Priority BTN KC Manado should begin to focus on activities aimed at increasing the knowledge of priority customers regarding investment products. These activities can be through investor gathering activities both online and offline, customer visits, workshops, and/or training. As the results in this study, that investment knowledge is the factor that has the biggest impact on customers' investment decisions. This activity certainly cannot be separated from the discussion of inflation, interest rates, and risk which are the 3 other independent variables in this study.

Priority BTN KC Manado should be able to provide explanations and straighten customer perceptions of the factors that become independent variables in this study. With better investment knowledge, priority customers of Bank BTN KC Manado will help facilitate customers in making investment decisions.

Training of bank staff on duty at Prioritas is a must, because priority bank staff will be the end of the offering of an investment product and they will meet with prospective new customers to explain investment and other matters that follow.

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