

Bank BTPN's Financial Performance Before and After Jenius as a Digital Banking Product

Fajar Pamungkas¹, Sri Suryaningsum², Hari Kusuma Satria N³

Universitas Pembangunan Nasional "Veteran" Yogyakarta^{1,2,3}

Jl. Padjajaran, Condongcatur, 55283, Yogyakarta

Correspondence Email: srisuryaningsum@upnyk.ac.id

ORCID ID: 0000-0002-7991-9727

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ABSTRACT

This study was conducted to test the differences of BTPN's financial performance before and after launching Jenius digital bank products. This study uses CAMELS indicator as the proxy of financial performance. The sample is selected by using purposive sampling method. The criteria used to obtain the sample the annual reports of Bank BTPN before launching Jenius (2013-2015) and after launching Jenius (2017-2019). Based on these criteria, a sample of 3 annual reports of Bank BTPN before launching Jenius and 3 annual financial statements of Bank BTPN after launching Jenius is obtained. The paired t-test method was employed to examine the data by using SPSS25 software. Based on the analysis that has been carried out using the t-test, the results obtained are not the same across all the variables tested. The results of this study indicate that there are significant differences between the NPL and BOPO values of Bank BTPN. Meanwhile, other variables such as CAR, ROE, LDR, and risk-weighted assets according to Bank BTPN before and after launching Jenius digital bank products, there is no significant difference. Jenius needs to be appreciated because it has become the role model for digital education for banking users since it was first launched in 2016.

Keywords: BTPN, CAMELS, Digital Banking, Financial Performance, Jenius.

INTRODUCTION

Technological developments in the banking sector are expected to be able to meet and facilitate people's needs for easier and more practical financial access. Technology was created not only to meet the needs of the community, but also to provide services with a better and modern system in the future. Technology in finance is also known as Financial Technology (Fintech). According to Anggraeni and Widyastuti (2018), Financial Technology (Fintech) is a tangible adjustment of the financial sector to technological developments where transactions that were previously in physical form are now converted to digital. Information Technology (IT) in financial activities or Financial Technology has a very vital role in banking activities so that it becomes an inseparable part of the Bank's operations (Anggraeni & Widyastuti, 2018). The rapid development of fintech and changes in customers' behavior, as well as the increasing needs of customers encourage the banks to improve the e-banking service which lead to the digital banking creation.

Imamah and Safira (2021) in their research shows the results that m-banking has not had a significant impact on the financial performance of banks in its utilization. While the research results from Sudaryanti, Sahroni, and Kurniawati (2018) shows that mobile banking has a negative effect on the financial performance (ROA) of banks. Meanwhile, research from Septiawan (2013) shows that internet banking and bank health have an effect on bank financial performance. In a study conducted by Kurniawan, Wardani, and Lestari (2019), the research shows that the quality of the mobile banking system has a positive effect on the company's net profit.

Based on previous studies, this study aims to determine how the financial performance of banking companies before owning digital bank products and how their financial performance after owning digital bank products. In this study, financial performance uses financial indicators, namely capital (capital adequacy), asset quality, management, earnings (profitability), liquidity, and sensitivity to market risk, which is known as the CAMELS framework. In the early 1970s, the US central bank developed the CAMELS framework to assist in the process of structuring bank audits. Since then, the usage of the CAMELS factor has been used to evaluate the financial health of banks (Sullivan & Widoatmodjo, 2021).

This study chose BTPN as the object of research. This is because BTPN has Jenius, which is the first Indonesian digital bank launched in Indonesia in 2016. Compared to other digital banks, Jenius has better data to analyze, both annual report data before the implementation of their digital bank (Jenius) and annual reports after the implementation of digital bank (Jenius).

This study uses data from Bank BTPN's quarterly reports before owning Jenius digital bank product in 2013-2015 and after owning Jenius digital bank product in 2017-2019.

LITERATURE REVIEW

Financial Innovation

According to Wachter (2006) financial innovation is a change in the market for consumers and business debt. Some examples of financial innovations in the banking sector can be in the form of services that include the provision of ATMs, mobile banking, and internet banking (Nkem & Akunjima, 2017). Financial innovation can also be defined as a broad concept that covers areas including: the use of new financial intermediation

methods, the foundation of new financial institutions, changes in financial legislation or supervision, changes in business processes and changes in services such as new deposit and loan products, derivative instruments, insurance, and investment products (Akhavein, Frame, & White, 2005). Product innovation occurs because of the company's response to changes in demand by the community for the better (Imamah & safira, 2021).

Digital Bank

According to the guidelines for digital branch implementation by commercial banks on the official website of Financial Service Authority (OJK), digital banking service is the banking activity employing electronic means owned by the bank, owned the prospective customer/bank customer, which are carried out individually. Telephone, internet, and cellular service become the main channel in the digital bank implementation. Hence, they are important components for the bank sustainability, which through customer Convenience, and also accessed easily anywhere and everywhere (Sundarraaj & Wu, 2005). Using digital bank, consumers are able to obtain the same service through social media (Mbama & Ezepeue, 2018).

Signal Theory

Signal theory is a theory focused on the reduction of information gap between two parties. Moreover, signal theory is also related to reduce uncertainty (Naveed, Khurshid, & Saqib, 2020). Meanwhile, stock market is always bound with the increasing uncertainty, so the signal theory will be useful as the risk mitigation (Chang, Hong, & Liskovich, 2015). IPO managers send signal to investors to show the company's quality and to understand that the low-quality company trying to copy the signal of other companies eventually will be bankrupt (Naveed et al., 2020).

Financial Performance

Bank financial performance is a part of the overall bank performance. Meanwhile, bank performance is the image of bank achievement in its operational that is associated with financial, marketing, fund collection and distribution, as well as technology and human resource aspects (Imamah & safira, 2021). The financial performance can also be defined as the work ability of management in achieving its work achievement (Suryaningsum & Dewi, 2006). Kawatu, Tumiwa, and Kewo (2020) add that financial performance is an important factor to assess the overall performance of the organization or it can be interpreted as the condition of the organization. Profitability ration can be used to measure financial performance (Keisidou, Sarigiannidis, Maditinos, & Thalassinou, 2013). Financial performance in this study uses company net profit rate, as carried out by Kurniawan et al. (2019).

CAMELS

CAMELS is an abbreviation of six parameters which are capital adequacy (C), asset quality (A), management (M), earnings (E), liquidity (L), and sensitivity to the market risk (S) (Wanke, Azad, & Barros, 2016). CAMELS is an abbreviation from six parameters which are used to measure bank and financial performance (Ledhem & Mekidiche, 2020).

Hypothesis Development

In research carried out by El-Chaanari & El-Abiad (2018), the researchers studied the impact of technology innovation to the financial performance of Lebanese bank in the period of eight years (from 2010-2017). The results of the research suggests that the technology innovation on the automatic teller machine (ATM) and internet banking affect positively to the financial performance of Lebanese bank.

Siddik, Sun, Kabiraj, Shanmugan, and Yanjuan (2016) had also tested the effect of e-banking to the bank performance. The research is conducted using data from 13 banks

in the period of 2003-2013. The result of the study shows that e-banking gives positive effect to the bank ROE in the second year, while in the negative effect was found in the first year of adoption.

Besides the positive impacts, other previous research had found the negative impacts of the bank innovation implementation (e-banking, m-banking, or digital banking). Sudaryanti et al. (2018) analyzed the effect of m-banking usage to the company performance. The research suggests that m-banking negatively impacted ROA.

Based on the description above, consequently the research hypothesis are as follows:

H1: There is a difference of bank performance which is measured by the capital ratio value of Bank BTPN before and after the presence of Jenius.

H2: There is a difference of bank performance which is measured by the asset ratio value of Bank BTPN before and after the presence of Jenius.

H3: There is a difference of bank performance which is measured by the management ratio value of Bank BTPN before and after the presence of Jenius.

H4: There is a difference of bank performance which is measured by the earnings ratio value of Bank BTPN before and after the presence of Jenius.

H5: There is a difference of bank performance which is measured by the liquidity ratio value of Bank BTPN before and after the presence of Jenius.

RESEARCH METHODS

Research Framework

This study is included in the quantitative research. Quantitative research is research with directly measurable data in the forms of description or explanation stated in figure or numeral forms (Suliyanto, 2017). This research tests the financial performance of Bank BTPN before owning the Jenius digital bank and the financial performance of Bank BTPN after owning the Jenius digital bank. This research measures the financial performance based on CAMELS indicators.

The data in this research uses secondary data. Secondary data is obtained from the yearly report of Bank BTPN which is selected as the sample during the period of 2013-2019, except in 2016 because Jenius was launched in the middle of 2016. The data of 2013-2016 is used to measure the financial performance of Bank BTPN before the presence of Jenius, while the data of 2017-2019 is used to measure the financial performance of Bank BTPN after the presence of Jenius.

Population

The population is a generalization consisting of objects or subjects with specific qualities and characteristics, which the researcher determines to be studied and to conclude (Sugiyono, 2008). The population in this research is all of the financial reports Bank BTPN has published.

Sample

The sample of this research is the yearly report of Bank BTPN in the periode of 2013-2015 and 2017-2019. The criteria used in this research are:

1. Yearly report data of Bank BTPN
2. The period after Bank BTPN carried out Digital Banking invest (2013 and after)
3. Yearly report of Bank BTPN before affected by Covid 19.
4. Yearly report of Bank BTPN before owning Jenius (2013-2015) and after owning Jenius (2017-2019)
5. The data of CAR, NPL, BOPO, ROE, LDR values and risk-weighted assets in the yearly report of Bank BTPN in period of 2013-2015 and 2017-2019.

Based on the sample selection criteria above, there are six samples for each CAR, NPL, BOPO, ROE, and risk-weighted assets of BANK BTPN data in the period of 2013-2019.

Research Object

Objects of this research is one of the banks in Indonesia which has digital banking, that is Bank BTPN. This study chose BTPN as the research object. This is based on the fact that BTPN has Jenius which is a pioneer and also the first digital banking launched in Indonesia in 2016. Jenius is still the most popular digital bank and the most used in Indonesia nowadays. So compared to other digital banks, Jenius has better data to be analyzed.

Statistical Test

Statistical Test is carried out using SPSS program. The data analysis was conducted using descriptive statistics, normality test, and paired t-test with related samples. Descriptive statistics is used to provide an overview or description of data (Ghozali, 2018). The normality test was used to determine whether the data used were normally distributed or not. Meanwhile, the paired t-test with related samples was used to determine whether there was a significant difference between net income, NPL, and CAR before and after Bank BTPN had Jenius digital bank product.

Descriptive Statistics

Descriptove statistics is a statistic used to analyze data by describing the raw collected data with drawing conclusion or publicly accepted generalization (Sugiyono, 2008). Using descriptive statistics we will obtain the overview or description about data which is viewed from mean, deviation standard, variations, maximum, minimum, sum, range, kurtosis and skewness (distribution win) (Ghozali, 2018).

Paired t-test

T-test was used to observe the influence among each independent variable to dependent variable. This test used significance level of 0.05. The positive significant effect hypothesis is accepted if the T test results show that the p-value ≤ 0.05 and has a positive regression coefficient. The hypothesis with a significant negative effect is accepted if the T test results show that the p-value ≤ 0.05 and has a negative regression coefficient. The hypothesis is rejected if the T test results show that the p-value ≥ 0.05 .

RESULTS

Descriptive Statistics Analysis

This research employed descriptive statistics analysis which is used to give data and description overview from the determined data sample. The followings are descriptive statistics analysis from this report.

Table 1. Descriptive Statistics of Financial Performance Bank BTPN before owning Jenius

	Descriptive Statistics			
	N	Minimum	Maximum	Std. Deviation
car	3	23.1	23.8	.3786
npl	3	.7	.7	.0000
bopo	3	53	61	4.041
roe	3	14.10	26.20	6.11583
ldr	3	88	97	5.196

sensitifity	3	38860695. 0	55500147. 0	47050734.66 7	8322757.737 1
Valid N (listwise)	3				

Source: Processed data by researcher 2022

Table 2. Descriptive Statistics of Financial Performance Bank BTPN after owning Jenius

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
car1	3	24.1	24.6	24.300	.2646
npl1	3	.4	.5	.433	.0577
bopo1	3	80.10	86.50	83.7000	3.27414
roe1	3	8.20	11.60	9.9000	1.70000
ldr1	3	96.2	163.1	118.500	38.6247
sensitifity1	3	63755973. 0	143582952. 0	91490122.000	45145272.7216
Valid N (listwise)	3				

Source: Processed data by researcher 2022

Paired T-test

Paired T-test aims to test whether there were any difference in two related samples, which were before and after the bank launch with the Jenius digital service by Bank BTPN.

Table 3. Paired T-test Net Income of Bank BTPN before and after owning Jenius digital bank product

Paired Samples Test								
Pair	Mean	Std Dev	Std Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				Low	Up			
Pair 1 car-car1	-9.3	.50	.29	-2.18	.31	-3.21	2	.08
Pair 2 npl-npl1	.27	.05	.03	.12	.41	8.00	2	.01
Pair 3 bopo-bopo1	-26.36	.062	3.58	-41.81	-10.92	-7.34	2	.01
Pair 4 roe-roe1	9.73	7.29	4.21	-8.38	27.85	2.31	2	.14
Pair 5 ldr-ldr1	-24.50	36.30	20.96	-114.69	65.69	-1.16	2	.36
Pair 6 atmr-atmr1	-444393.873	37864870.13	2186129.29	-49622164.46	4962216.46	-2.03	2	.17

Source: Processed data by researcher 2022

DISCUSSION

There is no Significant Difference Between Bank BTPN CAR Value Before and After Owning Jenius Digital Bank Product

From the result of this research, it is observed that there is no significant difference between Bank BTPN CAR value before owning Jenius digital bank product. It can be seen from the paired t-test that showed Sig. 0,085 value which implies that there is no significant difference, because the probability value is greater than the significance level of 0.05. According to the research conducted by Sullivan and Widoatmodjo (2021), bank is considered to perform well and save from bankruptcy if it has a high capital adequacy ratio.

There is a Significant Difference Between Bank BTPN's NPL Value Before and After Owning the Jenius Digital Bank Product

The results of this study show that there is a significant difference between the NPL value of Bank BTPN before having Jenius digital bank product and after having Jenius digital bank product. This can be seen from the paired t-test which shows the value of Sig. 0.015, which means that there is a significant difference, because the probability value is smaller than the significant level of 0.05. This study is in line with the research conducted by Sudaryanti, Sahrani, and Kurniawati (2018), which states that mobile banking has an effect on NPL, then NPL will have a negative impact on ROA of banking companies. The higher the NPL will lead to instability in banking health caused by unstable bank assets, influenced by high non-performing loans (Ledhem & Mekidiche, 2020).

There is a Significant Difference Between Bank BTPN BOPO Value Before and After Owning Jenius Digital Bank Product

The results of this study show that there is a significant difference between the BOPO value of Bank BTPN before having the Jenius digital bank product and after having the Jenius digital bank product. This can be seen from the paired t-test which shows the value of Sig. 0.018, which means that there is a significant difference, because the probability value is smaller than the significant level of 0.05. This is actually inversely proportional to the goal of creating a digital bank which is expected to be able to improve financial performance by reducing operational costs. The results of this study also contradict the research conducted by Prasetyo and Shinta (2022), in which digital banking is able to provide efficient performance by reducing operational costs.

There is no Significant Difference Between Bank BTPN ROE Value Before and After Owning Jenius Digital Bank Product

The results of this study show that there is no significant difference between the ROE value of Bank BTPN before having Jenius digital bank product and after having Jenius digital bank product. This can be viewed from the paired t-test which shows the value of Sig. 0.147, which means that there is no significant difference, because the probability value is greater than the significant level of 0.05. These results are not in line with the conclusions of previous studies by Imamah and safira (2021), Siddik et al. (2016), and El-Chaanari & El-Abiad (2018). In their research, it was concluded that Mobile Banking had a positive effect on ROE.

There is no Significant Difference Between Bank BTPN LDR Value Before and After Owning Jenius Digital Bank Product

The results of this study show that there is no significant difference between the LDR value of Bank BTPN before having Jenius digital bank product and after having Jenius digital bank product. This can be observed from the paired t-test which shows the value of Sig. 0.363, which means that there is no significant difference, because the probability value is greater than the significant level of 0.05.

There is no Significant Difference Between Bank BTPN Risk Weighted Asset Value Before and After Owning Jenius Digital Bank Product

The results of this study show that there is no significant difference between the value of risk-weighted assets according to Bank BTPN before having Jenius digital bank product and after having Jenius digital bank product. This can be seen from the paired t-test which shows the value of Sig. 0.179, which means that there is no significant difference, because the probability value is greater than the significant level of 0.05.

CONCLUSION

This research aims to empirically observe whether there is a difference in the financial performance of Bank BTPN before and after having Jenius digital bank product that is measured using CAMELS indicators. The drawn conclusions are there is no significant difference among the values of CAR, ROES, LDR, and Risk-Weighted Assets of Bank BTPN before and after having Jenius digital bank product. Moreover, there is a significant difference between the value of NPL and the value of NOPO Bank BTPN before and after having Jenius digital bank product. Based on the mentioned conclusions, it is expected to provide benefits for the parties concerned. The suggestions the researcher can provide include: For banking companies that do not own digital banking services, they can consider investing in digital banking in order to improve the performance of banking companies in the long term. Banking companies that already provide digital banking can continue to improve the features and performance of the digital banking that has been provided. Banks can also improve marketing and promotions so that they can demonstrate the advantages of using their digital banking products, hence they are able to attract more customers or retain existing customers. Banking companies that already own digital banking products must always improve their security features and convince the public that their digital banking products are very safe. They also must be responsible if things happen that harm customers because digital banking security is still not good. For researchers who will carry out further research from this research, it is better to do research by examining how digital banking influences the financial performance of the banking company that launched it. Thus, it is clear how the influence of digital banking on financial performance, whether it has a positive, negative effect, or does not have an effect on financial performance.

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DECLARATION OF CONFLICTING INTERESTS

The author declares that there is no conflict of interest

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