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The relationship of guaranteed interest with managerial behavior, customers, and financial performance for banking

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ABSTRACT

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Guaranteed interest is crucial in financial systems, boosting depositor confidence and impacting bank risk. The discussion about guaranteed interest has been thorough, focusing on the reassurance it provides to depositors and the risks it brings. Although it prevents bank running, it can also make depositors too relaxed, potentially causing future crises. Previous research has focused on established guaranteed interest schemes, but there is still a gap in understanding the impact of introducing guaranteed interest during a crisis. This paper explores the relationship between guaranteed interest and managerial behavior, customers, and performance of conventional and Islamic banking. The research design uses existing statistics, with data obtained from the publications of the Financial Services Authority and Bank Indonesia. The analysis uses VAR/VECM models, with results showing that the movement of guaranteed interest rates (both rupiah and foreign currency) has a dominant impact on conventional banking compared to Islamic banking, both on bank managerial behavior, customer behavior, and the performance of the bank itself. Specifically, the movement of the guaranteed interest will trigger the management of conventional banks to increase loan interest, while from the customer side they will ask for a higher yield (interest) on third part funds (TPF). As a result, these two things will lead to a negative outcome on the performance of the bank itself, especially on Net Interest Margin (NIM), Return on Assets (ROA), Operational Expenditure to Operational Income (BOPO), and Loan to Deposit Ratio (LDR). In Islamic banks, the movement of the guaranteed interest also has an impact on the managerial behavior of the bank, customer behavior, and the performance of the bank itself, but the effect of the movement of the guaranteed interest is only small. Most of the growth in credit and deposits, fluctuations in financing margins and returns on deposits and dominant Islamic Financial Performance for Banking indicators are explained by factors other than movements in guaranteed interest rates.

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1. Introduction

The guaranteed interest system can be likened to a “double-edged sword”. From one point of view, it serves as a necessary measure to mitigate systemic risk. However, on the other hand, it can also give rise to new challenges, particularly in the form of moral hazard behavior exhibited by bank management. In the 1970s, Merton (1977) discovered that the implementation of guaranteed interest schemes in a country often led to an increase in risk-taking by bank management. Subsequent studies have yielded conflicting findings on the effectiveness of guaranteed interest schemes worldwide. Many of these studies have highlighted the negative impacts of such schemes, particularly in terms of moral hazard problems (Anginer et al., 2014; Demirgüç-Kunt et al., 2008; Demirgüç-Kunt & Detragiache, 2002; Storbacka, 2019; Wheelock & Wilson, 1994). When a deposit guaranteed scheme is implemented by a country, banks tend to assume greater risks, which can potentially disrupt economic stability in certain cases (Citra et al., 2021). This phenomenon can be attributed to the fact

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that, under a fixed premium insurance contract, the bank is not influenced by the level of risk it undertakes when selecting a project to finance, provided that all projects have the same net present value. Consequently, the bank is inclined to choose the project with the highest risk. Another explanation is that when bank customers have substantial amounts of insured deposits, they are less inclined to closely monitor their bank and may not pay sufficient attention to or even be concerned about their deposits due to the increased risk-taking behavior of bank management (Garcia, 2000). While most scientific studies have discovered adverse effects of guaranteed interest schemes, there are some studies that have found the opposite outcome. One such study, conducted by the European Central Bank (ECB) (Gropp & Vesala, 2021), explicitly demonstrates that guaranteed interest schemes effectively reduce banking risk-taking, thereby promoting economic stability.

The goal of this research is to investigate the alternative perspective of the guaranteed interest scheme. In this case, explore the relationship between the interest rate guaranteed with the managerial behavior of banks, customer behavior, and the performance of banking itself. Specifically, this research will explore whether the increase or decrease in the guaranteed interest will have a positive or negative impact on managerial behavior and bank customers. In addition, this research will also explore the impact of increasing or decreasing guaranteed interest on the performance of conventional and sharia banking.

2. Literature review

The pros and cons of guaranteed interest have been extensively studied. On one side, it gives depositors confidence in the safety of their funds, which reduces the chances of the bank running after a negative event. On the other side, it might make depositors less vigilant in monitoring bank risk-taking activities during non-crisis periods, which could increase the likelihood of future bank failures. Anginer et al. (2014) support the first argument by pointing out that countries with explicit guaranteed interest schemes before the 2007-2008 global financial crisis had minimal depositor-led bank runs, but experienced widespread runs on uninsured wholesale funding. However, they also express concerns about the long-term moral hazard implications of this success. Most empirical research on guaranteed interest has focused on comparing countries with and without existing insurance schemes or comparing insured and uninsured depositors within the same country. Surprisingly, there has been limited research on the effectiveness of introducing guarantee interest during a crisis. This raises the question of whether such interventions can effectively prevent depositors running. Many countries choose to delay implementing guarantee interest until a banking crisis occurs due to the potential risks associated with moral hazard and adverse selection. However, this approach assumes that newly-introduced insurance is as effective in preventing bank runs as the long-standing insurance. It is possible that depositors need time to become aware of and trust explicit guarantee interest schemes. As a result, guarantee interest introduced after a crisis may have limited value compared to the existing insurance.

3. Methodology

The research design uses existing statistics, with data obtained from the publications of the Financial Services Authority, the guaranteed interest Corporation, and Bank Indonesia. The data includes guarantee interest rates, loan interest rates, deposit rates, and banking performance indicators, such as capital adequacy ratio, asset quality, net interest margin, return on assets, operating costs to operating income, and loan to deposit ratio. The data are grouped into two parts, namely conventional and Islamic banks. All data are monthly data, taken from January 2012 to December 2020.

The data analysis method was carried out using a multivariate Vector Auto Regression (VAR) or Vector Error Correction Model (VECM) approach. Systematically, the VAR model used in this study can be written as follows:

$$Y_t = A_0 + A_1 Y_{t-1} + A_2 Y_{t-2} + \dots + A_p Y_{t-p} + \varepsilon_t$$

where Y_t is a vector ($n \times 1$) containing each variable in the VAR, A_0 is the vector ($n \times 1$) intercept, A_1, \dots, A_p is the coefficient matrix ($n \times n$), and ε_t is the vector ($n \times 1$) of the error term.

The VAR model utilized in this research can be expressed in the following manner, following the general format provided above:

$$\begin{aligned} DI_t &= \alpha_{10} + \sum_{i=1}^k \alpha_{11,i} DI_{t-i} + \sum_{i=1}^k \alpha_{12,i} Loan_{i-t} + \sum_{i=1}^k \alpha_{13,i} Dep_{i-t} + \varepsilon_{1,t} \\ Loan_t &= \alpha_{20} + \sum_{i=1}^k \alpha_{21,i} DI_{t-i} + \sum_{i=1}^k \alpha_{22,i} Loan_{i-1} + \sum_{i=1}^k \alpha_{23,i} Dep_{i-t} + \varepsilon_{2,t} \\ Dep_t &= \alpha_{30} + \sum_{i=1}^k \alpha_{31,i} DI_{t-1} + \sum_{i=1}^k \alpha_{32,i} Loan_{i-t} + \sum_{i=1}^k \alpha_{33,i} Dep_{i-t} + \varepsilon_{3,t} \end{aligned}$$

Here DI , $Loan$ and Dep represent Deposit Insurance, Loan and Depreciation, respectively. The VAR form mentioned above is usually used when there is a little variation in the data. If the information does not stay the same at the same level but does not have a connection, then VAR estimation is done by looking at the difference. On the other hand, VECM is a constrained version of VAR due to the presence of non-stationary yet cointegrated data. VECM is commonly known as a VAR model

designed for cointegrated nonstationary series. The VECM specification limits the long-term relationship of endogenous variables to move towards their cointegration relationship, while still permitting short-term dynamics. In this study, the VECM model applied can be expressed systematically as follows:

$$DI_{t-1} = \alpha_{10} + \sum_{i=1}^1 \alpha_{11,i} Loan_{t-1} + \sum_{i=1}^1 \alpha_{12,i} Dep_{i-1} + \varepsilon_{1t}$$

$$Loan_{t-1} = \alpha_{20} + \sum_{i=1}^1 \alpha_{21,i} DI_{t-1} + \sum_{i=1}^1 \alpha_{22,i} Dep_{i-1} + \varepsilon_{2t}$$

$$Dep_{t-1} = \alpha_{30} + \sum_{i=1}^1 \alpha_{31,i} DI_{t-1} + \sum_{i=1}^1 \alpha_{32,i} Loan_{i-1} + \varepsilon_{3t}$$

In utilizing the VAR approach, particularly VECM, three key analytical tools are employed: the Granger Causality Test, Impulse Response Function, and Variance Decomposition. The Causality Test assesses whether an endogenous variable can be treated as exogenous, indicating a lack of understanding of variable influences. The Impulse Response Function examines the dynamic behavior of the VECM model, analyzing how variables respond to shocks (Greene, 2012). Variance Decomposition measures the model's characteristics and assesses the influence of research variables on each other. In this case, we are trying to figure out how foreign money coming into Indonesia affects how unpredictable the Indonesian stock market is (Demirgüç-Kunt & Huizinga, 2004).

3.1 Statistics

Fig. 1 displays research data statistics and presents the development of guaranteed interest rates for the period January 2012 to December 2020. During this period, rupiah guarantee rates tended to decrease from time to time, while foreign currency guarantee interest rates tended to increase. The average interest rate for guaranteeing rupiah deposits is 6.49% with the lowest rate of 4.50% and the highest of 7.75%, while the average interest rate on foreign currency deposit guarantees is 1.31% with the lowest level of 0.75% and the highest 2.25%.

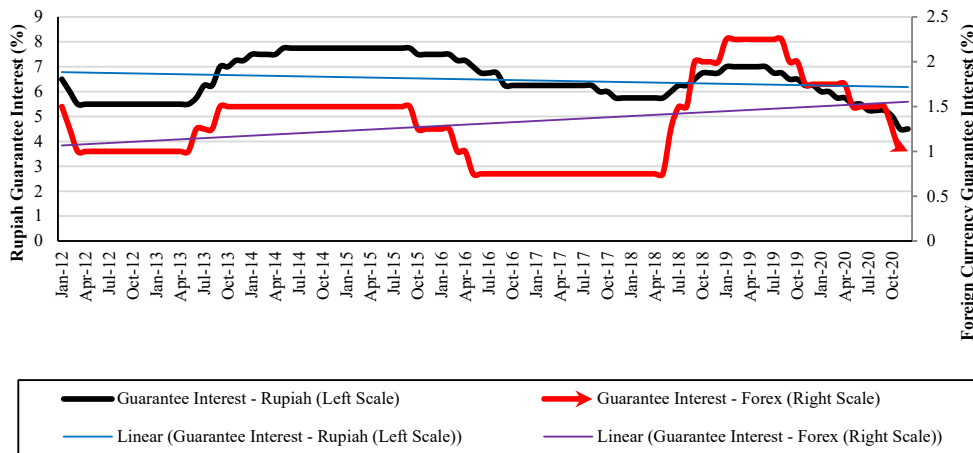


Fig. 1. Development of Guarantee Interest Rate

3.2 Period January 2012 – December 2020

The growth of credit and third-party funds (DPK) for conventional banking averaged around 0.88% and 0.83% per month, while growth in credit and third-party funds for Islamic banking actually decreased from time to time. The average credit growth fell by 3.22%, while the decline in third party funds reached 7.98%. Meanwhile, the average loan interest rate at conventional banks is cheaper than the financing margin at Islamic banks. The average rupiah credit interest for working capital at conventional banks is 11.37% per year, while the average financing margin for working capital at Islamic banks is 15.67%. The average foreign currency loan interest rate for working capital at conventional banks is also cheaper than the margin for foreign currency financing for working capital at Islamic banks (4.08% vs. 7.24%). Likewise, loan interest (rupiah and foreign currency) for investment, which is also cheaper than the financing margin (rupiah and foreign currency), is 11.08% vs. 13.18% and 4.99% vs. 7.75%. However, the financing margin (rupiah and foreign currency) for consumption at Islamic banks is cheaper than consumption credit interest at conventional banks (see Table 1). In line with loan interest or financing margins, the yield on deposits, particularly for demand deposits and time deposits offered by conventional banks is also higher than the yields offered by Islamic banks, except for the return on savings, which is the opposite (see Table 1).

Table 1
The summary of some basic statistics

	N	Conventional Commercial Bank			Sharia Commercial Bank		
		Minimum	Maximum	Average	Minimum	Maximum	Average
Guarantee Interest							
Rupiah (%)	108	4.50	7.75	6.49	4.50	7.75	6.49
Foreign (%)	108	0.75	2.25	1.31	0.75	2.25	1.31
Loan Interest Rate							
Loan (%)	108	-2.25	-2.17	0.88	-5.28	3.29	-3.22
Deposit (%)	108	3.19	3.77	0.83	-6.15	4.24	-7.98
Working Capital							
Rupiah (%)	108	9.21	12.85	11.37	7.33	18.42	15.67
Foreign (%)	108	3.39	4.95	4.08	2.73	12.85	7.24
Investments							
Rupiah (%)	108	8.88	12.40	11.08	9.38	15.94	13.18
Foreign (%)	108	3.71	5.87	4.99	2.61	10.48	7.75
Consumption							
Rupiah (%)	108	10.97	14.14	12.89	10.03	35.61	12.07
Valas (%)	108	2.40	6.80	4.05	0.00	13.00	1.92
Guarantee Interest Rate							
Current Account							
Rupiah (%)	108	1.91	2.46	2.23	0.56	2.62	1.24
Foreign (%)	108	0.32	0.78	0.43	0.00	1.24	0.18
Time Deposit							
Rupiah (%)	108	4.88	9.04	6.94	4.06	10.54	6.50
Foreign (%)	108	1.03	2.37	1.80	0.00	4.70	1.00
Saving							
Rupiah (%)	108	0.86	2.39	1.68	1.15	5.86	2.61
Foreign (%)	108	0.25	0.48	0.34	0.00	3.92	0.38
Financial Performance for							
CAR (%)	108	17.28	24.25	21.28	12.23	32.42	18.46
Assets Quality (%)	108	15.43	22.48	19.42	2.22	10.83	5.39
NIM (%)	108	4.06	6.06	5.07	-4.00	5.60	0.72
ROA (%)	108	1.59	3.70	2.60	-3.51	3.87	0.62
BOPO (%)	108	73.74	91.78	79.95	70.82	136.25	93.37
LDR (%)	108	78.57	96.19	89.16	83.86	142.29	100.20

In terms of performance, the Capital Adequacy Ratio (CAR) of conventional banks (21.28%) is better than Islamic banks (18.46%), but the asset quality of conventional banks is classified as unhealthy (19.42%) and vice versa with the asset quality of Islamic banks (5.39%). Meanwhile, the asset management quality of conventional banking as measured by NIM tends to be better than that of conventional banks (5.07% vs. 0.72%). As a result, the ability of conventional banks to earn profits is better than Islamic banks (ROA = 2.60% vs. 0.62%). The level of liquidity of conventional banks is also better than Islamic banks (LDR = 89.16% vs. 100.20%). Thus, the overall performance of conventional banks is superior to that of Islamic banks.

3.3 Regressions

The correlation analysis results between guaranteed interest rates and banking behavior (Panel A), customer behavior (Panel B), and banking performance (Panel C) are presented in Table 2. Here ATMR represents risk weighted asset.

Table 2
Regression

	Conventional Bank				Islamic Bank			
	Rupiah		Foreign		Rupiah		Foreign	
	Corr.	Adj. R ²	Corr.	Adj. R ²	Corr.	Adj. R ²	Corr.	Adj. R ²
Panel A. Impact on Banking Behavior								
Loan	-0.484***	0.220	0.754***	0.556	-0.295***	0.079	-0.261***	0.059
Loan Interest Rate								
Working Capital	0.921***	0.845	0.646***	0.401	0.559***	0.293	-0.637***	0.389
Investment	0.920***	0.843	0.619***	0.372	0.624***	0.372	-0.509**	0.252
Consumption	0.646***	0.400	0.666***	0.428	0.490***	0.233	-0.301***	0.064
Panel B. Impact on Customer Behavior								
Deposits	0.758***	0.563	0.582***	0.333	0.564***	0.305	-0.257***	0.048
Guarantee Interest								
Current Account	0.939***	0.880	0.797***	0.628	0.265***	0.053	-0.435***	0.182
Time Deposit	0.972***	0.942	0.767***	0.572	0.688***	0.463	-0.290	0.075
Saving	0.643***	0.402	0.807***	0.645	0.645***	0.405	-0.450***	0.195
Panel C. Impact on Financial Performance for Banking								
CAR (%)	0.511***	0.254	0.271***	0.056	0.260***	0.059	0.518***	0.247
RMI/ATMR (%)	-0.544***	0.282	0.395***	0.140	-0.355***	0.118	-0.643***	0.408
NIM (%)	-0.566***	0.314	-0.623***	0.377	0.310***	0.079	0.585***	0.337
ROA (%)	0.711***	0.497	0.337***	0.106	-0.446***	0.191	0.617***	0.375
BOPO (%)	-0.634***	0.391	0.219***	0.030	0.283***	0.071	-0.619***	0.378
LDR (%)	0.811***	0.651	0.804***	0.643	-0.706***	0.490	-0.442***	0.188

Looking at Table 2, the interest rate guaranteed for the rupiah does not have any connection to the growth of rupiah credit, whether it is in conventional or Islamic banks. This proves that the increase in rupiah loans in regular and Islamic banks over time was influenced by more than just the rupiah interest rate. Meanwhile, the foreign exchange guarantee interest rate has a positive and significant association with conventional bank credit growth. The increase (decrease) in the interest rate on foreign currency guarantees only resulted in an increase (decrease) in conventional banking credit of up to 75.4%. Approximately 55.6% of the increase (decrease) in credit in conventional banking was triggered by an increase (decrease) in the interest rate on foreign currency guarantees. This shows that when the foreign currency guarantee interest rate is increased, banks will try to significantly increase foreign currency credit, as shown in Fig. 2.

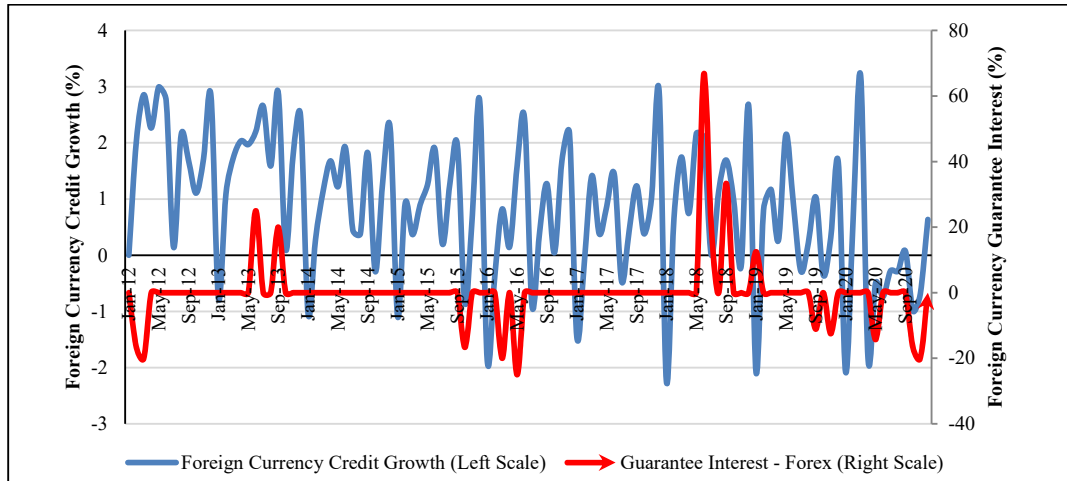


Fig. 2. Credit Growth and Interest Rates for Foreign Currency Guarantees

3.4 Period January 2012 – December 2020

In general, the increase (decrease) in the guaranteed interest rate did not have any impact on credit growth, but the increase (decrease) resulted in an increase (decrease) in loan interest rates, both offered by conventional and Islamic banks. Specifically, an increase (decrease) in the rupiah guarantee interest rate at conventional banks will trigger an increase in rupiah lending rates for working capital (corr. = 0.921), investment (corr. = 0.920), and consumption (corr. = 0.646), while an increase (decrease) the interest rate on foreign currency guarantees will have an impact on increasing (decreasing) interest on foreign currency loans for working capital (corr. = 0.646), investment (corr. = 0.619), and consumption (corr. = 0.666). The increase (decrease) in the rupiah guarantee interest rate at Islamic banks is also positively correlated with the rupiah financing margin, both for working capital (corr. = 0.559), investment (corr. = 0.624), and consumption (corr. = 0.490). When compared between the two banks, the impact of an increase (decrease) in the rupiah guarantee interest rate is the most significant on conventional bank lending rates. Around 40%-85% of the increase (decrease) in lending rates at conventional banks is due to an increase (decrease) in the rupiah guarantee interest rate, while the increase (decrease) in financing margins at Islamic banks can only be explained by around 50%-63%, while the rest is explained by other factors not discussed in this study.

2. Discussion

In conventional banks, the increase (decrease) in the interest rate on foreign currency guarantees also has a significant impact on the increase (decrease) in foreign currency lending rates, both for working capital (corr. = 0.646), investment (corr. = 0.619), and consumption (corr. = 0.666). However, the opposite holds for Islamic banking. The increase (decrease) in the interest rate on foreign currency guarantees had a negative impact on financing margins, both for working capital (corr. = -0.637), investment (corr. = -0.509), and consumption (corr. = -0.301). This shows that when the interest rate for foreign exchange guarantees is increased, Islamic banks will lower their financing margins to their customers. However, the decrease in the financing margin was only around 6%-40% due to an increase in the guaranteed interest rate, while the rest was caused by other factors not discussed in this study (Demirgüç-Kunt et al., 2008; Ennis & Keister, 2009).

In conventional banking, the rupiah guarantee interest rate is positively correlated with the growth of rupiah deposits (corr. = 0.758 with a high coefficient of determination (Adj. R^2 = 0.563). This indicates that an increase (decrease) in guaranteed interest will trigger an increase (decrease) in the amount TPF up to 75.8%. During this observation period, about 56.3% of the increase (decrease) in the number of rupiah TPF was due to an increase (decrease) in guaranteed interest. Likewise, the association between foreign currency guaranteed interest and growth in foreign currency DPK (corr. = 0.582 but the coefficient of determination is relatively low (Adj. R^2 = 0.333). An increase (decrease) in foreign currency guarantee interest will trigger an increase (decrease) in the number of foreign currency deposits, but during this observation period only 33.3% of the

increase (decrease) was caused by an increase (decrease) in guarantee interest (Garcia, 2000; Greene, 2012). In Islamic banking, the movement of the guaranteed interest rate (both rupiah and foreign currency) does not show any significant correlation to the growth of deposits (both rupiah and foreign currency). This shows that the increase (decrease) in the number of deposits in Islamic banking is not caused by an increase (decrease) in the guarantee interest, but is caused by other factors not discussed in this study (Iyer & Puri, 2012; Karas et al., 2013). This condition shows that conventional bank customers tend to be very sensitive to the level of security of their funds, and vice versa with Islamic bank customers (Iyer et al., 2013).

Besides being positively correlated with growth in deposits, the movement of guaranteed interest (both rupiah and foreign currency) in conventional banking is also positively correlated with interest on demand deposits (corr. = 0.939), time deposits (corr. = 0.972) and savings accounts (corr. = 0.643). The coefficient of determination of all three are also classified as high (Adj. $R^2 = 0.402 - 0.797$). While in sharia banking, the increase (decrease) in rupiah guarantee interest only has an impact on increasing the yield on deposits (corr. = 0.688) and the return on savings (corr. = 0.645). However, the coefficient of determination of both is also low (Adj. $R^2 = 0.405 - 0.463$). This is different from the return on foreign currency deposits, where the movement of foreign currency guarantee interest rates in Islamic banks is negatively correlated with the yield on foreign currency demand deposits (corr. = -0.435) and foreign currency savings (corr. = -0.450). An increase (decrease) in interest on foreign currency guarantees in Islamic banks will trigger a decrease (increase) yield on demand deposits and savings. However, the coefficient of determination k both are also classified as very weak (Adj. $R^2 = 0.182 - 0.195$). This means that less than 20% of the increase (decrease) in yields on foreign currency demand deposits and foreign currency savings is due to a decrease (increase) in guaranteed interest. Thus, conventional bank customers tend to be very sensitive to the security of their funds, and vice versa with Islamic bank customers (Kiss et al., 2014; Louviere, 1988).

The relationship between the guaranteed interest rate and banking performance is shown in Table 2, Panel C. As described in the previous statistics section, in general, the performance of conventional banks is superior to the performance of Islamic banks, both in terms of Capital Adequacy Ratio (CAR), Net Interest Margin (NIM), Return on Assets (ROA), Operational Expenditure to Operational Income (BOPO), and Loan to Deposit Ratio (LDR).

In conventional banks, the rupiah guarantee interest rate has a negative and significant correlation with asset management quality (NIM) (corr. = -0.566), but has a positive and significant correlation with profitability (ROA) (corr. = 0.711) and liquidity (LDR) (corr. = 0.811). The negative correlation between guarantee interest and NIM shows that when the guarantee interest increases, the NIM of conventional banking actually decreases (Kiss et al., 2012; Maddala & Lee, 1976). Interestingly, in the midst of increasing guaranteed interest and decreasing NIM, bank management was able to increase ROA and control LDR (Manski & Pepper, 2000; Schmidt & Maddala, 1984). Otherwise, the foreign exchange guaranteed interest rate only has a positive and significant correlation with BOPO (corr. = 0.219) and LDR (corr. = 0.804). The increase (decrease) in interest on foreign currency guarantees triggered an increase in BOPO up to 21.9% with a very weak coefficient of determination (Adj. $R^2 = 0.030$). Meanwhile, the increase (decrease) in foreign currency guarantee interest led to an increase (decrease) in LDR up to 80.4% with a high coefficient of determination (Adj. $R^2 = 0.643$).

In Islamic banks, the rupiah guaranteed interest rate is positively correlated with the NIM (corr. = 0.310) with a very weak coefficient of determination (Adj. $R^2 = 0.079$). In addition, the rupiah guaranteed interest rate is also negatively correlated with ROA (corr. = -0.446; Adj. $R^2 = 0.191$) and also negatively with LDR (corr. = -0.422; Adj. $R^2 = 0.490$). The increase (decrease) in guaranteed interest triggers a decrease (increase) in ROA to 44.6% and triggers a decrease (increase) in LDR to 42.2%, however, the coefficients of both are relatively weak, indicating that the increase (decrease) in both is more influenced by other factors than the decrease (increase) guaranteed interest. Meanwhile, the foreign exchange guaranteed interest rate was positively correlated with CAR (corr. = 0.518; Adj. $R^2 = 0.247$) and NIM (corr. = 0.585; Adj. $R^2 = 0.337$), but negatively correlated with RMA/RWA (corr. = -0.643; Adj. $R^2 = 0.408$), BOPO (corr. = -0.619; Adj. $R^2 = 0.378$), and LDR (corr. = -0.442; Adj. $R^2 = 0.188$). The coefficient of determination of each of these performance indicators is also relatively weak, which indicates that the overall performance of Islamic banks is not good, but the poor performance is only slightly caused by the movement of guarantee interest (Osili & Paulson, 2014; Soledad et al., 2001). The poor performance was more dominantly caused by other factors, apart from the movement of the guarantee interest (Nier & Baumann, 2006).

3.1 Implications

The study's findings suggest important considerations for policymakers, banks, and researchers. Policymakers may need to set different guaranteed interest rates for conventional and Islamic banks, as the impacts observed vary between them. For conventional banks, careful setting of guaranteed interest rates is crucial to avoid potential negative effects on performance metrics like Net Interest Margin (NIM) and Return on Assets (ROA). Islamic banks, while less affected, should remain watchful of any consequences from guaranteed interest rate changes.

3.2 Suggestions for Further Research

To deepen our understanding, future research could compare the impacts of guaranteed interest rate movements on specific banking products, conduct behavioral studies to explore underlying reasons for observed responses, investigate long-term effects on banking stability, and extend the analysis to a cross-country level. Additionally, qualitative research methods could be employed to capture nuanced insights from banking professionals and customers. Exploring the interaction between guaranteed interest rates and broader economic factors, as well as studying moral hazard and adverse selection behaviors, would further contribute to the knowledge in this area.

3. Conclusion

After looking at the data analysis, we can highlight that the movement of the guaranteed interest (both rupiah and foreign currency) has a dominant impact on conventional banking compared to Islamic banking, both on bank managerial behavior, customer behavior, and banking performance itself. Specifically, the movement of guaranteed interest rates (both rupiah and foreign currency) will trigger conventional bank management to increase loan interest rates, while from the customer's perspective they will demand higher yields (interest) on deposits. As a result, these two things will lead to a negative outcome on the performance of the bank itself, especially on NIM, ROA, BOPO, and LDR. The movement of the guaranteed interest has the potential to cause moral hazard behavior or adverse selection in conventional banks, but this study does not focus on this.

In contrast to conventional banks, the movement of guaranteed interest rates also has an impact on the managerial behavior of banks, customers, and the performance of Islamic banking. However, only a small effect is caused by the movement of the guaranteed interest. Most of the growth in credit and deposits, fluctuations in financing margins and returns on deposits and dominant Islamic Financial Performance for Banking indicators are explained by factors other than movements in guaranteed interest rates. Thus, the possibility of moral hazard or adverse selection from the movement of guaranteed interest in Islamic banks is lower than in conventional banks.

An important implication for policy making is that it may be necessary to set a different guaranteed interest rate between conventional and Islamic banks, because the determination of the same guaranteed interest does not have the same effect for both. Specifically, for conventional banks, the guaranteed interest must be set prudently, because setting a guaranteed interest that is too high has the potential to cause moral hazard or adverse selection behavior from bank management, while setting interest rates that are too low can trigger fear in customers.

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