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FINANCIAL LITERACY AND MENTAL ACCOUNTING ANALYSIS OF FINANCIAL DECISIONS AND SHOPPING INTERESTS IN THE COVID-19 PANDEMIC ERA

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ABSTRACT

The Covid 19 pandemic is a situation that illustrates the uncertainty of economic conditions nationally and globally and has an impact on how individuals should react to it in financial terms. Therefore, this study aims to examine the effect of financial literacy and mental accounting on financial decisions and spending interests in the COVID-19 pandemic situation based on prospect theory and behavioural life-cycle theory. The results of research on lecturers and staff respondents at STIE Equity Bandung - Indonesia, the SEM-PLS analysis results show that financial literacy and mental accounting have an effect on financial decisions, and only mental accounting has an effect on shopping interest. In terms of prospect theory, the research findings found that in pandemic situations, individuals generally behave in risk-aversion behaviour. Meanwhile, in the viewpoint of the behavioural life-cycle theory, individuals view money as current assets with precautionary reasons.

Keywords: Financial literacy, financial decisions, mental accounting, shopping interest.

1. Introduction

Financial activity is one of the fundamental activities for individuals and society. Consumptive lifestyles that are not by income capabilities and financial conditions, can cause financial problems. In addition, the lack of individual knowledge and skills in financial literacy has resulted in the low utilization of banking and non-banking service products, so that many are trapped in the practice of using illegal financial services as well as instant behaviour and trapped in fraudulent investment schemes. To avoid this, individuals need basic knowledge of finance, commonly known as financial literacy, which is a solution and opportunity to overcome economic conditions. As stated by the World Economic Forum in 2015, it has provided an overview of the 21st-century skills that should be possessed by all nations in the world, which include basic literacy, competence, and character. Financial Literacy as one of the basic literacies offers a set of knowledge and skills to manage financial resources effectively for the welfare of life as well as a basic need for every individual to minimize, find solutions, and make the right decisions in financial problems.

Financial decisions in people's daily activities are often one of the activities undertaken, either in the form of investment or funding decisions. Investment decisions at the individual level are usually in the form of buying real assets and non-real assets, including property, gold, deposits, mutual funds. The funding decision is usually a loan. Regarding loans to banking institutions, the Central Statistics Agency noted that in the last five years, loans to non-business sectors (households) showed a fluctuating trend.

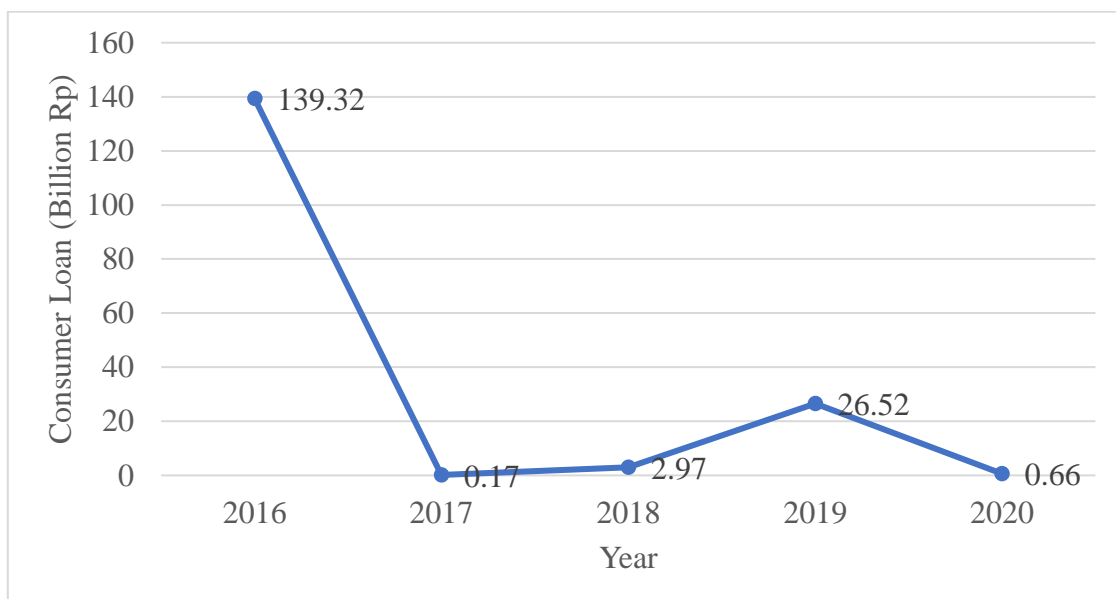


Figure 1
Consumer Loan in Indonesia

Figure 1 shows an interesting trend regarding loans made by the public, namely during the Covid-19 Pandemic era, which showed an increase in the number of loans, and in the same era, it experienced a decline. This condition shows the existence of individual behaviour in responding to various situations, especially those related to financial management. This shows that the covid-19 pandemic situation has affected individual attitudes in determining their financial decisions.

The attitude of an individual in an accounting context is known as mental accounting. Thaler (1994) describes mental accounting as a series of cognitive operations used by individuals or households in coding, creating, and evaluating categories of financial activities. Thus, it can be concluded that the mental focus of accounting is how individuals respond to and evaluate situations against the possibility of giving two or more results.

Research related to financial decisions in terms of financial literacy and mental accounting has been carried out by many researchers, but research results are still mixed. This shows that research related to financial literacy and mental accounting is still interesting to do. Some of these studies include research by Remund (2010); Krishna, et al. (2010); Tan Hui Boon, et al (2011); Ansong and Gyensare (2012); Bhushan & Medury (2013); Taft, Hosein, & Mehrizi (2013); Chu. Zhong et al (2016); Silaya and Persulesy (2018); Dewanti, et al (2018); Xiao, Jing Jian (2018).

Based on the stated background, this study was conducted to confirm whether the results of the research that have been carried out still show the same results as previous studies, especially those related to financial literacy and mental accounting for financial decisions and spending interests in the Covid-19 pandemic era.

2. Literature Review

2.1. Prospect Theory

Prospect theory was developed by Daniel Kahneman and Amos Tversky in the early 1980s which includes two disciplines, namely psychology and economics (psycho economics) which is an analysis of a person's behaviour in making economic decisions between two choices. Prospect theory focuses on how real decisions are taken (descriptive approach). By Kahneman and Tversky, these are referred to as risk-aversion and risk-seeking behaviour as shown in Figure 2.

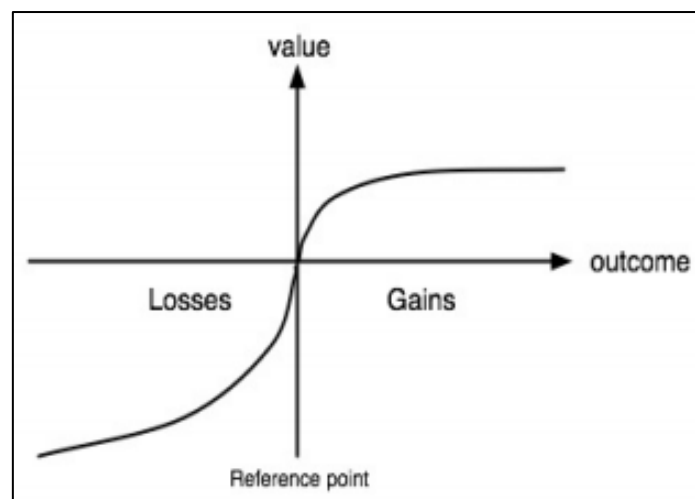


Figure 2
Prospect Theory

The figure shows a reference point dividing the area where a person is at a loss and the area that shows someone is at an advantage. The shape of the curve above the reference point represents risk aversion, while the underline of the reference point represents risk-seeking

behaviour. What is very important from Kahneman and Tversky's study is an experiment that shows that attitudes about the risk-facing gains will be very different from attitudes about the risk-facing losses.

Prospect theory, can be used to see the phenomenon of human behaviour in various fields of life, especially related to the decision-making process which sometimes “doesn't make sense”. This theory is also used to measure (take a measurement perspective) the behaviour of a person or organization in making decisions, as well as the things behind the decision. Prospect theory shows that people will have an irrational tendency to be more reluctant to risk gains than losses. In a loss condition, a person will tend to be more willing to take risks than when the condition is successful. This prospect theory is in line with mental accounting which focuses on how a person should respond and evaluate a situation when there are two or more possible outcomes, especially how to combine the possibilities of these results.

2.2. Behavioural Life-Cycle Theory

Behavioural Life-Cycle Theory (Shefrin and Thaler, 1988) is a theory related to the use of income in one's consumption behaviour. Shefrin and Thaler, categorize a person's wealth into three accounts, namely current income, current assets, and future income. According to this theory, a person treats their wealth as highly dependent on how they view their money as current income, current assets, or future income. Of the three accounts, someone is spending more on current income accounts. Behavioural Life-Cycle Theory emphasizes self-control, mental accounting, and framing. Regarding self-control, Thaler and Shefrin argued that a person should adopt rules that can limit the opportunity to spend money, both from within himself and from outside himself. Regarding mental accounting, Thaler and Shefrin suggest that categorization and evaluation in financial activities are assumed to help impose limits on spending money.

2.3. Financial Literacy, Mental Accounting, Financial Decisions, and Shopping Interest

Financial literacy is an individual's ability to make decisions related to personal financial arrangements. Remund (2010) describes five domains of financial literacy, namely 1) Knowledge of financial concepts; 2) Ability to communicate about financial concepts; 3) Ability to manage personal finances; 4) Ability to make financial decisions; and 5) Confidence to make future financial planning. Financial literacy is closely related to the welfare of an individual. In addition, financial knowledge and skills in managing personal finances are very important in everyday life, as the results of research by Krishna, Rofaida, and Sari (2010) explain that financial literacy helps individuals avoid financial problems. Financial difficulties are not only the result of low income, but financial difficulties can also arise if there is an error in financial management (miss management) such as misuse of credit and the absence of good financial planning.

Financial literacy in Vitt et al. (2000) is defined as the ability to read, analyse, manage and communicate about personal financial conditions that affect material well-being. The definition of financial literacy, in ANZ Bank (2011), is the ability to make informed judgments and make effective decisions about the use and management of money. Financial literacy is a combination of individual abilities, knowledge, attitudes, and individual behaviour related to money. In addition, according to Bhushan & Medury (2013) financial literacy is the ability to

make informed judgments and make effective decisions regarding the use and management of money. Based on these definitions, it can be concluded that financial literacy is an individual's knowledge of finances and an individual's ability to make financial decisions effectively. With the existence of financial literacy, it can help individuals in managing personal financial planning, to be able to maximize the time value of money, and the benefits obtained will be even greater and can improve their standard of living. This is in line with the results of research by Bhushan & Medury (2013) which explains the reasons for the importance of financial literacy, where consumers who have financial literacy can go through difficult financial times. Financial literacy is also directly correlated with positive financial behaviour, such as timely bill payments, loan instalments, and prudent use of credit cards.

There have been many studies related to financial literacy, but the results are still different. Krishna et al. (2010) found that women understand financial literacy better than men. Bhushan and Medury (2013) in their research found that there are significant differences between male and female respondents who already have a salary in terms of financial literacy. Another study was conducted by Taft, Hosein, & Mehrizi (2013) which explained that there was a positive relationship between age and financial literacy and financial wellbeing. Shaari, Hasan, Mohamed, and Sabri (2013) in their research found that there was a negative relationship between student financial literacy and age. Ansong and Gyensare (2012) found that age has a relationship with financial literacy in college students.

The decision-making process by individuals is influenced by many factors such as psychological and social factors, one of which is the mental accounting aspect. The components that build mental accounting according to Thaler (1999) consist of three things: first, the perception of results and making and evaluating decisions, second determining activities for a more specific recording, and third, determining the limit or period of evaluation of the accounts. accounts where, some are evaluated weekly, monthly, or yearly. These three components influence individuals in their attitude and decision-making. Furthermore, Thaler (1999) defines mental accounting as a series of cognitive operations used by individuals or households to organize, evaluate, and maintain the flow of their financial activities. Shefrin and Thaler (1988) state that mental accounting is influenced by a person's knowledge and understanding of finances. In managing finances, someone should pay attention to knowledge and understanding of finances so as not to cause problems in the future.

Interest is a process or sense of interest that is felt by someone in a product and wants to try, use or possibly own the product. In this case, the interest in using a credit card is a feeling of interest and a feeling of happiness to use a payment instrument in the form of a card whose funds are loaned by an agency in places that are willing to accept payments without having to spend cash (Alam, 2006). Indicators of interest in using a credit card according to Fure (2013), consist of 1) interest in the products offered; 2) product availability; and 3) ease of use. Knowledge of finances is very important for an individual so that they do not misunderstand financial decision making (Margaretha and Sari, 2015). In the perspective of decision-making theory, financial literacy is the basis of one's judgment or the logic that is made or the basis for choosing the best from several alternatives. This is reflected in deciding what to choose, including the interest in using a credit card. The results of research conducted by Margaretha and Sari (2015) suggest that financial literacy has a positive and significant effect on the interest

in using a credit card. The same results are also shown in the research of Tsalitsa and Rachmansyah (2016), Anggraeni, Judiarni & Kadafi (2018).

The existence of good financial management is the only way for individuals to use their credit cards wisely so that they avoid troublesome debt, and can prepare savings and investments in the future (Mahastanti & Wiharjo, 2012). Mental accounting is based on decision-making theory, where a decision on a matter is based on considerations or logic that is made or selects several alternatives that must be selected the best from several alternatives. This is reflected in the decision-making which he chooses. Including interest in using a credit card. This is supported by the results of research conducted by Silaya and Persulesy (2018), which show that mental accounting has a negative and significant influence on the interest in using a credit card. The same thing is also shown in the research of Damayanti, et.al (2011).

Based on this description, the hypotheses proposed in this study are as follows:

H1: Financial literacy affects financial decisions

H2: Financial literacy affects shopping interest

H3: Mental accounting affects financial decisions

H4: Mental accounting affects shopping interest

3. Research Method

This study uses explanatory research, which is a method that aims to explain the relationship between variables through statistical testing to obtain an explanation of the relationship between the two variables (Saunders et al., 2007). The variables used in this study consisted of financial literacy and mental accounting for financial decisions and interest in spending. An explanation of the variables studied is as follows:

3.1. Endogenous Variables

Financial Literacy (FL) is an individual's ability to make decisions related to personal financial arrangements. Remund (2010) describes five domains of financial literacy, namely 1) Knowledge of financial concepts; 2) Ability to communicate about financial concepts; 3) Ability to manage personal finances; 4) Ability to make financial decisions; and 5) Confidence to make future financial planning. Financial literacy is closely related to the welfare of an individual. Financial knowledge and skills in managing personal finances are very important in everyday life.

Mental accounting (MA) is a series of cognitive operations used by individuals or households to organize, evaluate, and maintain the flow of their financial activities. In addition, mental accounting is based on decision-making theory, where a decision on a matter is based on the reasoning or logic that is made or choosing some alternatives that must be selected the best from several available alternatives. This is reflected in the decision making which becomes his choice (Thaler & Shefrin, 1988).

3.2. Exogenous Variables

The exogenous variables in this study are financial decisions (MB) and interest in shopping (KK). Shefrin (2000) defines financial decisions as a study that studies how psychological phenomena affect individual financial behaviour. Financial behaviour is an approach that

explains how humans who invest in or deal with finance are influenced by psychological factors. Shopping interest is a process or a feeling of interest that is felt by someone in a product and wants to try, use or possibly own the product (Alam, 2006). The data collection process for all variables is carried out through a questionnaire that is compiled based on the indicators of each variable. The visualization of the research structural model to be analysed is as follows:

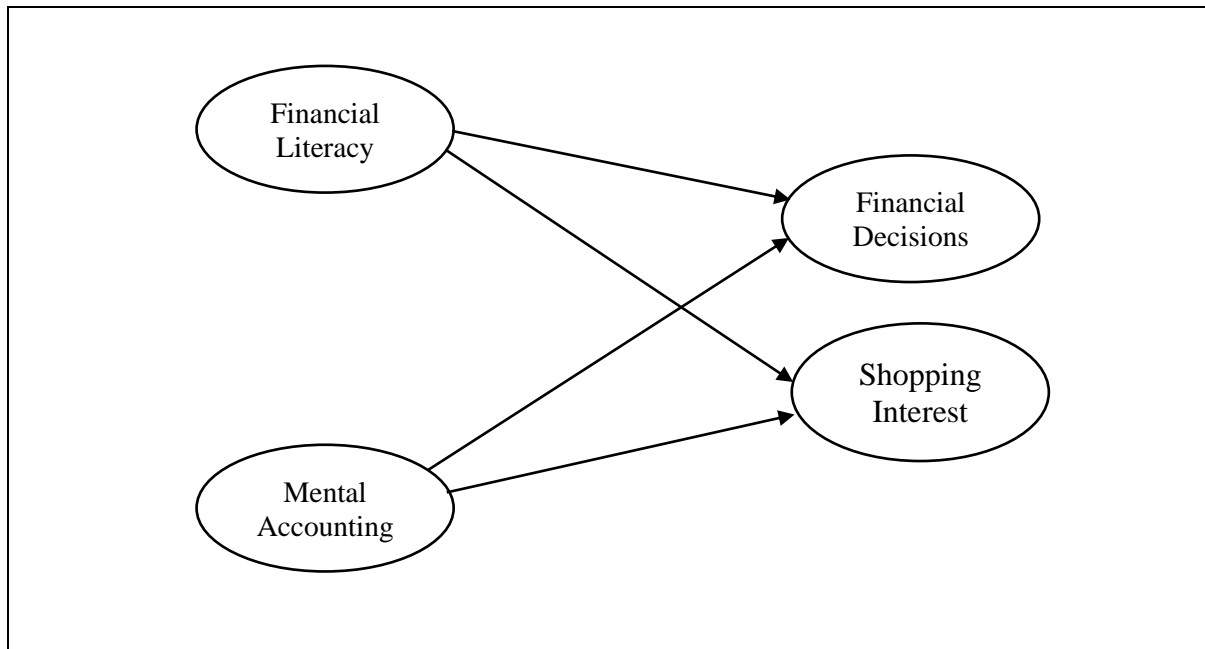


Figure 3
Research Model

Based on this figure, mathematically the research model is written as follows:

$$KK = \rho FL + \rho MA + \varepsilon_1 \quad \dots\dots\dots(4)$$

$$MB = \rho FL + \rho MA + \varepsilon_2 \quad \dots\dots\dots(5)$$

- Whereas:
- KK = Financial literacy
 - MB = Shopping interest
 - FL = Financial Literacy
 - MA = Mental Accounting

Technical processing of data using WRAP-PLS version 7.0. As stated by Latan & Ghazali (2016) that PLS is suitable for research with small samples. The samples in this study are all lecturers and educational staff at STIE Ekuitas Bandung - Indonesia, totalling 58 people. The sample selection was based on a purposive sampling approach with the criteria (a) respondents were permanent employees, (b) respondents had transacted using debit or credit cards, (c) respondents had e-commerce applications.

4. Result and Discussion

To analyse the effect of financial literacy and mental accounting on financial decisions and interest in spending in a covid-19 pandemic situation, the SEM Warp-PLS analysis is used. The results of the goodness of fit test, Table 1 shows that the research model proposed by most of the estimates shows that the model is fit. In addition, the predictive power of the model is concluded to have great predictive power (Latan & Ghozali, 2016), this is as shown by the GoF value of 0.442.

Table 1.
Research Model Fit Test Results

Measures	Result	Criterion	Interpretation
<i>Goodness of Fit Test</i>			
<i>Average Path Coefficient (APC)</i>	0.348, P=0.001	≤ 0.05	Fit
<i>Average R-Square (ARS)</i>	0.304, P=0.003	≤ 0.05	Fit
<i>Average Adjusted R-Square (AARS)</i>	0.278, P=0.006	≤ 0.05	Fit
<i>Average Block VIF (AVIF)</i>	1.040	≤ 3.3	Fit
<i>Average Full Collinearity VIF (AFVIF)</i>	1.464	≤ 3.3	Fit
<i>Goodness Tenenhaus (GoF)</i>	0.442	Small ≥ 0.1 , Medium ≥ 0.25 , Great ≥ 0.36	Great

Source: WarpPLS 7.0 output, 2021

After the model is declared "fit", hypothesis testing can be carried out. The following shows the results of hypothesis testing with Warp-PLS on various relationships between variables as shown in Figure 4 and Table 2.

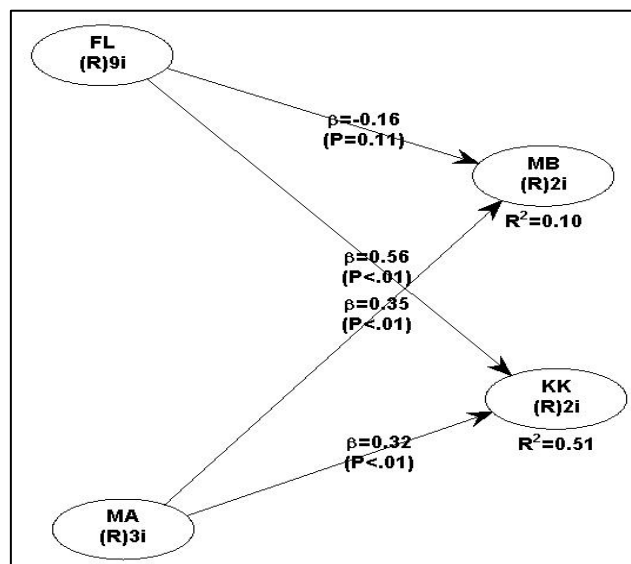


Figure 4
Estimation of the Relationship between Variables

Table 2.
Hypothesis Testing Results

Relationship between Variables	Estimation	<i>P-Value</i>	R ²
FL → KK	0.562	<0.001***	0.513
MA → KK	0.323	0.004***	
FL → MB	-0.160	0.106	0.096
MA → MB	0.348	0.002***	

***) significant at α 1%, 5%, and 10%

In the Covid-19 pandemic situation, it appears that financial literacy influences financial performance with the greatest estimated value than the estimated value of the relationship between other variables. Meanwhile, financial literacy was confirmed to not affect spending interest. This shows that financial literacy in the Covid-19 pandemic situation is the most determining factor for individuals in determining their financial decisions. Based on the results of the respondents' answers, from the three financial decisions that were asked, it appears that the decision to save funds in the COVID-19 pandemic situation is the most preferred decision over investment decisions or making loans. This finding is consistent with the fourth hypothesis which confirms that financial literacy does not affect spending interest using a debit or credit card.

The findings in the first hypothesis provide a very strong argument that a person's understanding of finances, both macro and understanding the benefits and risks of a financial instrument will have an impact on prudent attitude in making financial decisions, especially when faced with situations that are considered unfavourable such as the Covid pandemic situation. -19 that hit Indonesia at this time. Of course, the prudent attitude related to this financial decision is the attitude that individuals choose to avoid financial problems. This is as stated in the research of Krishna, Rofaida, and Sari (2010) which explains that financial literacy helps individuals to avoid financial problems. Bhushan & Medury (2013) explain the reasons for the importance of financial literacy, where consumers who have financial literacy can go through difficult financial times through the right financial decisions to face the situation.

Elsewhere, these findings provide arguments in line with Vitt et al. (2000) who argues that financial literacy is the ability to read, analyse, manage and communicate about personal financial conditions that affect material well-being. Likewise, Remund (2010) explains that financial literacy is closely related to the welfare of an individual because it creates the right financial decision-making.

Apart from being in line with previous research findings, theoretically, these findings reinforce prospect theory which focuses on how real decisions are taken (descriptive approach) based on situations that require a person to make choices when faced with conditions of risk-aversion or risk-seeking behaviour (Tversky & Kahneman, 1980). In line with the findings in the study, the tendency of people to save their money during the Covid-19 pandemic shows that in these situations individuals generally behave at risk aversion. This is very rational, a pandemic that hits the world will trigger economic volatility which has the potential for an economic crisis. Thus, those who understand this situation will think rationally to anticipate various situations that may have an impact on the financial difficulties they will face.

Table 2 also shows that mental accounting affects financial decisions and spending interests, thus the second and fourth hypotheses are confirmed to have empirical support. These findings indicate that mental accounting as a series of cognitive operations used by individuals or households to organize, evaluate, and maintain the flow of their financial activities is one of the attitudes that underlie a person making financial decisions and encouragement to spend. According to Thaler and Shefrin (1988) in behavioural life-cycle theory, this shows how a person treats their wealth depends on how they view their money as current income, current assets, or future income. If he views it as current income, this will be related to spending interest, whereas if it is related to financial decisions, especially saving funds, this is related to his perspective on current assets with a motive to be on guard over the financial situation affected by the current pandemic situation.

5. Conclusion

The results of this study have very clear implications for the prospect theory seen from the aspects of financial decisions and spending interests tested in the Covid-19 pandemic situation. Important findings related to this prospect theory conclude that financial literacy and mental accounting are two aspects that dominate the financial decisions of individuals who generally save their money in a pandemic situation that can trigger economic volatility as a picture of uncertain economic conditions and impact on individual lives. Saving money in the COVID-19 pandemic situation in terms of prospect theory shows that individuals generally behave risk-aversion for their financial problems. In other words, they are not willing to take big risks in an uncertain situation. Meanwhile, related to the behavioural life-cycle theory, shows that such behaviour shows that generally, individuals view money as current assets with precautionary reasons. There is a tendency for people to save funds due to an uncertain situation, this illustrates the need for a change in the company's strategy to continue to run its business. Business trends that seem appropriate to be developed in Indonesia and developing countries are in the staple food sector, health goods/services, and courier services.

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