

THE ANALYSIS OF SAVINGS BEHAVIOR ON BANKS LISTED IN IDX BEFORE COVID-19 ERA AND DURING COVID-19 ERA

ANALISA DARI PERILAKU MENABUNG DI BANK YANG TERDAFTAR DI IDX SEBELUM ERA COVID-19 DAN SAAT ERA COVID-19

By:

Yosepha J. Hartana¹
Frederik G. Worang²
Hizkia H. D. Tasik³

¹²³Management Department Faculty of Economic and Business
Sam Ratulangi University, Manado

Email:

18061102131@student.unsrat.ac.id

frederikworang@gmail.com

hizkiatasik1@gmail.com

Abstract: This study aims to identify the changes in people's saving behavior before Covid-19 outbreak and during Covid-19 outbreak. This is why management is crucial to follow the importance of money because, without management skills, money waste will occur and lead to poverty. One of many ways in money management is savings behavior. Saving has many benefits, one of which is preparing an emergency fund for unusual situations, such as current situation of Indonesia and the world that are experiencing the Covid-19 pandemic. This study uses a quantitative approach. Secondary data collected from the bank's Annual Reports during 2018-2021 is analyzed using the Normality Test and Wilcoxon Test, with the sample of 21 banks listed in the Indonesia Stock Exchange (IDX).

Keywords: savings, savings behavior, deposit, current account, Net Interest Margin, credit given, non-interest income

Abstrak: Penelitian ini bertujuan untuk mengidentifikasi perubahan perilaku menabung masyarakat sebelum wabah Covid-19 dan selama wabah Covid-19. Inilah mengapa manajemen sangat penting untuk mengikuti pentingnya uang karena tanpa keterampilan manajemen, pemborosan uang akan terjadi dan mengarah pada kemiskinan. Salah satu cara dalam pengelolaan uang adalah perilaku menabung. Menabung memiliki banyak manfaat, salah satunya adalah menyiapkan dana darurat untuk situasi yang tidak biasa, seperti situasi Indonesia dan dunia saat ini yang sedang mengalami pandemi Covid-19. Penelitian ini menggunakan pendekatan kuantitatif. Data sekunder yang terkumpul dari Laporan Tahunan bank selama tahun 2018-2021 dianalisis menggunakan Uji Normalitas dan Uji Wilcoxon, dengan sampel sebanyak 21 bank yang terdaftar di Bursa Efek Indonesia (BEI).

Kata Kunci: tabungan, perilaku menabung, deposito, giro, margin bunga bersih, kredit yang diberikan, pendapatan non bunga

INTRODUCTION

Research Background

Indonesia is one of the countries that continue to struggle against Covid-19 with various policies that combine counter measures without sacrificing the economy. As data from the Government of Indonesia through the Committee for Handling Covid-19 and National Economic Recovery (KPCPEN) on April 22, 2021, show the number of daily cases has increased to 6,243 people, cumulatively the number of positive cases has reached more than 1.6 million, and more than 44 thousand of them died. The Indonesian economy itself in 2020 is no less gloomy than what is happening in the world. After the economy grew positively in the first quarter of 2020 by 3

percent, economic growth fell in freefall in the next 3 consecutive quarters of minus 5.3 percent, minus 3.5 percent, and minus 2.2 percent. Cumulatively in 2020, Indonesia will grow at minus 2.1 percent (BPS, 2021). Something to be very grateful for, considering that in 1998, Indonesia's economy fell by minus 13.3 percent.

The Global Financial Crisis and COVID-19 crisis have, among many other things, also affected savings behavior. Changes involve both aggregate household savings ratios, individual propensity to consume and to save, as well as portfolio choice. While the post-GFC and COVID-19-induced very low-interest rates have likely reduced income motives for saving, crises put precautionary savings into the foreground. In the COVID-19 crisis, new attention was directed to savings motives, given the impossibility to consume, resulting in "forced savings". The COVID-19 crisis also raises the question of whether consumption and household savings behavior will change more permanently, and beyond the time of the constraints imposed by the pandemic and related containment measures. Such changes would have important permanent consequences on aggregate demand, structural employment/unemployment, potential growth, the sectoral composition of output, the natural rate of interest, and, as a result, the environment in which fiscal and monetary policies act (Lakshmi et al., 2021).

The financial disruption happened in 2016 when the financial sector issued a breakthrough for financial services in digital form which is Financial Technology (Fintech). Financial services were packaged conveniently, where the use of these digital financial services could replace traditional bank services. Financial Technology (Fintech) could be used only via smartphones and were real-time transactions. The community could save their money and even apply for a loan, also use financial services such as transfer, pay, buy, top-up, and others. Examples of Financial Technology (Fintech) that are often used are OVO, Link Aja, DANA, Shopee Pay, and others. It turns the community, from saving money in the bank to saving money in the Fintech that can be used for daily life. Businesses nowadays, use financial technology products, such as transportation, mini markets, or even roadside traders and it affects the community's savings behavior. As of now, we know that only 35.4% of Generation Z own and use bank ATMs in their financial activities (Lavinda, 2022)

Peers also have several roles in the process of social development, including as friends and sources of physical and emotional support. The role of peers is also to provide opportunities to interact with others, control social behavior, develop skills and interests according to age, and exchange ideas and problems. This means that peers can influence a good habit such as a savings goal for dreams to be achieved together and a bad habit such as overspending and the desire to match the luxurious lifestyle. (Budikuncoroningsih, 2017). Emergencies such as natural disasters, accidental disasters, public health incidents, and social security incidents that occur suddenly, cause or may have the potential to cause serious harm to human life and the environment and require emergency response measures. Since emergencies occur suddenly and have continuous impacts, they often cause serious damage to social order, life, public environment, and resources (Wang and Su, 2020), and have a strong and far-reaching impact on the national economy (Muthuraman and Haziizi, 2020).

The current COVID-19 pandemic become an emergency that has caused severe damage to the global economy. Therefore, economic recovery has become an important goal for governments globally. It is a known fact that economic recovery (during and after a pandemic) is inseparable from consumer consumption stimulation. However, contrary to this fact, people's consumption behaviors during a pandemic usually tend to be disorderly and chaotic. One of the most typical behavior during the COVID-19 pandemic is panic buying (Arafat et al., 2020), which results from individuals' fear of scarcity, losing control, and anxiety exacerbation (Yuen et al., 2020). In this case, individuals cope with threats by purchasing specific products, such as necessities (Sharma et al., 2020). However, to better deal with future uncertainties and risks, individuals may also reserve resources and increase saving behavior. It is observed that individuals facing a pandemic save more than those who are not.

In March 2021, the personal savings rate which reflects the ratio of total personal savings minus disposable income surged to 26.6%. While saving is up, that figure also indicates a short-term slowdown in consumer spending, as people hold onto more of their money. The last time the savings rate was this high was in April 2020, when it hit 33%. While it has slowly eased during the past 12 months, it has remained above 12%, compared with pre-pandemic levels that were below 10%.

Research Objective

The objective of the research is to identify the changes in savings behavior before Covid-19 era and during Covid-19 era.

THEORITICAL FRAMEWORK**Savings**

Savings are important drivers of economic growth and are pre-requisite to the sustainability of pension systems and the international balance of trade. The correlates of differences in saving rates have been well-studied in the literature and include the effect of demographics, differences in income and growth rates, social security systems, tax systems and housing price differentials, and financial markets and liberalization.

Behavior

Behavior is the range of actions and mannerisms made by individuals, organisms, systems, or artificial entities within some environment. These systems can include other systems or organisms as well as the inanimate physical environment. It is the computed response of the system or organism to various stimuli or inputs, whether internal or external, conscious or subconscious, overt or covert, and voluntary or involuntary.

Savings Behavior

Conceptually, it is an individual's savings behavior by the proportion of disposable income in a period that is not consumed but instead invested (or saved) for future consumption or bequest.

Bank

A bank is a financial institution that is licensed to accept checking and savings deposits and make loans. Banks also provide related services such as individual retirement accounts (IRAs), certificates of deposit (CDs), currency exchange, and safe deposit boxes. There are several types of banks including retail banks, commercial or corporate banks, and investment banks.

Importance of Cash

The COVID-19 pandemic drastically changed consumer behavior and payment choice. It is still unclear if these changes are long-term or short-term, but the value of cash and the acceptance of cash as a payment method will not decrease. Cash provides payment and savings options for people with limited or no access to digital money, making it crucial for the inclusion of socially vulnerable citizens such as the elderly or lower-income groups. It is more than just a payment instrument. It allows people to hold money for saving purposes without default risk. It is useful for small person-to-person gifts and payments.

Previous Research

Nathika and Lakshmi (2021) investigated the factors behind what determine household saving behaviour. An individual and a consumer is led by their culture, their social class, their membership groups, their family, their personality, their psychological factors, etc. In my study size of 136 was drawn from the population using the descriptive sampling techniques. The results ultimately reveals that the age of the head of the household, gender, income and expenditure are significantly influencing the saving behavior in the entire study area.

Poan, Permatasari, and Komalasari (2021) aimed to find whether the independent variable, which is financial literacy, attitude towards saving, subjective norms, and family socialization has a significant impact on the mediating variable, which is saving intention during the pandemic situation. Researchers also intrigues to find whether saving intention has a significant impact on the dependent variable which is saving behavior in Indonesia at current pandemic. This research study was conducted using a quantitative method using probability sampling, in which the primary data was collected from the questionnaire filled by 312 Indonesian from age >17 to <51 years old (productive age). The questionnaire was analyzed using validity and reliability test. The validity and reliability test found that all questions (30 questions) are valid and reliable and can be processed further. The hypotheses and research model of this study were tested using Structural Equation Model. The results of the survey show that saving intention is affected by saving behavior. In addition, saving intention is influenced by the attitude towards saving, subjective norm, and family socialization. Moreover, the financial literacy toward saving intention is not related.

Bona (2019) looked at the factors influencing the savings behavior of the iGeneration/Gen Z or post-millennials in Cantilan, Surigao del Sur, Philippines. Factors include financial literacy, parental socialization, peer influence, and self-control. The descriptive survey method was used in the study. A researcher-made questionnaire was used as the main instrument for data collection. Interviews were also conducted to answer clarifications, verify the answers of the respondents, and to solicit additional information. Findings revealed that as to financial

literacy, they strongly agree that they know the importance of saving money and they have a better understanding of how to manage their finances or allowance through budgeting. As to how peer influence affects the savings behavior of the iGeneration or post-millennials; they agree that some of their friends regularly do save money in a savings account and they discuss money management issues, particularly savings. IGeneration has a sense of responsibility. They have the vision of helping the global economy sustainable through helping create jobs or owning a small business. Among the factors that affect savings behavior, parental socialization is the most influential. The post-millennials see their parents as financial role models. Parental teachings on managing money help increase financial awareness. Clearly, if parents could educate their children on personal finance, children would develop good savings habits. In the long run, this will enable them to be financially responsible.

RESEARCH METHOD

Research Approach

This research used quantitative approaches which were able to show the relationship between variables. As explained, this research collected and process the data to determine the saving behavior between 2018-2019 which is the period before Covid-19, and 2020-2021 which is the period during Covid-19, and analyses the changing in Savings Behavior during that time.

Population and Sample

The population in this study was all of the Indonesian citizen's savings on banks listed in IDX and the sample is 21 banks listed on the IDX from 2018 to 2019 as data before Covid-19 and data from 2020 to 2021 as data during Covid-19. This research data is obtained on the IDX website (<https://www.idx.co.id/>).

Data Collection Method

Sources of data used in this study are Primary data and Secondary data.

Data Analysis Method

This research will use, Descriptive statistics, Normality Test, and Paired T-Test if the result from the normality test is normal and use Wilcoxon Test if the result from the normality test is not normal.

RESULT AND DISCUSSION

Result

The data was obtained from financial reports published by the official website of each Bank and from Indonesia Stock Exchange (IDX). The data was collected from the annual report of 21 banks listed in IDX Indonesia. The research period is from 2018-2021. The data is analyzed with the SPSS program.

Table 1. Descriptive Statistics

Descriptive Statistics			
Variables	Mean	Minimum	Maximum
(Before Pandemic)			
Savings	70487356.07	350711	404360261
Deposit	68741382.62	233003	397547188
Current Account	48711890.4286	392267	236397211
Net Interest Margin	4.4495	.05	8.61
Credit Given	29190509.79	0	859570852
Non-Interest Income	8204502.31	64847	78560302
(During Pandemic)			
Savings	82527221.79	537645	494575745
Deposit	80455263.64	917069	413875819
Current Account	62140530.71	847570	378436403
Net Interest Margin	146.8793	.61	6000.00
Credit Given	108921949.93	0	943702693

Source: Data Processing, 2022

According to table 1, it shows that there is a fairly significant difference in the average value of the before pandemic data and during pandemic data, where the average value of savings, deposit, current account, net interest margin, credit is given, and non-interest income during the pandemic is higher than before the pandemic. This indicates that there is an increase in the financial performance of the banks.

Normality Test

In this study, the normality test of the data used is the Kolmogorov- Smirnov statistical test. With a significant level of 0.05, the data is declared normally distributed if the significance is greater than 5%. If the data obtained is normally distributed then the test used in this study is the paired t-test, otherwise, if the data obtained is not normally distributed then the test used in this study is the Wilcoxon test. The result of the normality test will be shown in the following table.

Table 2. Normality Test

Variable	Tests of Normality					
	Kolmogorov – Smirnov		Shapiro - Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.
Savings Before Pandemic	.354	42	.000	.615	42	.000
Savings During Pandemic	.345	42	.000	.603	42	.000
Deposit Before Pandemic	.314	42	.000	.709	42	.000
Deposit During Pandemic	.255	42	.000	.727	42	.000
Current Acc Before Pandemic	.315	42	.000	.688	42	.000
Current Acc During Pandemic	.327	42	.000	.642	42	.000
NIM Before Pandemic	.154	42	.013	.905	42	.002
NIM During Pandemic	.536	42	.000	.143	42	.000
Credit Given Before Pandemic	.434	42	.000	.217	42	.000
Credit Given During Pandemic	.421	42	.000	.456	42	.000
Non-Interest Income Before Pandemic	.325	42	.000	.555	42	.000
Non-Interest Income During Pandemic	.347	42	.000	.433	42	.000

Source: Data Processing, 2022

According to table 3, the significant values obtained for all the variables are 0.00 which is lower than 0.05, which means the variables are not normally distributed, it can be concluded that the Wilcoxon test will be used in this study instead of paired t-test.

Wilcoxon Test

Wilcoxon test is an alternative test for paired t-tests when the data are not normally distributed. The basis for the decision to accept or reject H_0 in the Wilcoxon Signed Rank Test is if the probability (Asymp. sig < 0.05) then the hypothesis is rejected. If the probability (Asymp. sig > 0.05 then the hypothesis is accepted). The result of the Wilcoxon test will be shown in the following table.

Table 3. Wilcoxon Test

Variables	The Result of Wilcoxon Test	
	Significant Value	Information
Savings	0.003	H1 Accepted
Deposit	0.000	H1 Accepted
Current Account	0.001	H1 Accepted
Net Interest Margin	0.037	H1 Accepted
Credit Given	0.002	H1 Accepted
Non-Interest Income	0.001	H1 Accepted

Source: Data Processing, 2022

According to table 4.7, the significant values obtained for savings, deposits, current accounts, net interest margin, credit given, and non-interest income are Sig. < 0,05, which means H1 Accepted and it can be concluded that there is a difference in the average value of savings, deposits, current account, net interest margin, credit given, and non-interest income before and during the pandemic.

Discussion

The result of the analysis conducted shows that there are differences in savings behavior before and during the covid-19 outbreak, this is evidenced by the acquisition of a significant value from the Wilcoxon test for variables such as savings, deposit, current account, net interest margin, credit given, non-interest income met the criteria of the test (H1 Accepted). Based on the results, it can be concluded there are changes in financial performance and saving behaviors in banks listed in IDX. The results of the current research are in line with the research conducted by (Faizah dan, 2021) which are changes in financial performance and saving behaviors on banks listed in IDX. The differences that occur in banks in Indonesia are caused by several things, including Indonesian banks which are not yet effective enough in using assets to generate profits during the pandemic. The results of research conducted by Kritianingsih and Agustina (2022) also show that covid-19 outbreak significantly and positively affects the net interest margin. The increases in this ratio will lead to an increase in net interest income there by increasing profits for banks, thus it tends to be concluded that the higher the net interest margin the higher the profitability (Kritianingsih and Agustina 2022). Besides that, Bank Muamalat Indonesia, which realized the potential for an economic slowdown during the Covid-19 pandemic, chose to implement a strategy of increasing profits carefully, both short-term and long-term strategies. This may be based on the consideration that Covid-19 pandemic outbreak is still ongoing and continues without an estimated time of completion, so the potential risk of financing due to the economic slowdown during the outbreak is still very large (Faizah dan, 2021).

CONCLUSION AND RECOMMENDATION

Conclusion

1. Regarding the Normality Test result of two periods which is 2018-2019 before Covid-19 and 2020-2021 during Covid-19, the variables Savings, Deposit, Current Account, Net Interest Margin, Credit Given, and Non-Interest Income is not normal because the value of all variables is 0,00 which is below 0,05. That is why instead of using paired T-Test, the researcher used Wilcoxon Test to continue with the analysis.
2. Based on the Wilcoxon test, all of the variables have significant changes because the value Sig. < 0,05, which means H1 is accepted. We can conclude that the variable Savings increase during pandemic with mean rank of 23.57 and the result of the analysis is 0.003, Deposit increase during pandemic with mean rank of 24.41 and the result of the analysis is 0.000, Current Account increase during pandemic with mean rank of 22.59 and the result of the analysis is 0.001, Net Interest Margin increase during pandemic with mean rank of 21.21 and the result of the analysis is 0.037, Credit Given increase during pandemic with mean rank of 20.35 and the result of the analysis is 0.002, and Non-Interest Income increase during pandemic with mean rank of 22.66 and the result of the analysis is 0.001.

Recommendation

The recommendations below are given to several parties:

1. In this pandemic situation, Banking Industry needs to change its approach method to the customers, and be more adapted to the situation. Using the prediction of the behavior of customers and analyses of the needs and wants of the customers, the banking industry will be able to anticipate and prevent the problem or threats that exist or could happen such as financial crises.
2. The people or community must consider having emergency savings to anticipate the threats that exist right now and future financial crisis.
3. The next researcher is expected to do more specific research of try to use other savings indicators to find another possible indicator that could influence the customers' savings behavior.

REFERENCES

- Arafat, S. M. Y., Kar, S. K., Menon, V., Kaliamoorthy, C., Mukherjee, S., Alradie-Mohamed, A., Sharma, P., Marthoenis, M., & Kabir, R. (2020). Panic Buying: An Insight from the Content Analysis of Media Reports during COVID-19 Pandemic. *Neurology, Psychiatry, and Brain Research*, 37, 100–103. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7365627/>. Retrieved on: August 12, 2022
- Bona, J. T. C. (2019). The Savings Behavior of the IGeneration. *Religación*, Vol. 4, 122-128. Available at: <https://www.neliti.com/publications/331670/the-savings-behavior-of-the-igeneration#cite>. Retrieved on: October 7, 2022
- Budikuncoroningsih, S. (2017). Pengaruh Teman Sebaya dan Persepsi Pola Asuh Orang Tua Terhadap Agresivitas Siswa di Sekolah Dasar Gugus Sugarda. *Skripsi*. Universitas Muhammadiyah Purweokerto. Available at: <https://repository.ump.ac.id/3562/>. Retrieved on: November 8, 2022
- Faizah, I., & Amrina, D. H. (2021). Kinerja Keuangan Perbankan Konvensional di Indonesia Sebelum dan Selama Masa Pandemi COVID-19. *Optimal: Jurnal Ekonomi dan Kewirausahaan*, Vol. 15, No. 1. Available at: <https://jurnal.unismabekasi.ac.id/index.php/optimal/article/view/3050>. Retrieved on: July 10, 2022
- Kristianingsih., & Agustina, Y. (2022). Dampak COVID-19 Terhadap Harga Saham, Volume Transaksi, Capital Adequacy Ratio, Net Interest Margin, dan Loan to Deposit Ratio Perusahaan Perbankan yang Listed di Bursa Efek Indonesia. *Jurnal Ilmiah Akuntansi Rahmaniyyah*, Vol. 5, No. 2, 164 -183 Available at: <https://jurnal.stier.ac.id/index.php/ak/article/view/225>. Retrieved on: September 9, 2022
- Lavinda. (2022). *Survei KIC: Gen Z Lebih Pilih Pakai E-Wallet Dibandingkan ATM*. Available at: <https://katadata.co.id/lavinda/finansial/61e0ee6ef1b27/survei-kic-gen-z-lebih-pilih-pakai-e-wallet-dibanding-atm-bank>. Retrieved on: November 4, 2022
- Muthuraman, S., & Al Haziazi, M. (2020). COVID-19 Impact on Health, Social & Economy. *International Journal of Nutrition, Pharmacology, Neurological Diseases*, 10. Available at: <https://www.ijnpnd.com/article.asp?issn=2231-0738;year=2020;volume=10;issue=3;spage=159;epage=160;aurlast=Muthuraman>. Retrieved on: July 10, 2022
- Nathika, S., & Lakshmi, K. (2021). A Study Saving Behavior and Choice of Assets of Households. *International Journal of Creative Research Thoughts (IJCRT)*, 9(5). Available at: <https://ijcrt.org/papers/IJCRT2105344.pdf>. Retrieved on: November 19, 2022
- Poan, R., Permatasari, F., & Komalasari, F. (2021). Analysis Factor of Saving Behavior of an Indonesian for Emergency Fund during COVID-19 Pandemic. *International Journal of Family Business Practices*, Vol. 4, No. 1. Available at: <http://e-journal.president.ac.id/presunivojs/index.php/IJFBP/index>. Retrieved on: August 12, 2022
- Sharma, O., Sultan, A. A., Ding, H., & Triggle, C. R. (2020). A Review of the Progress and Challenges of Developing a Vaccine for COVID-19. *Frontiers in Immunology*, 11, Available at: <https://pubmed.ncbi.nlm.nih.gov/33163000/>. Retrieved on: October 5, 2022
- Wang, Q., & Su, M. (2020). A Preliminary Assessment of the Impact of COVID-19 on Environment - A Case Study of China. *The Science of the Total Environment*, 728, Available at: <https://pubmed.ncbi.nlm.nih.gov/32348946/>. Retrieved on: November 17, 2022
- Yuen, K-S., Ye, Z-W., Fung, S-Y, Cheung, P-H. H., Chan, C-P., & Jin, D-Y. (2020). SARS-CoV-2 and COVID-19: The Most Important Research Questions. *Cell Biosci*, 10. Available at: <https://cellandbioscience.biomedcentral.com/articles/10.1186/s13578-020-00404-4#citeas>. Retrieved on: November 4, 2022