

Aspects Of Bias In Credit Decisions For Employees Of The Mollucan Christian University Of Indonesian

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ABSTRACT

Credit is one source of external funding for all individuals who have and are limited to achieving their goals. However, in reality, individuals can make mistakes or biases in making credit decisions. Often individuals do not realize that the psychological factors that exist in each one play an important role in making credit decisions.

The purpose of this study is to analyze whether the bias aspect can have an influence on credit decision making for Indonesian Christian University Maluku employees in Ambon City. The bias factors used in this study are excessive optimism, over confidence, confirmation, and illusion of control.

To achieve the goal, the method used is logistic regression with existing primary data. The results of the logistic regression test show that the aspects of excessive optimism, overconfidence, confirmation bias, illusion of control have no significant effect on credit decision making for Indonesian Christian University Maluku employees.

Keywords: financial behavior, psychological factors, aspects of bias, credit decisions

I. Introduction

Behavioral finance is a science that studies how humans respond to and react to existing information in an effort to make decisions that can optimize returns by taking into account the risks inherent in them. The involvement of emotions, traits, preferences and various kinds of things inherent in humans as intellectual and social beings will interact underlies the emergence of decisions to take an action.

Decision quality is a measure of the effectiveness of decision makers. Effective decision making is a complex process and depends on the skills of decision makers. Therefore, decision making needs to prioritize rationality so that the results of the decision are not biased. However, a person's behavior in decision making is not completely rational. Experts argue that the use of rationality assumptions may lead to a misunderstanding

of the true mechanism of financial anomalies. Deviating from rational choice (biases) is an individual's financial behavior that is more influenced by factors that are less well known in the company's financial models, namely psychological factors.

Shefrin (2007) explains that the psychological aspect is categorized into three aspects, namely: bias, heuristic and framing effect. Furthermore, it is explained that bias is the tendency of prediction error. In other words, bias is a prejudice against a decision that has been influenced by a certain belief. Heuristics are criteria, methods, or principles to determine the most effective solution to achieve a goal. The heuristic aspect can explain the problem and the selection of several solutions. Framing effect is defined as a person's decision that is influenced by

style, where the background for making that decision is preconceived (Pearl 198).

This research leads to one aspect of psychology, namely the aspect of bias that plays a role in making credit decisions for UKIM-Ambon employees. Where, the bias aspect is an aspect that tends to produce decisions that do not guarantee absolute accuracy (Athalia: 2012). Decision makers have the possibility to make wrong decisions or deviate estimates. Biases lead to prediction errors and make people miscalculate the risks that can occur. This is what makes researchers interested in discussing aspects of bias. Aspects of bias are divided into four types: (1) excessive optimism (2) overconfidence (3) confirmation and (4) illusion of control.

In making decisions, individuals often do not realize that the psychological factors that exist in each play an important role in decision making. Sometimes emotional factors and self-confidence that influence individuals in making decisions. For example, for UKIM Ambon employees, who use credit as a way to shop, the convenience of obtaining non-cash items then becomes something interesting and tempting for employees rather than saving and buying cash. This is where they are psychologically tested on credit decisions so that they will not be harmed by debt. This is the background for this research to be carried out.

Thus, this study aims to 1). analyze the effect of excessive optimism on credit card decisions for employees of the Indonesian Christian University, Maluku, Ambon. 2). analyze the effect of overconfidence on credit decisions through credit cards for employees of the Indonesian Christian University, Maluku, Ambon. 3). analyze the effect of confirmation on credit decisions through credit cards for employees of the Indonesian Christian University, Maluku, Ambon. 4). analyze the effect of illusion of control on credit card decisions for employees of the Indonesian Christian University, Maluku, Ambon.

2. Review of Literature

Credit Decesion

Credit or credo in Latin which means trust or trust, in the sense that someone is willing to trust another person and he, that person, can repay what he borrowed. Then the word credo developed into credit worthiness which means that a person with a reputation will make that person maintain his character and reputation, so that he can be trusted.

The banking law states that credit is the provision of money or equivalent claims, based on an agreement or loan agreement between the bank and another party that requires the borrower to repay the debt after a certain period of time with interest.

Credit decisions contain the greatest moral element, because it involves so many other people's interests. Making credit decisions is very important, not only for the quality of the bank loan portfolio for lending institutions, but also for the continuation of the bank's business. It is everyone's duty to do what is morally right. The individual is basically an ethical unit, so a moral agent is needed. Therefore, credit decisions are highly dependent on the individual, who will make the right and moral decision because it involves so many other people's interests.

Credit decisions are choices made in ensuring that a credit risk is acceptable or not and at the same time aligning the balance between risk and profit from a credit transaction. Thus the credit decision is correct or not, or approved or rejected, must be supported by the right reasons, which arise from the results of the analysis using relevant information, data and facts. Moral decisions are not based on likes or dislikes, are not determined by emotions or tastes, but require reasoning.

Biased Aspect

The bias aspect is divided into 4 categories, namely: (1) excessive optimism (2) overconfidence (3) confirmation bias and (4)

illusion of control. Shefrin (2007) explains Excessive optimism is associated with too high a favorable outcome than an unfavorable outcome. The type of deviation that results in people often overestimating good results and underestimating the unfavorable results of their experiences. Furthermore, Meinert (1991) suggests that the main reason for today's debt problems is the excessive optimism of a person's past. Excessive optimism will make a person unrealistic with the real situation at hand or underestimate the risks that will occur. Overconfidence is a type of deviation that causes how often people make mistakes because of overconfidence. People understand their own abilities and the limits of their knowledge. They feel that the information obtained can be put to good use because it has accurate and precise analytical skills (Shefrin: 2007). Furthermore, Baker & Nofsinger (2002) asserted that this overconfidence is actually an illusion of knowledge and ability due to lack of experience and limited expertise in interpreting information. Confirmation bias is a deviation that causes a person to prefer to hear the opinions of people who are in line with his thoughts. Where people often only want to hear what they want to hear. (Shefrin 2007) in Darmawan (2012). Meanwhile, according to Joutsen (2009) in Darmawan (2012) Confirmation can be interpreted as ignoring information that does not support our views and taking too much information in accordance with our views. Or in other words, individuals will have the habit of hearing what they like. A person experiencing confirmation bias tends to listen more to the opinions of people who are in line with his thoughts and ignore the opinions of people who contradict his thoughts. Confirmation deviations often occur because of an error when confirming the information obtained. The illusion of control is the human tendency to believe that they can control or at least influence outcomes but in reality they cannot.

Aspects of Bias in Credit Decision Making

Aspects of bias that play a role in credit decision making. Where, the bias aspect is an aspect that tends to produce decisions that do not guarantee absolute accuracy. Aspects of bias are divided into four types: (1) excessive optimism (2) overconfidence (3) confirmation and (4) illusion of control.

Excessive optimism is an overly optimistic attitude. Nofsinger (2011) suggests that excessive optimism will make individuals produce quality decisions whose realization is far from what was planned. Excessive optimism makes a person often make plans that are too positive, without taking into account the disadvantages of obstacles and challenges that may occur. As a result, if there is a problem, the individual is not ready and tends to make mistakes in making decisions because they are under pressure and panic. In terms of credit decisions, it means that individuals who have excessive optimism have high confidence that using a credit card as a medium of payment will make it easier for them to satisfy their immediate needs even though they have to pay in installments from their total transactions.

Hypothesis 1: There is a positive effect of excessive optimism on credit decision making.

Overconfidence is a belief that is not guaranteed based solely on intuitive judgments and cognitive abilities. Overconfidence or overconfidence has to do with how prejudiced or feeling one is about how well a person understands their abilities and the limits of their knowledge. People who are overconfident in their abilities usually think that they are better than they really are. On the other hand, people who are overconfident about their own level of knowledge usually think they know more than they actually know. This attitude doesn't necessarily mean that they don't care or are

incompetent, it just lies in thinking that they are smarter and better. Individuals with this overconfidence will put aside the information they get because they trust their own beliefs more. They are too confident and confident in their own views and knowledge that they don't really care about any other information they can get. Individuals believe that using a credit card in every shopping transaction will get a high return and low risk, even though this cannot be guaranteed and is not necessarily the case. This type of bias is able to influence credit decision making by using a credit card. Individuals believe that using a credit card in every shopping transaction will get a high return and low risk, even though this cannot be guaranteed and is not necessarily the case. This type of bias is able to influence credit decision making by using a credit card. Individuals believe that using a credit card in every shopping transaction will get a high return and low risk, even though this cannot be guaranteed and is not necessarily the case. This type of bias is able to influence credit decision making by using a credit card.

Hypothesis 2: There is a positive effect of overconfidence on credit decision making

Confirmation bias. Individuals will spend a lot of time looking for information that strengthens the individual's views but ignores information that is not in accordance with their views even though the information can actually help individuals to make better decisions. In making credit decisions, an individual who experiences confirmation bias will only listen to the information he wants to hear. Make reasons that will justify his opinion about the credit decisions taken and ignore information that does not support his opinion. The more information that supports his opinion the more daring to take credit. So that individuals think that credit is a natural thing to shop when you don't want to use existing cash or when you don't have cash.

Hypothesis 3: There is a positive effect of confirmation bias on credit decision making.

Illusion of control is the tendency of people to believe that they can control or at least influence outcomes but in reality they cannot. when an individual makes a decision, the outcome characteristics depend on the luck and ability of the individual⁵. Even though in reality this is not the case, most of the results of the decision whether it brings profit or loss are beyond the control of the decision maker (Supramono: 2008). Individuals believe that they will be able to manage finances well because they are controlled by themselves, thus individuals also believe that they can control the credit that will be used properly. The way or process of getting results affects the illusion of control. If you get a positive result first, it will increase the illusion of control of the individual. Otherwise it will have a negative impact. The more familiar the individual with credit, the greater the control over credit decisions taken.

Hypothesis 4: There is a positive influence of illusion of control on credit decision making.

3. Research Method

Types of data are divided into 2 (two) types, namely primary data and secondary data (Supramono and Utami 2004: 61). Primary data is a source of research data obtained directly from original sources, both individuals and individuals. While secondary data is a source of research data obtained by researchers indirectly, namely through intermediary media, data obtained and recorded by other parties. In this study, the type of data used is primary data, where the necessary information is obtained by distributing questionnaires to the employees of the Indonesian Christian University, Maluku, Ambon who use credit.

The population used was the employees of the Indonesian Christian University in Maluku Ambon, while the

sample used was the employees of the Indonesian Christian University in Maluku Ambon. Sampling in this study was carried out by non-probability sampling with purposive sampling technique, namely sampling carried out with the consideration that the desired elements already existed in the members of the sample taken. The criteria used in the selection of the sample are the employees of the Indonesian Christian University, Maluku, Ambon who use the facilities.

In this study, the analytical tool used is logistic regression analysis. This analysis is used to analyze the effect of the independent variable (x) on the dependent variable (y), with the condition that the dependent variable is a dummy variable that only has two alternatives and the independent variables in this study are excessive optimism, overconfidence, confirmation and illusion of control. While the dependent variable is credit decision making.

With the regression model:

$$\ln \frac{P}{1-P} = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4$$

Information:

P : individual opportunity to take credit

b₀ : constant of logistic regression model

b₁, : regression coefficient of the independent variable

x₁: excessive optimism

x₂: overconfidence

x₃: confirmation

x₄: illusion of control

4. Results and Discussion

Biased Aspect

The following will describe the bias aspects of the respondents related to their characteristics. In this study, a respondent is considered to be biased if the respondent answers agree on all the indicators of the questionnaire given. The table below describes the aspects of respondent bias:

Table Number of Respondents For Each Aspect Bias

Biased Aspect	Number of Respondents
excessive optimism	37
Overconfidence	7
Confirmation Bias	2
Illusion of control	4

Source: Primary Data 2021

Based on the table above, it can be seen that most of the respondents have a bias aspect of excessive optimism as many as 37 people, which means they have excessive optimism. Furthermore, respondents who have an overconfidence aspect of bias are 7 people, which means that these 7 respondents have excessive self-confidence in themselves. 2

respondents in the aspect of confirmation bias, which means they don't like to hear people's opinions that contradict their thoughts or put aside information that doesn't match their thoughts. Some respondents also have the illusion of control that they think that they are able to control all problems that occur in the future, which are 4 people.

Table Bias Aspect Distribution by Age

Biased Aspect	Age					Total
	25-29 (%)	30-35 (%)	36-40 (%)	41-50 (%)	51-60 (%)	
exelssive optimism	4	10	11	9	3	37
Overconfidence	3	1	2	1	0	7
Confirmation Bias	0	0	1	1	0	2
Illusion of control	1	1	2	0	0	4
Number of Respondents	8	12	15	11	3	

Source; Primary data 2021

The table above shows that respondents in the 36-40 age group experience the most aspects of bias, either excessive optimism, overconvindence, confirmation bias, or illusion of control. An interesting condition is seen in respondents aged 51-60, out of 3 respondents all experienced excessive optimism. This may happen because they are

old, mature and experienced which makes them feel confident in what they are doing

However, for the bias aspect of overconvindence, respondents in the age group of 25-29, 30-35, 51-60 did not experience the bias aspect, even though only a few experienced the bias aspect for the 36-40 and 41-50 age groups.

Table Bias Aspect Distribution by Gender

Biased Aspect	Gender		Total
	Man	girl	
exelssive optimism	11	26	37
Overconfidence	5	2	7
Confirmation Bias	1	1	2
Illusion of control	1	3	4
Number of Respondents per gender group	17	32	

Source; Primary data 2021

The table above shows that the percentage of male and female respondents who experience aspects of bias is not much different. All 17 men experienced the bias aspect and the most biased aspect was excessive optimism as well as women, almost all women experienced excessive optimism and exceeded the male

respondents. As for the overconvindence aspect, male respondents are more confident in their decisions than female respondents. Women and men both experience confirmation bias or they tend not to care about other people's opinions.

Table of Distribution of Aspects of Bias by Education Level

Biased Aspect	Level of education				Total
	SMA	D3	S1	S2	
exelssive optimism	0	10	25	2	37
Overconfidence	1	1	2	3	7

Confirmation Bias	1	1	0	0	2
Illusion of control	1	1	2	0	4
Number of Respondents per education group	3	12	29	5	

Source; Primary data 2021

The table above shows that the percentage of all respondents based on education level is biased. Respondents with D3 and S1 education levels who dominate because all of them experience bias, especially in the aspect of excessive optimism S1 from 29 respondents, as many as 25 people are biased. And D3 of 12 respondents 10 people

experienced bias. This shows that the higher the education, the higher their character, confident in what they do.

Logistics Regression

continued, to find out how much influence the bias aspect had on credit decisions, logistic regression analysis was carried out.

Table of Coefficients of Logistics Regression Results

	B	SE	Wald	df	Sig	Exp (B)
Step 1a Excessive	0.370	0,255	3,238	1	0,072	1,583
Optimism Overconfidence						
Confirmation Bias Illusion						
Of Control Constant	-00.035	0,292	1,312	1	0,252	0,715
	-0.007	0,183	0,594	1	0.441	0,868
	0.095	0,189	0,254	1	0,614	1,100

Source: Data processing, 2021

The results of the logistic regression above can be written with the following equation:

$$\ln \frac{P}{1-p} = 0.161 + 0.370X_1 - 0.335X_2 - 0.141X_3 + 0.095X_4$$

$$= e^{0.161 + 0.370X_1 - 0.335X_2 - 0.141X_3 + 0.095X_4}$$

The above equation can be interpreted that the variable of excessive optimism points in the direction of the hypothesis that has been proposed. The variable of excessive optimism has a coefficient of 1.583 ($e^{0.370}$), which means that every increase in the optimistic excessive score, the chances of making credit decisions will increase. This is in accordance with the hypothesis that has been proposed previously, because with the belief that you

have about the benefits, the benefits obtained will give a positive impact in making credit decisions. However, the variable of excessive optimism was not proven to be significant with a significant value of 0.072.

The overconfidence variable has a coefficient of 0.715 ($e^{-0.335}$), which means every If the overconfidence score increases, the chances of making credit decisions will decrease. This is not in accordance with the hypothesis that has been proposed previously, because they are not confident in making credit decisions. Likewise with the significant level, overconfidence was not proven to be significant with a significant value of 0.252.

The confirmation bias variable has a coefficient of 0.868 ($e^{-0.141}$), which means

everyan increase in the confirmation bias score, the chances of making credit decisions will decrease. This is not in accordance with the hypothesis that has been proposed previously, because respondents are open to other people's input and opinions. Likewise with the level of significance, confirmation bias was not proven significant with a significant value of 0.441.

The Illusion of Control variable has a coefficient of 0.100 ($e^{0,095}$), which means everyIf the Illusion of Control score increases, the chances of making credit decisions will also increase. This is in accordance with the hypothesis that has been proposed previously. However, the variable of excessive optimism was not proven to be significant with a significant value of 0.614.

5. Conclusion

Based on the results and discussion, it can be concluded, among others:

1. This study examines the effect of bias in credit decision making on UKIM employees with a sample of 53 employees. Of the 53 employees, 4 employees did not apply for credit and 49 employees did credit. The results of the logistic regression test show that the aspects of excessive optimism, overconfidence, confirmation bias, illusion of control have no significant effect on credit decision making for Indonesian Christian University Maluku employees.
2. The knowledge and experience of the respondent allows the respondent to act and make good decisions and there is no bias. This is indicated by the results of the questionnaire research that was circulated, the respondents were generally highly educated.

Based on the conclusions, several things can be suggested, including:

1. This study discusses the bias in respondents and is not very specific regarding credit decision making. And

other factors that have not been studied in this study. Therefore, it is recommended to add other factors in further research.

2. The questionnaires that were circulated were only deposited, so it was not optimal in filling out and returning the questionnaires. Therefore, it is recommended for further researchers that the filling of the questionnaire should be controlled directly by the researcher.

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