

# Mitigation of Displaced Commercial Risk of Islamic Bank in Indonesia

Gista Rismayani\*, Ulfa Luthfia Nanda

Department of Accounting  
Universitas Perjuangan Tasikmalaya  
Tasikmalaya, Indonesia  
\*gistarismayani@unper.ac.id

**Abstract**—The purpose of this paper is to identify the effect of third-party funds on displaced commercial risk. It was do to mitigates DCR in Islamic banks. This research used a quantitative method with an associative approach that is intended to determine the relationship between variables or the influence between two or more variables. Data analysis techniques used descriptive statistics and hypothesis test by simple linear analysis for panel data. The results showed that third party funds had a significant positive effect on displaced commercial risk. Implication of the paper is Islamic Banks will do mitigates to resolve the problem rate risk return by measure of DCR and they can make a strategy to avoid the decrease of rate return to depositor.

**Keywords:** *displaced commercial risk, third party fund, Islamic bank*

## I. INTRODUCTION

Islamic bank in Indonesia has been developing for more than two decades. This began with the establishment of Bank Muamalat since 1992. In 1998, Indonesia began to adjusted UU No. 10 1998 which states that Indonesia applies a dual banking system. That was the conventional banking system and Islamic bank system [1]. The main difference between the two systems is the instrument used to provides return to depositors. Conventional banking uses the interest system while Islamic bank, returns are based on the profit-sharing ratio for gains or losses based on the contract.

The difference in the two instruments used gives a difference in conventional bank returns with Islamic banks. These differences can cause risks for Islamic banks. The difference in risk is contained on the Surat Edaran Otoritas Jasa Keuangan No. 10/SEOJK.03/2014 Tentang Penilaian Tingkat Kesehatan Bank Umum Syariah dan Unit Usaha Syariah [2]. The risk is the rate return risk which the risk occurs due to changes in the rate of return paid by the Bank to depositors, due to changes in the rate of return received by the Bank from the distribution of funds, which can affect the behaviour of customers of third-party bank funds. When depositors are more interested in making a profit, then there is a risk that Islamic banks will lose a number of funds from depositors to get a higher return at conventional banks.

The consequence of yield risk is that Islamic banks face displaced commercial risk (DCR). It occurs when the bank has

operated according to sharia principles, but bank was unable compete to pay returns to depositors compared to returns paid by conventional banks as competitors [3]. It could give effect depositors withdraw funds or keep them in Islamic banks. In addition, the rate of return of Islamic banks is a determinant factor for customers in saving funds in Islamic banks [4]. That was indicates that Islamic bank customers make returns as a consideration for choosing Islamic banks or conventional banks to save their funds. The desire of customers to save in Islamic banks is triggered by the profit-sharing factor. This is supported by Wahab which revealed that the level of profit sharing of Islamic banks has a strong relationship with the interests of customers to save in Islamic banks [5]. Thus, the management of Islamic banks must be able to compete with competitors to provides returns for customers.

Based on Islamic bank statistics data, Islamic bank growth increased rapidly in 2004. This was indicated by the growth in total assets in 2004 reached 95% while total deposits were 107%. But in 2005-2017 the growth of Islamic banks began to slow down. In 2015 the growth of Islamic bank in terms of total assets and total deposits was only 6%. In 2016 it increased to 21% and again decreased to 20% in 2017 [6].

The implications of decreased asset and third-party fund growth would inhibit the growth of Islamic bank [7]. The implementation of dual banking system causes Islamic bank growth slowly. In addition, the country of Indonesia is a country that has a variety of religions and cultures so that the wish of the public to save a number of funds in Islamic banks is only based on religious factors but also the returns obtained. The other opinion showed that depositors of both Islamic banks and conventional banks are still fully driven by considerations of seeking profit in their decision to choose a banking service system [8].

Sharia Enterprise Theory contains the values of justice, truth, honesty, trustworthiness, and accountability. The accountability is the responsibility to Allah Ta'ala [9]. Sharia enterprise theory explains that the basis for every conceptualization is Allah Ta'ala as the Creator and Sole Owner of all the resources in the world. While the resources owned by the stakeholders in principle are mandate from Allah Ta'ala, they were be responsibility to used according to what has been determined. The implication in this study is that the behaviour of depositors is expected to place religious factors in

choosing Islamic bank as the right choice in carrying out the mandate.

Third party funds are a source of Islamic bank funds which has the largest proportion of Islamic bank so that, the total funding owned by Islamic banks depends on the amount of funds deposited by depositors. The large number of deposits owned by Islamic banks illustrates the interest of people who want to invest in Islamic banks. When the return generated for depositors is low, there is a risk of transfer of funds from Islamic banks to conventional banks [10]. The effort to mitigate the risk of return is to maximize third-party funds in the form of productive assets to increase income [11]. The higher the income received by Islamic banks from the allocation of third-party funds, it will increase the equivalent rate of return and minimize the occurrence of displaced commercial risk. So, it can be concluded, if the number of deposits increases, the occurrence of displaced commercial risk will be decrease. And also, if the number of deposits is decrease, then the occurrence of displaced commercial risk was increase. Third party fund can affect the existence of displaced commercial risk [12]. Revealed a similar thing that third-party fund affects displaced commercial risk [13]. The condition of third-party fund has an influence on displaced commercial risk [14]. The other opinion, that third party fund has a negative effect on displaced commercial risk in Islamic bank in Indonesia [15]. Based on the description above, the hypothesis proposed is third party fund has a negative effect on displaced commercial risk in Islamic bank in Indonesia.

Find out the level of DCR, the benefits can be felt from this study, the Islamic bank practitioners are able to identify factors that influence the risk of withdraw customers to get a higher return as a mitigation of the occurrence of DCR risk in Islamic banks in Indonesia and also it can be a consideration for Islamic banks to determinant the right strategy to maintain depositors is the goal of this research.

**II. METHOD**

*A. Method, Sampling, and Data Analysis*

The research method used quantitative research with association approach.

The samples of this research were 10 Islamic banks in Indonesia (BNI Syariah, Bank Muamalat Indonesia, BRI Syariah, Bank Mandiri Syariah, Maybank Syariah, Bukopin Syariah, Bank Mega Syariah, Bank Panin Syariah, Victoria Syariah, BCA Syariah). The data analysis used linear simple regression.

*B. Measurement of Variables*

Displaced Commercial Risk (DCR) is the risk of Islamic banks in the face of a condition where an increase in the benchmark level will lead to expectations of higher returns by investment account holders. DCR is measured in percentage units (%). Farooq calculated DCR using the steps and formula as follows:

- Step 1: Calculate w which is the relationship between the profit-sharing movement and the interest rate.

$$R_i = w \cdot (R_m) + (1 - w) \cdot R_A$$

Information:

- R<sub>i</sub>= rate of Islamic return
- R<sub>m</sub>= market benchmark
- R<sub>A</sub>= return on asset

- Step 2: Calculate the rate of return i.e. return to shareholders (RE) in accordance with scenario 1 (RE0) and scenario 3 (RE2):

$$RE_0 = RA - SP \text{ and}$$

$$RE_2 = (RA - SP) + \frac{DI}{K} \cdot w (RA - SP - R_m)$$

Information:

- SP= % mudharib's share (1- investment account holder's share)
- DI= profit sharing investment account's fund
- K= shareholder's fund

- Step 3: Calculate unexpected losses, Unexpected Loses to Shareholders (UL) according to scenario 1 (UL0) and scenario 3 (UL2):

UL0 = standard deviation RE0 and

UL2 = standard deviation of RE2

Step 4: Calculate DCR

$$DCR = UL_2 - UL_0 \text{ [16].}$$

**III. RESULTS**

Based on the results of processing statistical data of a simple regression analysis, the normality test can be seen in the table below:

TABLE I. NORMALITY TEST RESULTS

Variable	Normality test results J-B
Dependent: DCR	Series: Standardized Residuals Observation= 47
Independent	J-B= 2,938557
LN_DPK	P-Value= 0,230091

Source: Output EViews

Based on table 1 above it is known that the p-value is 0.230091. When compared with α = 0.05, the probability value is greater. So, the prob.> Alpha (α) is 0.230091. Thus, it can be concluded that in this study residuals are normally distributed.

Based on the results of processing statistical data of a simple regression analysis, the Heteroscedasticity test can be seen in the table below:

TABLE II. HETEROCEDASTICITY TEST

Variable	ARCH Test
Dependent: DCR	Observed= 47
Independent:	
LN_DPK	P-Value= 0,2541

Source: Output EViews

Based on table 2 above shows that the p-value is 0.2541. When compared with  $\alpha = 0.05$ , the probability value is greater. So, the prob.> Alpha ( $\alpha$ ) is  $0.2541 > 0.05$ . Thus, it can be concluded that in this study heteroscedasticity did not occur.

Based on the results of processing statistical data of a simple regression analysis, the autocorrelation test can be seen in the table below:

TABLE III. AUTOCORRELATION TEST RESULT

Variable	DW Test results
Dependent: DCR	Observation= 47 Durbin-Watson Stat= 1,819196
Independent:	
LN_DPK	

Source: Output EViews

Table 3 above shows the value of Durbin Watson of 1.5739. In the Durbin-Watson table with  $n = 51$ ,  $k = 1$ , the lower limit value (dL) = 1.4872 and the upper limit value (du) = 1.5739 are obtained. A 4-dU value of  $4 - 1,5739 = 2.4261$ . Thus, the DW value lies between dU and 4-dU, which is  $1.5739 < 1.819196 < 2.4261$ , so it can be concluded that there is no autocorrelation.

Based on the results of processing statistical data of a simple regression analysis, the partial test can be seen in the table below

TABLE IV. PARTIAL TEST RESULT

Variable	Coefficient	t-statistics	Prob.
Dependent: DCR	-7,726039		
Independent: LN_Third Party Fund	0,306862	2,836505	0,006

Source: Output EViews 9

The effects of variable third-party funds on displaced commercial risk results in a P-Value to 0.006. If the value of  $\alpha = 0.05$ , then,  $P\text{-Value} = 0.006 < 0.05$ , which means, variable third-party funds have a significantly positive effect on displaced commercial risk. This is different from the hypothesis which suggests that there is a negative effect. Thus, the hypothesis proposed in this study which states that third party funds have a negative and significant effect on displaced commercial risk is rejected.

**IV. DISCUSSION**

The result research showed that the third-party fund has effect positive significantly on DCR. This research not supported hypothesis. The research is not supported Solissa and Arshad et al [15]. This research explained the increase third party fund would be increase DCR. So that, if Islamic bank saving third party fund from the rational depositor, it could get the displaced commercial risk (depositors moved his/her fund to conventional bank).

The rate of profit sharing in Islamic banks significantly positive effect to the amount of deposits, it means that the

decision of depositors of Islamic banks to choose Islamic and conventional bank service systems is driven by considerations get profit [8]. Thus, the more funds raised from rational customers, the risk of customers moves from Islamic banks to conventional banks will be increased. The interest rate is one of factor the reason for rational customer consideration to transferred a number of funds. As mentioned, a changes of interest rates will lead to indications of potential interest rest risk [8].

Islamic banks offer a profit-sharing system so that it is very beneficial for business practices. Thus, rational customers make profit as a motive for financing from Islamic banks. Although Indonesia is one of the countries with the largest Muslim population, in reality the religious factor did not significantly affect financing decisions in Islamic banks. It means, customers are more rational than emotional [17].

In addition, third party funds growth in Islamic banks were increased, but slowed. It was evidenced in 2004 the growth of third-party funds reached 107% but in 2015 growth declined to 6%, until 2017 third party fund growth reached 20% [6]. interest rate movements, causes indications of outflows and incoming funds into Islamic banks (interest rate risk). Even though the two systems of Islamic banks and conventional banks are different, the performance of the two systems can affects each other [8].

**V. CONCLUSION**

Third party funds have a significantly positive effect on displaced commercial risk. The higher the rational customer at the Islamic bank, the higher the risk of customer movement. Islamic banks need an identity as an Islamic bank by applying rules that are adapted to the concepts in the Al-Quran and As-Sunnah.

**ACKNOWLEDGMENT**

The research has been funded by Kemenristekdikti.

**REFERENCES**

- [1] Undang-undang Nomor 21 tahun 2008 Tentang Perbankan Syariah
- [2] Surat Edaran Otoritas Jasa Keuangan No. 10/SEOJK.03/2014 Tentang Penilaian Tingkat Kesehatan Bank Umum Syariah dan Unit Usaha Syariah
- [3] Z. Zainol and S. Kassim, "An analysis of Islamic Banks' Exposure to Rate of Return Risk," Journal of economic Cooperation and Development, vol. 31, no. 1, pp. 59-84, 2010.
- [4] R. Rahmatur and S. Septarini, "Rahmatur dan Septarini. 2016. "Dampak Faktor Pemicu Terjadinya Displaced Commercial Risk Terhadap Keputusan Nasabah Untuk Tetap Menjadi Nasabah Bank Syariah di Surabaya," Jurnal Ekonomi Syariah Teori dan Terapan, vol. 3, no. 9, pp. 728-774, 2016.
- [5] W. Wahab, "Pengaruh Tingkat Bagi Hasil terhadap Minat Menabung di Bank Syariah," JEBI (Jurnal Ekonomi Bisnis dan Islam), vol. 1, no. 2, 2016.
- [6] Statistik Perbankan Syariah Otoritas Jasa Keuangan (www.ojk.go.id)
- [7] A. Affandi and L. Tamanni, "Monetary Policy Shocks And Islamic Banks Deposit in Indonesian Dual Banking System After The Financial Crisis," Jurnal Keuangan dan Perbankan, vol. 14, no. 3, pp. 491-500, 2010.

- [8] M. Musri and R. Rama, "Analisis Perilaku Depositor Perbankan di Indonesia (Studi Kasus Bank Syariah dan Bank Konvensional)," *The Journal of Tauhidinomics*, vol. 1, no. 1, pp. 1-34, 2015.
- [9] I. Triyuwono, "Sinergi Oposisi Biner: Formulasi Tujuan Dasar Laporan Keuangan Akuntansi Syariah," *Iqtisad Journal of Islamic Economics*, vol. 4, no. 1, pp. 29-90, 2003.
- [10] K. Dzakiyah, Pengaruh Faktor Pemicu Displaced Commercial Risk Terhadap Keputusan Anggota untuk Tetap Menjadi Anggota di BMT UGT Sidogiri Cabang Surabaya. Thesis. Universitas Islam Negeri Sunan Ampel Surabaya, 2018.
- [11] D.N. Solissa, "Profit Equalization Reserve (PER) Sebagai Upaya Mitigasi Risiko Imbal Hasil Perbankan Syari'ah (Suatu Kajian dengan Pendekatan Maqasid asy-Syari'ah)," *Az Zarqa*, vol. 9, no. 1, 2017.
- [12] H. Hasanah, "Displaced Commercial Risk: Empirical Analysis on the Competition between Conventional and Islamic Banking Systems in Indonesia," *Advances in Natural and Applied Science*, vol. 7, no. 3, pp. 292-299, 2013.
- [13] R.A. Kasri, "Displaced Commercial Risk in Islamic Banking: The Case of Indonesia," *Proceedings of the 2nd Islamic Conference*, 2007.
- [14] H. Daher, "The Unique Risk Exposures of Islamic Bank's Capital Buffers: A Dynamic Panel Data Analysis," *Journal Of International Financial Market, Institution & Money*, pp. 36-52, 2015.
- [15] N.C. Arshad, "Determinants of Displaced Commercial Risk in Islamic Banking Institutions: Malaysia Evidence," *Trikonomika*, vol. 13, no. 2, 2014.
- [16] M.O. Farooq, "Displaced Commercial Risk (DCR) and Value of Alpha ( $\alpha$ ) for Islamic Banks in Bahrain/GCC," Paper for Gulf Research Council Conference July 11-14, 2012.
- [17] W. Wibowo and H. Hardiwinoto, "Pemahaman Rasional Pembiayaan Syariah, Relegiusitas, Primordialisme Pengusaha dan Pengaruhnya terhadap Sikap Pengusaha dalam memilih Pembiayaan di Bank Syariah," *BENEFIT Jurnal Manajemen dan Bisnis*, vol. 19, no. 1, pp. 45-52, 2015.