---------- Forwarded message ---------
From: **Nisful Laila** <nisful.laila@gmail.com>
Date: Sun, Apr 7, 2019 at 12:02 AM
Subject: Document from nisful laila
To: GATR Team <gcbsscommittee@gmail.com>

Dear Ms Flora,
please find my revised paper as requested.

thank you.
Regards,

TEMPLATE OF a PAPER to ESI 2019 June - with the EU funding fix.doc

--
Nisful Laila, SE., M.Com.

Wakil Dekan 3 Fakultas Ekonomi dan Bisnis
Vice Dean for Partnership and Research
Universitas Airlangga
Jl. Airlangga 4 Surabaya, Indonesia
Phone : +62 31 5033 642
Fax : +62 31 5026 288
Mobile : +62 81233 9933 52
Email : nisful.laila@feb.unair.ac.id
nisful.laila@gmail.com
Website : www.feb.unair.ac.id

TEMPLATE OF a PAPER to ESI 2019 June - with the EU funding fix.doc
1.1MB

ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES
ISSN 2345-0282 (online) http://jssidoi.org/jesi/
2019 Volume 6 Number 4 (June)
http://doi.org/10.9770/jesi.2019.6.4(..)

Publisher
http://jssidoi.org/esc/home

Efficient Portofolio Composition of Indonesian Islamic Bank Financing

Nisful Laila[1], Karina Ayu Saraswati[2], Himmatul Kholidah[3,4]

[1,2]Faculty of Economics and Business, Universitas Airlangga , Indonesia.
[3]Faculty of Vocational Studies, Universitas Airlangga, Indonesia
[4]Study Program of Doctoral Islamic Economic Science, Faculty of Economics and Business, Universitas Airlangga, Indonesia

E-mails:[1]nisful.laila@gmail.com; [2]karina.ayu-13@feb.unair.id; [3,4]himmatul.kh@gmail.com

Received ; accepted….; published…..

Abstract. The purpose of this research is to determine the composition of an efficient portfolio in the financing of ten Islamic banks. The theory of efficient portfolio by Markowitz is a modern portfolio theory used for analyzing the combination of various investment instruments to form efficient portfolio points at efficient frontier lines. The efficient composition portfolio measurement of Islamic bank in this study uses return, standard deviation, variance-covariance, correlation coefficient, and variation coefficient of investment instruments between 2011 and 2015. This study uses quantitative research achieved using Microsoft Excel. The result of this research shows that the average composition of an efficient portfolio of each Islamic bank is as follows: 48.62% for Mudharabah-Musyarakah, 41.63% for Murabahah, 8.03% for Ijarah, and 8.31% for Istishna. It can be seen that Mudharabah-Musyarakah and Murabahah are more dominant than the other financing types.

Keywords: Return, Standard Deviation, Efficient Portfolio, Efficient Frontier, Indonesia.

JEL Classifications: Z23. Z29

1. Introduction

Financing is an important function of all financial institutions and can be used as a source of income for Islamic banks. In performing its functions, it is important that Islamic banks pay attention to the ratios that affect the quality of financing. As quoted from the Islamic Finance Outlook in 2015, the Financing to Deposit Ratio (FDR) for Islamic banks remained above 96%, when compared to conventional banks which remained between 60 to 90%. Further, of the third-party funds received by Islamic banks, 96% of it was channeled for financing. However, the various financing issues faced by Islamic banks are largely caused by the Non-Performing Financing (NPF) ratio, which typically sits between 2% and 4%.

According to Obaidullah (2015), there are three types of Islamic financing: equity based financing, debt-based financing and service-based financing. Table 1 demonstrates that the *Murabahah* bank is the most preferred Islamic bank in Indonesia.

ISSN 2345-0282 (online) http://jssidoi.org/jesi/
2019 Volume 6 Number 4 (June)
http://doi.org/10.9770/jesi.2019.6.4(..)

The provision of finance is a banks' most important function when it comes to earning profit, however, financing also exposes banks to different types of risk. In order to reduce the risks associated with financing, Islamic banks need to employ a meaningful diversification regime. Banks need to establish a wide-ranging portfolio, through the selection of a combination of assets so as to reduce risk without reducing the return, or the rate of return, received.

Table 1. Islamic Financing Instrument Portion in Islamic Banking Industry
(In percentage)

Year	Mudharabah	Musyarakah	Murabahah	Ijarah	Istishna
2011	18.46	9.96	54.90	0.31	3.73
2012	18.75	8.15	59.66	0.25	4.97
2013	21.65	7.39	60	0.31	5.69
2014	24.74	7.42	59.23	0.33	4.94
2015	27.74	7.32	57.96	0.38	4.49

Source: Statistics of the Financial Services Authority in December 2015, taken from www.ojk.go.id, reprocessed

As financial institutions, Islamic banks have the power to determine the amount of finance provided in accordance with the risk associated with each transaction, whilst complying with the rules set by the Financial Services Authority. It is important for Islamic banks to employ policies within their business to determine the composition of their finance portfolio, in a way that offers high returns with certain risks or low returns with low risks. This is known as an efficient portfolio. In order to achieve an efficient finance portfolio, Islamic banks must collect important information about the characteristics of assets which will be included in the portfolio, such as the expected returns, the risk involved and the proposed benefit to the bank. The research question addressed in this paper explores how to create an efficient portfolio in Islamic banks.

2. Theoretical Framework

2.1. Islamic Financing Instrument

There are five types of financing used in this research, namely *Mudharabah* financing, *Musyarakah* financing, *Murabahah* financing, *Ijara* financing and *Istishna* financing. *Mudharabah* financing is a fund investment transaction from the *Shahibul Maal* (owner of the fund) to the *Mudharib* (fund manager) to conduct certain Islamic-compliant business activities, with shares being held in the company by the two parties, based on the *nisbah* (ratio) agreed beforehand (Muhammad, 2015: 41).

Alternatively, *Musyarakah* financing is a form of business which involves two or more parties combining all forms of tangible and intangible resources. The parties provide contributions in the form of funds, trade goods, entrepreneurship, intelligence, ownership, equipment and other non-monetary goods (Karim, 2004: 102).

Murabahah financing is an *akad* (contract) for the purchase and sale of goods, which states the price of acquisition and profit (margin) as agreed by the seller and buyer (Karim, 2007: 113). *Istishna* financing is an *akad* of sale and purchase in the form of ordering certain goods with certain criteria and requirements, as agreed between the one who ordered (buyer, *mustashni'*) and the seller (maker, *shani'*) (DSN-MUI Fatwa). The last is *Ijarah* financing, which is an *akad* for transferring the right to use certain goods or services within a certain time through the payment of rent /wages, without the ownership of the goods themselves being transferred.

2.2. Efficient Portofolio Theory and Optimum Portfolio

Jones (2000) states that an efficient portfolio is a portfolio with the same level of profit and a lower risk, or with the same risk that provides a higher rate of return. Unlike an efficient portfolio, an optimum portfolio is a

ISSN 2345-0282 (online) http://jssidoi.org/jesi/
2019 Volume 6 Number 4 (June)
http://doi.org/10.9770/jesi.2019.6.4(..)

portfolio that an investor chooses from many options that exist in an efficient portfolio set. Surely, the portfolio selected by investors in this case is the portfolio of an Islamic bank in accordance with the preference of investors. When creating an investment portfolio, investors always seek to maximize their expected return, whilst leveraging that on a certain level of risk, often looking for a portfolio that offers the lowest risk and a certain amount of RoR (Pirzada, K., 2017). This particular portfolio is called an efficient portfolio. To establish an efficient portfolio, we must assume the behavior of investors in making investment decisions. One of the most important assumptions is that no investor likes excessive risk (risk aversion). Meanwhile, investors are more likely to choose an optimal portfolio from the efficient portfolio (Marcowitz:1991).

2.3. Risk and Return Portfolio Theory

Risk–return portfolio theory is commonly used in finance to analyze the RoR and the expected return of one instrument and set of instruments; in this case, the instrument is the finance provided by Indonesian Islamic banks. Moreover, it may also inform the probability of occurrence of an instrument and coefficient of correlation, as two of the pre-requisite elements are used to calculate risk and return of one and group of the financing instrument(s).

This paper uses the risk-return portfolio theory to identify the risk of a financing instrument using the variance of actual and expected return. Following this, the risk of various financing instruments are also identified from the variance of actual and expected return (Ismal, 2014)

3. Research Methodology

This research uses a quantitative approach using the Markowitz model portfolio which is processed using Microsoft Excel and the Solver application. The operational definition of the research variables are as follows (Horne, 2001):

EQUATION	NOTES
1. Individual Return Realization: $Actual\ Return = \frac{Amount\ of\ earned\ income}{Amount\ of\ financing\ issued}$	
2. Individual Expected Return: $E(R_j) = \frac{\sum R_j}{n}$	$E(R_j)$ = expected rate of return from j financing R_j = actual rate of return from j financing n = amount of possible occurring event
3. Portfolio Expected Return $E(R_i) = \sum_{i=1}^{n} (W_i E(R_i))$	$E(R_i)$= the rate of expected return of the portfolio W_i= the proportion from asset *i* towards the whole portfolio asset $E(R_i)$= the rate return of each asset *i* n= number of single securities
4. Individual Standard Deviation $\sigma = \sqrt{\frac{\sum_{i=1}^{n}[R_{ij} - E(R_j)]^2}{n-1}}$	σ= standard deviation $E(R_j)$= the rate of financing actual return R_{ij}= average rate of financing expected return n= total historical data observation for large sample with n (at least 30 observations) and for small sample (n-1)
5. Portfolio Standard Deviation	$\sigma^2_{(p)}$= the variance of portfolio profit

ISSN 2345-0282 (online) http://jssidoi.org/jesi/
2019 Volume 6 Number 4 (June)
http://doi.org/10.9770/jesi.2019.6.4(..)

$\sigma_{(p)}^2 = \sqrt{\sum_{i=1}^{n} W_i^2 \sigma_i^2 + \sum_{i=1}^{n}\sum_{j=1}^{n} W_i W_j Cov(R_i, R_j)}$	W_i= invested fund proportion to asset *i* W_j= invested fund proportion to asset *j* σ_i^2= the variance of profit asset *i* $Cov(R_i, R_j)$= covariance of asset *i* and asset *j*
6. Covariance $Cov(R_A, R_B) = \sigma_{AB} = \frac{\sum_{i=1}^{n}[R_{A,i} - E(R_A)][R_{B,j} - E(R_B)]}{n}$	σ_{AB}= covariance between security A and B $R_{A,i}$= A return securities of *i* $R_{B,j}$= B return securities of *j* $E(R_A)$= expected return of security A $E(R_B)$= expected return of security B n= total historical data observation for large sample (at least 30 observations) and for small sample (n-1)
7. Correlation Coefficient $\rho_{i,j} = \frac{Cov(r_i, r_j)}{\sigma_i \sigma_j}$	$\rho_{i,j}$= correlation coefficient between security i and *j* $Cov(r_i, r_j)$= covariance between security i and *j* σ_i= standard deviation security *i*

To establish an efficient portfolio, this research uses the Microsoft Excel spreadsheet application. The researcher uses a feature in Microsoft Excel named Solver that can be used to search for the most efficient combination of variables whose size is unknown, by determining limitation or certain constraints first. The limitation or constraints conducted in establishing an efficient portfolio are as follows:

a. Minimize portfolio risk.
b. Proportion size for each investment is more than or equal to zero.
c. The total weighted average for each type of financing is 100%.
d. Size of certain returns, starting from the type of investment that results in the smallest to largest return.

The population in this research is Islamic banks in Indonesia. According to the data collected by the Bank of Indonesia in 2015, there are currently 12 Islamic banks. This research uses purposive sampling as the sampling technique. The criteria of this research selection samples are as follows:

i. Islamic banks which operated in Indonesia between 2011 and 2015.
ii. Banks with a financial report published between 2011 and 2015.
iii. Islamic banks with completed data based on the examined variables.

Table 2. Research Sample

Names of Islamic Banks	
Bank BNI Syariah	Bank Muamalat Indonesia
Bank Bukopin Syariah	Bank Jabar Syariah
Bank Panin Syariah	Bank Syariah Mandiri
Bank BCA Syariah	Bank Victoria Syariah
Bank BRI Syariah	Bank Mega Syariah

4. Result and Discussion

4.1. Description of Research Results

4.1.1. Calculating of Average Return and Standart Deviation

The calculation of the average return and standard deviation of the finance activities of the *Mudharabah Musyarakah*, *Murabahah*, *Ijarah*, and *Istishna* banks of Muamalat, Indonesia is calculated using quarterly financial statements for the period of 2011-2015. The data that has been used is financing data and financing income. The results of the actual return expected return and standard deviation are shown in Table 3.

ISSN 2345-0282 (online) http://jssidoi.org/jesi/
2019 Volume 6 Number 4 (June)
http://doi.org/10.9770/jesi.2019.6.4(..)

Table 3. Average Return and Standard Deviation

Bank	MEAN				St.Dev			
	Mudharabah-Musyarakah	Murabahah	Ijarah	Istishna	Mudharabah-Musyarakah	Murabahah	Ijarah	Istishna
BMI	0.09	0.99	0.12	0.11	0.18	0.02	0.16	0.06
BRIS	0.09	0.12	0.50	0.14	0.02	0.02	1.44	0.08
BSM	0.11	0.10	0.76	0.09	0.01	0.02	0.84	0.05
BJBS	0.11	0.11	0.29	0.13	0.02	0.03	0.28	0.39
BCAS	0.08	0.08	0.38	-	0.03	0.03	0.24	-
BNIS	0.09	0.11	0.15	-	0.01	0.02	0.14	-
BVS	0.07	0.10	0.67	-	0.07	0.05	0.82	-
BSB	0.10	0.10	0.09	-	0.04	0.01	0.05	-
BPS	0.09	0.10	-	-	0.02	0.05	-	-
BMS	0.12	0.18	-	-	0.10	0..04	-	-

Table 3 shows that the average return of financing at Islamic banks has various values. It also shows that *Ijarah* financing has the highest return compared to the other financing types. Whether a return rate is high or low is inseparable from the contained risk rate. It is shown that *Ijarah* financing produces the highest return however, it also has the highest risk. The supports the concept of high risk and high return.

4.1.2. Establishment of an Efficient Portfolio Composition

After obtaining the average value of returns, standard deviation, correlation, and the covariant of all types of finance options, an efficient portfolio combination can be established by using the Solver application. The result of that calculation are presented in Table 4. The results show that *Ijarah* financing has the smallest proportion compared to the other financing, although the return of *Ijarah* financing in Islamic banks is the highest. This is likely the result of using the Markowitz theory of efficient portfolio which focuses only on risk and return, whilst ignoring other factors.

The extreme fluctuation on returns experienced by *Ijarah* financing, ranging between the highest and lowest level, suggests that the higher the risk, the higher the average return will be compared to the other types of investments. In establishing an efficient portfolio, *Ijarah* financing must be reduced into the lowest proportion in accordance with the suggestions of a previous study by Nazwar (2006).

However, the highest proportion is found in *Murabahah* financing. *Murabahah* financing is able to minimize the risk involved by determining the margin in the beginning of the contract by the Islamic bank. This provides the Islamic bank with certainty of income. In addition, *Murabahah* financing does not require much effort and coordination when compared to *Mudharabah-Musyarakah* financing. Hence, the results of the Markowitz's portfolio theory assume that the risk is still low. This is also emphasized by the average return of *Murabahah* financing, which is relatively stable, and does not fluctuate a great deal. Hence, it is assumed that the deviation of reaching the expected return is small, as stated in a previous study by Nazwar (2006).

ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES
ISSN 2345-0282 (online) http://jssidoi.org/jesi/
2019 Volume 6 Number 4 (June)
http://doi.org/10.9770/jesi.2019.6.4(..)

Table 4. Efficient Portfolio Composition of Each Islamic Banks

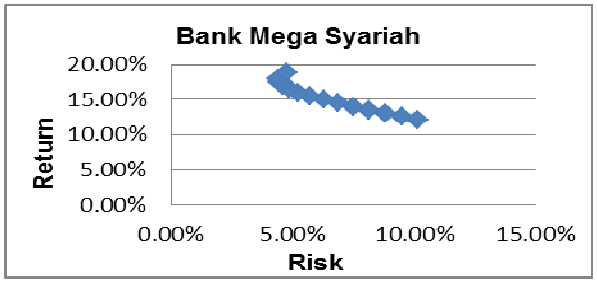
Bank	Std.Dev	E[r]	Mudharabah-Musyarakah	Murabahah	Ijarah	Istishna
BMI	1.48%	10.24%	34.41%	39.85%	6.85%	18.89%
BRIS	2.88%	12.32%	9.61%	83.57%	1.00%	5.83%
BSM	1.71%	11.72%	92.05%	1.00%	1.19%	5.76%
BJBS	2.14%	12.55%	67.83%	21.86%	7.54%	2.77%
BCAS	2.73%	10.27%	45.48%	48.95%	5.57%	-
BNIS	1.29%	10%	83.45%	11.08%	5.47%	-
BVS	4.27%	12.2%	14.08%	82.34%	3.58%	-
BSB	1.45%	10%	28.28%	38.69%	-	33.03%
BPS	2.47%	9.30%	98.88%	1.12%	-	-
BMS	4.43%	18.08%	12.16%	87.84%	-	-

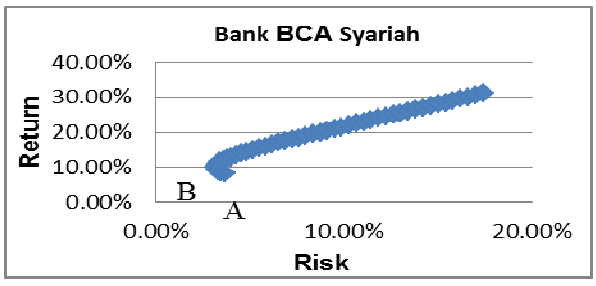
4.2. Efficient Frontier Curve

After identifying the combination of portfolio proportions, that combination is plotted into the graph in which the X axis (horizontal) is the standard deviation and the Y axis (vertical) is the expected return on the portfolio. If the points which are the combination of the investment portfolio are linked, they will form a curve called an efficient frontier curve, as shown in Figure 1.

This study assumes that investors are rational and risk averse and hence will choose a portfolio with a higher return when compared to the risk involved. Therefore, a portfolio which is plotted under an efficient portfolio point in an efficient frontier curve of each bank is a non-efficient curve. Conversely, a portfolio which is laid above an efficient portfolio point in an efficient frontier curve of each bank is an efficient frontier.

As shown in the efficient frontier curve of the 10 Islamic banks, excluding Bank Mega Syariah, all of the banks share the same convex upward curve. This is consistent with Markowitz's theory that the higher the rate of return is expected to increase, then the higher the risk that the investors will be willing to take, i.e., high risk and high return. Compared to the other banks, the curve shape of the Bank BRI Syariah is more linear, while the curve shape of the Bank Syariah Bukopin is more convex. This is because the correlation of the return rate of the Bank BRI Syariah has a positive correlation, and the correlation of the return rate of the Bank Syariah Bukopin has a negative correlation. This is different from the Bank Mega Syariah, which has convex-to-the-bottom-right efficient frontier curve, as shown in Figure 1. This demonstrates that the portfolio status is not more efficient. This may be due to the number of bad debts reflected in the NPF ratio on the Bank Mega Syariah. This produces an efficient frontier curve for the Bank Mega Syariah, which is different from the other Islamic banks.





ISSN 2345-0282 (online) http://jssidoi.org/jesi/
2019 Volume 6 Number 4 (June)
http://doi.org/10.9770/jesi.2019.6.4(..)

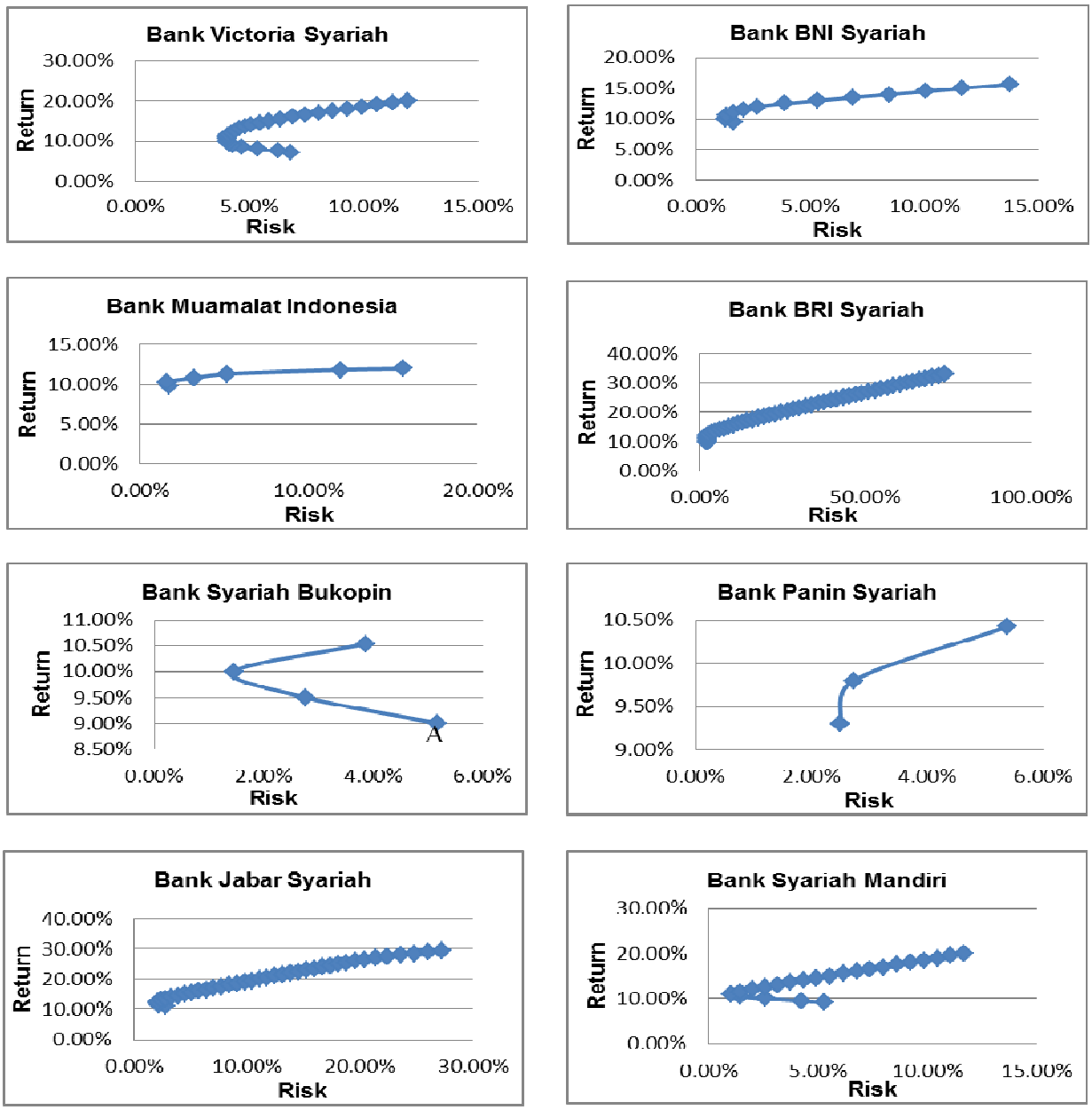


Figure.1. Frontier Efficient Curves of Islamic Banks

5. Discussion

5.1. Efficient Portfolio Target

In essence, portfolio management consists of three main activities: (1) making a decision of asset allocation, (2) determining the portion of funds which will be invested in each asset class, and (3) choosing assets from each selected asset class. In Markowitz's portfolio model, portfolio selection consisting of individual assets is used.

ISSN 2345-0282 (online) http://jssidoi.org/jesi/
2019 Volume 6 Number 4 (June)
http://doi.org/10.9770/jesi.2019.6.4(..)

The individual assets used in this research are *Mudharabah-Musyarakah*, *Murabahah*, *Ijarah*, and *Istishna* financing, which exist in each Islamic bank.

The aim of making a portfolio is to diversify the risk within a portfolio, to achieve a portfolio with the lowest risk, or to obtain a combination of high returns with low risk. The creation of a portfolio in this research aims to achieve the lowest risk, which is chosen by the standard deviation, or the lowest variance. The portfolio with this lowest risk is called the minimum variance portfolio (MVP).

This section will describe the target of an efficient portfolio from an efficient set based on 10 Islamic banks as shown in Table 4. This demonstrates that the Bank Muamalat Indonesia will achieve an efficient portfolio with a risk rate of 1.48% and a return rate of 10.24%, which represents a proportion of 34.41% of *Mudharabah-Musyarakah* financing, 39.85% of *Murabahah* financing, 6.85% of *Ijarah* financing, and 18.89% of *Istishna* financing. The same thing occurs in the Bank Jabar Syariah, which will achieve an efficient portfolio if it employs 67.83% of *Mudharabah-Musyarakah* financing, 21.85% of *Murabahah* Financing, 7.54% of *Ijarah* financing and 2.77% of *Istishna* financing with a portfolio return of 12.55% and a portfolio risk of 2.14%.

From the results shown in Table 4, it can be seen that the average financing of *Mudharabah-Musyarakah* from each of the Islamic banks is 48.62%, *Murabahah* financing is 41.63%, *Ijarah* financing is 8.03%, and *Istishna* financing is 8.31%. This shows that *Mudharabah-Musyarakah* financing and *Murabahah* financing are more common than *Ijarah* financing and *Istishna* financing.

6. Conclusion

Based on the results of the analysis and discussion, it can be concluded that every kind of Islamic bank financing in Indonesia requires a different composition in order to provide finance options with minimum risk. However, the average financing of *Mudharabah-Musyarakah* is higher than the other types. Therefore, it is important for banks to pay more attention to the expansion of investments and consider using more *Mudharabah-Musyarakah*. In addition, risk mitigation is important to consider when dealing with high risk financing, particularly with respect to *Ijarah* financing. This can be achieved by monitoring the concentration of finance portfolios, focusing on the most interesting and rapidly developing industrial sectors in Indonesia and developing organizational structures that are providing the finance to these sectors.

This study calculates the composition of an efficient portfolio for each Islamic bank between 2011 and 2015. The results show that the average of *Mudharabah-Musyarakah* financing from each Islamic bank is 48.62%, *Murabahah* financing is 41.63%, *Ijarah* financing is 8.03 % and *Istsihna* financing is 8.31%.

References

Acharya, Viral V, Hasan, Iftekhar&Saunders, Anthony. 2002.*"Should Banks be Diversified?"*. BIS Working Papers. DOI: http://dx.doi.org/10.2139/ssrn.293295.

Ali, Salman Syed. 2005. "*Islamic Capital Market Products: Developments and Challenges"*. Islamic Research and Training Institute. Occasional Paper No.9. ISBN 978-9960-32-179-0

Guerard, John B., Harry Markowitz and Ganlin Xu. 2013, "Global Stock Selection Modeling and Efficient Portfolio Construction and Management", *The Journal of Investing*, Winter 2013, 22 (4) 121-128. DOI: https://doi.org/10.3905/joi.2013.22.4.121.

Horne, James C.Van & John M. Wachowicz, JR. 2001. Fundamental of Financial Management: 12th Edition. ISBN 978-979-691-266-3.

Ismal, Rifki. 2008. *"The Potential of Liquidity Risk in Islamic Banking"*. Academic Paper, Presented in Ustinov College Seminar of Finance, Durham University.

Ismal, Rifki. 2014. "*An Optimal Risk – Return Portfolio of Islamic Banks*". Academic Paper. Humonomics, Vol: 30 Iss 4 pp. 286-303. DOI: https://doi.org/10.1108/H-08-2013-0055.

Ismal, Rifki. 2010. *The Indonesian Islamic Banking (Theory and Practices)*. Bogor: Phd Gramata Publishing. ISBN 978-602-8986-20-6.

Jones, Charles P, 2000. *Investment: Analysis and Management, Edisi kesepuluh*. New York: John Willey and Sons.Inc. ISBN 0471-331-14-7.

Kaplan, Paul D. 1998. *Asset Allocation Model Using the Markowitz Approach*. Paper, January. DOI: https://doi.org/10.1002/9781119205401.ch22

Karim, A. Adiwarman. 2007. *Ekonomi Mikro Islami*. Second Edition. Jakarta: PT. Raja Grafindo Persada. ISBN 97-8979-697-38-9

Kwan, Clarence C.Y. 2003. "Improving the Efficient Frontier", *The Journal of Portfolio Management Winter*, 29 (2) 69-79. DOI: https://doi.org/10.3905/jpm.2003.31987.

Markowitx H.M. 1991. *Foundations of Portfolio Theory*. Journal of Finance. Muhamad. 2001. *Teknik Perhitungan Bagi Hasil di Bank Syariah*. Yogyakarta: UII Press. ISBN 979-841-369-5.

Obaidullah, Muhammad. 2005. "*Islamic Financial Services"*. Islamic Economics and Research Center, King Abdul Aziz, University Jeddah, Saudi Arabia. ISBN 978-9960-064-28-4.

Pirzada, K., 2017. Effects of Dividend Policy on Stock Price Volatility in the Financial Sector. *Journal of Finance and Banking Review 2 (2) 2017, 34 – 48.* ISSN 0128-3103.

Yuan, Jiaqin Chen Ming., 2016, "Efficient Portfolio Selection in a Large Market", *Journal of Financial Econometrics*, Volume 14, Issue 3, 1 June 2016, Pages 496–524. DOI: https://doi.org/10.1093/jjfinec/nbw003.

Winton, Andrew. 1999. *Don't Put All Your Eggs in One Basket? Diversification and Specialization in Lending*. Finance Departement University of Minnesota. DOI: http://dx.doi.org/10.2139/ssrn.173615.

Short biographical note about the contributors at the end of the article (name, surname, academic title and scientific degree, duties, research interests):

Nisful LAILA is a assistant professor of Islamic Finance and Economics and vice dean for cooperation and reserch, faculty of Economics and Business, Universitas Airlangga. Her research interest is on Islamic finance, Islamic banking and Islamic social finance.
Karina Ayu SARASWATI is a banker alumny of faculty of Economics and Business, Universitas Airlangga. Her research interest is on banking and finance.
Himmatul KHOLIDAH is a lecturer and researcher of Vocational faculty, Universitas Airlangga, currently a PhD student in Islamic Economics, Faculty of Economics and Business Universitas Airlangga. Her research interest is on Islamic banking, Islamic economics and halal tourism.

ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES
ISSN 2345-0282 (online) http://jssidoi.org/jesi/
2019 Volume 6 Number 4 (June)
http://doi.org/10.9770/jesi.2019.6.4(..)