



Research Article

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The Islamic Banking, Asset Quality: “Does Financing Segmentation Matters” (Indonesia Evidence)

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Doi: 10.2478/mjss-2018-0154

Abstract

Bank stability becomes one of the crucial pillars in maintaining economic growth. Therefore, the segmentation strategy is needed because it aims to improve the financial stability of the bank (decrease Non-Performing Loan-NPL / Non-Performing Financing-NPF). This study aims to determine the effect of segmentation on the quality of Islamic banks proxied with NPF. The method used is a quantitative method with multiple regression test and statistical tool Stata version 13. From the results of statistical data, it is known that the retail segment has a more significant influence than the wholesale segment, which is 92.61% and 56.05%. Therefore, sharia banks should have their business priorities in the retail segment, especially business in the microfinance segment by maintaining the quality of financing through selective financing channeling.

Keywords: Asset Quality; Non-Performing Loan/Financing; Segmentation, Retail Segment; Wholesale Segment

1. Introduction

The development of sharia banking in Indonesia in the last five years still has some challenges (Nugroho et al., 2017a). One of the challenges is the market share of sharia bank is still below 10% in 2017, and the other side conventional bank has more 90% of the market share. In addition, according to Nugroho et al., (2017b) and Setyawati et al., (2017) the financial condition of the sharia banking industry has not been better than conventional banking, it is shown from several key financial indicators one of which is the low-quality asset that reflects in financing channeled by the Bank Syariah which showed by non-performing financing ratio/non-performing loan (NPF/NPL). The comparison information of the NPF of sharia banking industry with conventional banking industry is shown in the figure 1. as follows:

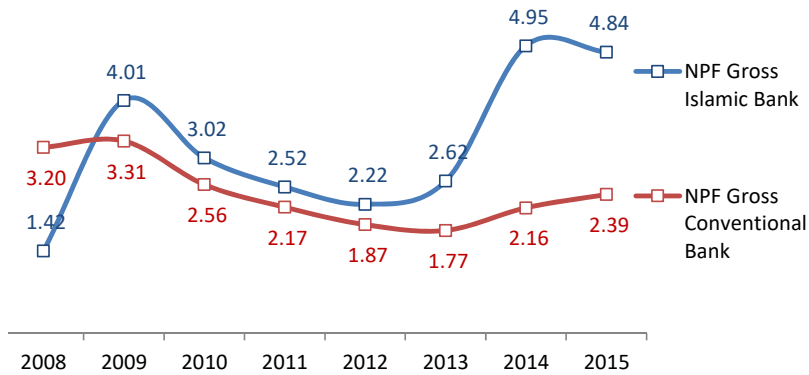


Figure 1: Comparison of NPF of Sharia Banking Industry with NPL of Conventional Banking Industry
Source: (Nugroho et al., 2017b)

From figure 1.1 above, it can be explained that the quality of sharia banking financing shown by the NPF ratio has a significant increase, from 1.42% in 2008 to 4.84% in 2015. In other words, problematic financing in sharia banking industry grew by 341.85% over eight years. Furthermore, when compared with the conventional banking industry where the ratio of NPF in 2015 amounted to 2.39%, then the NPF of the Islamic banking industry is also higher than conventional banks, which amounted to 2.45%. The decreased their performance should be able to be overcome by the selection of financing disbursement that focuses on MSME sector. The MSME sector can diversify the risk with a large number of borrowers (borrower volume) and small amounts of credit or financing exposure, Dietsch & Petey, (2002). Also, Islamic finance concepts aimed at achieving social welfare and conserving nature (Arafah & Nugroho, 2016b, Shahinpoor, 2009; Rahim Abdul Rahman, 2010; Anas & Mounira, 2009) should be the foundation of sharia banking operations. Therefore sharia banks should focus on channeling their financing to micro, and small entrepreneurs that aim for alleviating poverty, improving community health standards and increasing the level of education.

The prospect of sharia banking business in Indonesia is remarkable, considering Indonesia as the 4th largest population in the world dominated by Muslim majority (88%). Thus, the large Muslim population in Indonesia creates a massive demand for sharia banking products so that the business potential of sharia banks in Indonesia is huge (Nugroho et al., 2017b). However, Islamic Banking in Indonesia also as a newcomer to Indonesia banking industries and there is illiteracy of Muslim community related to Islamic Banking products (Nugroho, 2016; Elsa et al., 2018) but in Islamic thought, the Muslim must follow their religion in totally (Kafah), its mean the activity of Muslims must comply with Islamic thought or Sharia principle that also impact to their financial transaction must be in Islamic comply. On the other side, the activity of Islamic banking is necessary to convince the public for believing that sharia banking not only fulfills the spiritual needs but also can provide financial services transaction which is suitable for public needs and increase macroeconomic stability. According to some previous studies, the level of public confidence can enhance through improved bank performance (Berger et al., 2000; Haan & Vlahu, 2016; Shibani & De Fuentes, 2017). Therefore, it is crucial to improving the performance of sharia banking in fixing problematic financing that can be impacted to increase the performance, especially on intermediary function. The increasing performance in term of revenue from sharia banking will provide a positive impact on social aspects such as the scale-up of Zakat payment from Islamic banking. Also, with the increasing role of sharia banking in the social aspects of society based on sharia principles will strengthen public confidence to engage in with sharia banks for achieving social well being.

According to Restuccia & Rogerson, (2008) and Hsieh & Klenow, (2009), the selection of segments in the distribution of financing has a vital role in increasing sales turnover which impacts on the performance improvement of the company or bank. Based on business priorities to improve

performance, it is necessary to select an appropriate allocation of financing distribution or so-called segmentation strategy (Mylonakis, 2007). Furthermore, the selection of financing distribution with the right target market and in the segment with good prospects will be able to minimize the problematic financing in the bank (Allred, 2001). Thus, through appropriate services according to customer characteristics will strengthen the relationship between banks and customers because there is a principle of mutual need (Parasuraman et al., 1985), so the application of segmentation strategy will reduce the risk of financing problems that will occur. The impact of decreased financing risk (NPF) will directly increase revenues from banks (Soekapdjo et al., 2018).

Furthermore, according to Nugroho et al., (2017c), Bank Syariah Mandiri (BSM) as a Sharia Bank with the most considerable assets in the sharia banking industry and also has a significant influence on the sharia banking industry in Indonesia. BSM is the only sharia bank in Indonesia that has been eligible for the category of BUKU III (Commercial Bank of Business), which is the bank has a core capital of at least Rp 5 trillion to Rp 30 trillion (Nugroho et al., 2017c). Therefore, as the largest Shariah bank in Indonesia, BSM should have an appropriate segmentation strategy in disbursing its financing

Based on the description of the data and facts above, the research aim is to analyze the financing segment, which has an impact on the quality of financing.

2. Literature Review

2.1 Sharia Bank Relationship with Community Welfare

The background of the establishment of sharia banking in Indonesia is different from other countries in the world. The sharia banking industry in Indonesia began with the founding of Bank Muamalat in 1992 while the sharia banking industry in Malaysia was already starting in 1983 (Nugroho et al., 2017a). Surely the gap in sharia banking development in Indonesia compares with the country of Malaysia is relatively far, which is more than nine years. However, the cause of the establishment of sharia banking in Indonesia has a strong grassroots, because it is bottom-up (community driven) in other words due to the public demand. While other countries such as the Middle East and Malaysia, according to Nugroho et al., (2017b), the cause of the establishment of Islamic banks don't derive from society (not from community driven), but from the petrodollars for middle east country, middle east investment hub for Europe countries and government-driven for Malaysia country. The establishment background of sharia banking in the world can show in below figure 2.1:



Figure 2: The Background of The Establishment of Sharia Banking in the Several Countries
Source: Nugroho & Chandra, 2014a

Sharia banking is an intermediary institution that conducts operational activities based on sharia principles, especially prohibits the concept of MAGHRIB (Maysir, Gharar, and Riba) in financial transactions (Sukmadilaga & Nugroho, 2017). Also, the primary function of sharia banks is as a solution of the failure of conventional banks that became one of the contributors to the financial crisis due to the elements of greed in carrying out operational activities (Nugroho et al., 2017a; Jalil & Rahman, 2010; Dowd, 2009). Furthermore, the objective of sharia banking is to fulfill the maqasid of sharia, which is to create a justice and social wellbeing (Arafah & Nugroho, 2016a; Alam Choudhury & Nurul Alam, 2013; Choudhury, 2008), thus sharia bank responsible to implement the triple bottom line concept (Profit, People and Planet Regarding with triple bottom line concept, the sharia bank must achieve the profit, but the impact should give beneficiaries to the social aspect, environmental aspect and spiritual aspect (Prastowo, 2015a). Furthermore, Islam as a comprehensive religion that regulates all aspects of human life that aim not only for the benefit of the world but also the hereafter, including providing guidance in carrying out financial transactions such as a sharia banking operational principle (Arafah & Nugroho, 2016a; Arafah & Nugroho, 2016b; Prastowo, 2015b; Nugroho, 2014b; Mohammad & Shahwan, 2013; Wajdi Dusuki, 2008), thus the concepts of triple P in Islamic principles must be extended become "Profit, People, Planet and Prophet". Taxonomy of Islamic finance based on Sharia Principle can be described in the figure as follows:

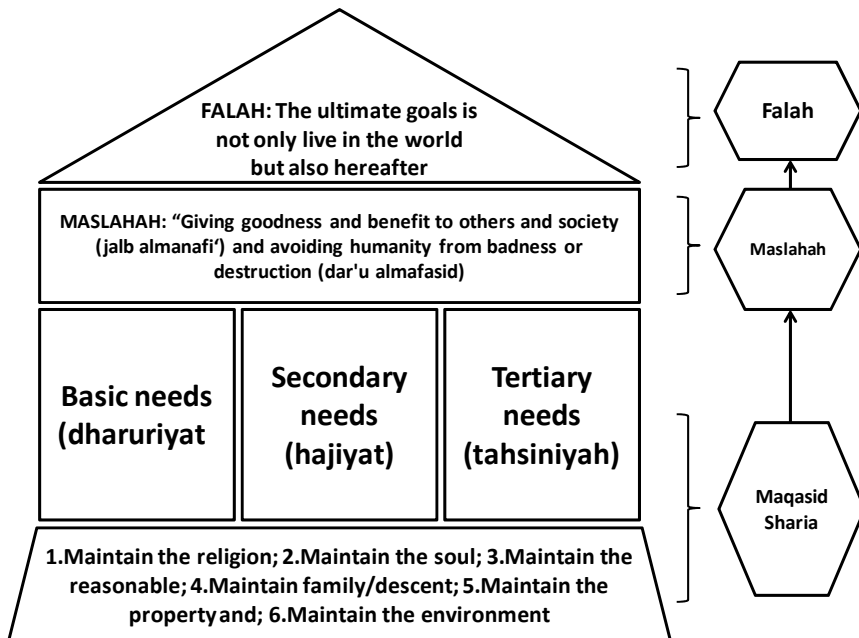


Figure 3: The Taxonomy of Islamic Finance Objective based on Islamic Principles (Maqasid Sharia, Maslahah, and Falah)

Source: Own

Maqasid Shariah is the foundation of the Muslim activity that includes:

- Maintain the religion: Man needs religion absolutely, without religion there is no use in life, even religion is the primary need to determine the purpose of life. The obligation to maintain religion is a duty of every Muslim without exception. If this obligation is ignored, then the existence of religion will be threatened. One of the obligations to maintain religion is to perform the five daily prayers. "Indeed, those who recite the Book of Allah and establish prayer and spend [in His cause] out of what We have provided them, secretly

and publicly, [can] expect a profit that will never perish" (Q.S Al Fatir: 29).

- Maintain the soul: Maintaining the soul is intended to preserve the right to live honorably and nourish the soul to avoid the act of persecution in the form of murder, limb cutting or wounding, including consuming foods that can damage the body or excessive in consumption (israf). Furthermore, maintaining the soul in the maqasid sharia is manifested in the form of eating and drinking. If this is not fulfillment, it will damage the soul or life. "He has only forbidden to you dead animals, blood, the flesh of swine, and that which has been dedicated to other than Allah. But whoever is forced [by necessity], neither desiring [it] nor transgressing [its limit] - then indeed, Allah is Forgiving and Merciful" (QS An Nahl: 115).
- Maintain the reasonable: In Islam, human reason is a significant gift of God because of the reason the human can distinguish what is right and what is wrong. Maintain of the mind is a thing to be done by every Muslim. Therefore, humans should avoid something that can damage the existence of the mind, such as drinking khamar or liquor. "O you who have believed, indeed, intoxicants, gambling, [sacrificing on] stone alters [to other than Allah], and divining arrows are but defilement from the work of Satan, so avoid it that you may be successful" (QS Al Maidah: 90).
- Maintain family/descent: Goodness in both the world and the hereafter must be sustainable from one generation to another. The Shari'a that is implemented in one generation alone becomes meaningless due to the extinction of the next generation. For that Islam regulates marriage and forbids adultery. In maqasid sharia, keeping a family or descent can be done by marrying to avoid adultery. "And marry the unmarried among you and the righteous among your male slaves and female slaves. If they should be poor, Allah will enrich them from His bounty, and Allah is all-Encompassing and Knowing" (QS An Nuur: 32).
- Maintain the property: Although in essence, all possessions belong to Allah, Islam recognizes the private rights of a person whose benefits for the common good or the people. Islam has rules on a human relationship, activity such as trading, and selling, rent, borrowing, mortgage and so on and prohibits fraud and practice usury. One way to keep the treasure intended in the maqashid of sharia is to avoid taking property in a way that is not good or take the rights of others such as corruption. "And let those [executors and guardians] fear [injustice] as if they [themselves] had left weak offspring behind and feared for them. So let them fear Allah and speak words of appropriate justice" (QS An Nisaa': 29).
- Maintain the environment: Environmental damage can be life-threatening. Therefore, humans are obliged to protect the environment so that natural exploitation must be limited to the next generation and consider the balance of nature. "And cause not corruption upon the earth after its reformation. And invoke Him in fear and aspiration. Indeed, the mercy of Allah is near to the doers of good" (QS. Al-A'raf: 56).

Maqasid Shariah provides the basis for Muslims to carry out daily activities in fulfill their needs (basic needs, secondary needs, tertiary needs). If the maqasid Shariah has been executed, then human activity must also carry out all the commands of Allah (jalb almanafi ') and stay away from Allah's prohibition (dar'u almafasiid) thus creating a civilized social life where there is no social gap in society because a Muslim has an orientation to benefit others and aim to develop social welfare. Thus, the ultimate goal of the maqasid shariah is the human life not only to gain happiness in the world but also to gain satisfaction in the afterlife (Falah) so that as a social creature a Muslim should have attention not only for their interests but also how their role in the community to provide benefit and goodness.

Conventional banks and sharia banks have different objectives, Islamic banks have a goal to achieve Falah so that the existence of sharia banks should provide social wellbeing for people who also consider justice, morals, ethics, and equality while conventional banking aims solely for goodness in the world. However, in its current development, all banks, both conventional and sharia banks must implement sustainable Islamic banks, and conventional banks must have a triple P concept (Profit, People, and Planet). Thus there is additional responsibility of Islamic bank to extend the implementation of "triple P" become "quard P" (Profit, People, Planet and Prophet)

The concept of welfare or *Falah* in Islam is reflected in Q.S Al Baqarah, Verse 201: "But among them is he who says, "Our Lord, give us in this world [that which is] good and in the Hereafter [that which is] good and protect us from the punishment of the Fire." The essence of the verse is the goodness of life in the world to be the source of the *Falah*. Therefore, hereafter is the place to reap what has been planted in the world. The ultimate goal of human life is to gain Allah's blessing by carrying out Allah's commands and avoiding Allah's prohibitions (Ismail, 2012). Thus, there will be a prosperous society. The implementation of a prosperous society is the creation of a "marhamah" society, which means that people who have concerns and share one another are based on the love and affection described in the QS Al-Hashr verse 9 which says: "And [also for] those who were settled in al-Madinah and [adopted] the faith before them. Are in privation and whoever is protected from the stinginess of his soul - it is those who will be successful." Therefore, Shariah banks should be based on sharia principles to contribute more to the welfare of society is not to create an economic crisis.

2.2 Segmentation Relationship with Financing Quality

The concept of Agency Theory is to regulate the relationship between the agent with the principal which purpose to establish the good relationship, because of the good relationship is crucial for the business continuity of the organization (Utami, 2006; Hidayah, 2015; Gulsoy, 2012; Nugroho et al., 2018). Furthermore, the business relationship is usually referred to as a strategic partner, because with a good relationship between both parties, all parties will get the benefit. On the agent side, with the proper connection, it will perpetuate the business relationship, can increase sales turnover. Increase in business turnover can increase revenues and profits, so the company seeks to improve services to maintain its customers whose purpose is to scale up the company's reputation and value (Duhan & Sandvik, 2009; Harnovinsah & Marlita, 2017). Moreover, based on good relationships, Sharia Banks require to have good financing quality so the sharia bank should avoid the moral hazard of the borrower. The borrower needs the bank to support the financial needs of their company and also the bank need the customer to cover their operational cost, thus between bank and customer should have the long-term relationship principle between the bank and the borrower based on sharia principles (Azmat et al., 2015). Therefore, the understanding of religion and public awareness as a debtor must be increased to avoid the occurrence of moral hazard from the customer side (Lestari 2014). The moral dangers arise if the borrower takes advantage of the weakness of the bank's credit policy, such as pretending not to be able to pay the installments, but actually, the borrower is able to pay for the installment (Ziaul Hoque, 2003).

According to Watson (1986), financial institutions including banks can tailor their products and services according to the needs of the community or its customers. However, due to the vast variety of public demands for services and financial products and market heterogeneity, it is necessary to classify into the segmentation strategy (Cheron et al., 1989) to facilitate the bank for mapping the market needs. Segmentation according to Jonker et al. (2004) is a way to market goods or services following the target market being targeted. Also, according to Wedel and Kamakura (2012), segmentation is a way of dividing the customer population and various communities or markets into groups with similar characteristics (homogeneity). While the objective of segmentation implementation in companies or banks is to optimize the benefits that can be achieved by obtaining customers who have a good loyalty (Baesens et al., 2004; Buckinx et al., 2007; Van den Poel & Lariviere, 2004). Furthermore, the simplest segmentation process in management according to Kotler (1994) includes: segmentation; targeting and positioning (STP). In line with Kotler's opinion, Dibb (1998) describes the process of segmentation into a process of gathering customers in a group that aims to maximize homogeneity within the same segment and optimizes heterogeneity among different segments. The process of segmentation can be illustrated in the figure below:

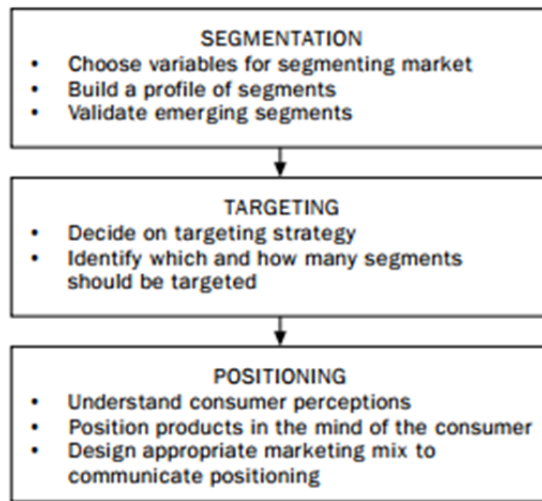


Figure 3: Segmentation Process
Source: Dibb (1998)

The application of a segmentation strategy by Markowitz Portfolio Theory, to find a balance between the results obtained with possible risks (Hiriyappa, 2008; Crouhy & Mark, 2002). Thus, the selection of appropriate segmentation at the bank can improve bank performance. Furthermore, maintaining the quality of financing becomes one of the focuses for the Bank to maintain the continuity of its business (Varotto, 2011). Related to previous studies (Wu et al., 2003; Saba et al., 2012; Anggreni & Suardhika, 2014; Ben Saada, 2018), the size of financing/credit quality that is commonly used in the banking sector of both conventional and Sharia banks as the indicator of asset quality. Good or bad quality of financing from a bank shows the ability of banks in choosing and acquiring customers. If the bank can select customers appropriately and have a focus on segments that have good prospects, then banks can reduce or save costs arising from the emergence of problem financing. On the other hand, with the bank's ability to adopt an adequate financing segmentation strategy through a customer acquisition process based on prudential principles, it will increase the number of qualified customers thereby reducing the risk of non-performing financing.

2.3 Risk Management at Sharia Bank

The principle of risk management in sharia banks is "al ghorm bil ghurmy and al kharaj bil dhaman" (Arafah & Nugroho, 2016a; Nugroho et al., 2017c), which meaning if there is action to take profit, then there will be risks that will be borne. However, the risk must be managed with responsible. The definition of the risk principle ('al ghorm bil ghurmy and al kharaja bil daman') in the sharia bank is also in line with the opinion of Waemustafa and Suriani (2016) which states that banks can recognize their income and profits when derived from real economic activities or business. While the profit is accompanied by risks that must be managed by responsible so that the profits or revenues that was earned do not cause the disadvantage and a burden for the company and the stakeholders in the future. Related to the principle of risk management "al ghorm bil ghurmy and al kharaj biil dhaman, the sharia bank can be an alternative solution of the existence of conventional banks that are believed to provide benefits or maslahah for the community in general (Prastowo, 2015b; Nugroho et al., 2017a). Therefore, Islamic banks should be able to show an excellent performance to increase the trust of the community to disseminate sharia principle advantages.

2.4 Segmentation Strategy in Bank Syariah Mandiri

Bank Syariah Mandiri (BSM) is the largest sharia bank regarding assets in Indonesia, which amounted to Rp81.9 trillion as of June 2017 and the only sharia bank included in the core capital category of Rp5 trillion to 30 trillion. As the largest sharia bank, BSM has a strategy in market penetration through the implementation of segmentation strategy to get maximum revenue and qualified customers. The current segmentation in BSM based on the annual report of 2017 is as follows:

- **Retail Segment**
 - a. Micro is financing with a maximum limit of Rp200 million with criteria:
 - Financing to individuals for productive purposes;
 - Financing for individuals for multipurpose.
 - b. Business/Small is financing with limit > Rp200 million up to Rp 5 billion with criteria:
 - Financing to an individual or private entity for productive purposes;
 - Financing to private individuals or business entities for productive purposes (not a member of the group of borrowing borrowers and excluding customer-specific criteria in the commercial segment);
 - Financing for cooperatives (including for the cooperative members with productive & consumptive purposes);
 - Financing to Islamic Microfinance Institutions (Linkage).
 - c. The consumer is non-productive financing regardless of the limit with criteria
 - Individuals for consumptive/multipurpose purposes
 - Institutions for consumptive member financing (BSM Implant financing)
 - Pawn product/gold installment
 - Hajj and Umrah bailouts
- **Wholesale Segment**
 - a. The commercial is financing with limit > Rp5 billion up to Rp50 billion with criteria:
 - Financing to private enterprises;
 - Financing to private entities for productive purposes (not members of the group of borrowing borrowers and excluding customer-specific criteria in the corporate segment);
 - BUMD (regionally owned business entity) and its subsidiaries;
 - Local government;
 - Financing to subcontractors through supply chain financing pattern.
 - b. Corporations are financing with limit > Rp 50 billion with criteria:
 - Financing to private enterprises;
 - BUMN (State-Owned Enterprises) and its subsidiaries;
 - State institutions;
 - Multinational Company;
 - Banks and non-bank financial institutions, including multi-finance companies and venture capital;
 - Syndicated financing;
 - Public company.

2.5 Previous Research

Several previous studies suggest that the implementation of segmentation strategies can improve bank performance through optimal customer acquisition (Jonker et al., 2004; Qian, 2002; Onalapo et al., 2011; Cenar & Turcas, 2014; Faias & Torres-Martinez, 2017). The segmentation strategy at the bank aims to establish the upper and lower limit of interest rates on conventional banks or returns on Shariah banks of each segment by the marketing objectives (Faias & Torres-Martinez, 2017). Market segmentation is a strategy to maintain the viability of a company and has proven successful for companies in the non-banking sector, especially if a company can create such a

unique product so that it fits the demand and needs of the community in that segment (Kotler 1994). Even according to McBurnie and Clutterbuck (1988) if the products and services produced are specific products and services, then our competitors begin to imitate these products and services, then the profits of the company will multiply.

The application of segmentation strategy can be regarded as a panacea for improving the company's performance that can be applied in all industry sectors, including the banking sector (Wind, 1978, Cheron et al., 1989; Rushinek et al., 1994; Worthington & Welch, 2011). Previous research related to segmentation in the banking sector discusses how to improve customer acquisition through the development of products and services tailored to the needs of each segment that can ultimately improve the performance of the bank (Anderson et al., 1976; Storbacka, 1997; Chéron et al., 1989; Machauer & Morgner 2001; Stanley et al., 1985). Nevertheless, there is no research linking segmentation with financing quality, especially in sharia banking.

2.6 Research Question

Regarding the research objective this research will include limitation of these research questions:

- What is the Impact of retail segmentation on the financing quality in Bank Syariah Mandiri?
- What is the Impact of wholesale segmentation on the financing quality in Bank Syariah Mandiri?
- Which segment has the most significant impact on asset quality?

3. Methodology and Analysis

3.1 Data

The population in this research is financing distribution of each segment and financing quality in Bank Syariah Mandiri. The sample in this study was chosen based on the criteria for the implementation of the financing distribution segmentation strategy in the second half of 2014 until 2017 and the quality of financing in the same period.

3.2 Methodology

The methodology in this research uses the qualitative and the quantitative for explaining and describing the segmentation implementation in Bank Syariah Mandiri. Furthermore, the quantitative method in this study using a regression approach to determine the effect of independent variables on the dependent variable. The time of this research is cross-sectional that is research done in the second semester of the year 2014 until the year 2017 and to collect related data to find the answer to the research question. Statistical software used in this research is Stata version 13. The variables used in this study are divided into Dependent or dependent Variables and Independent or Independent Variables. Dependent variable (Y) is a variable that can be affected by other variables while independent or independent variables are those that explain or influence other variables, while the variables used in this study are

- The dependent variable used in this research is Non-Performing Financing (NPF). The NPF formula is:
$$\frac{\text{Bad financing all segments}}{\text{Total Financing}}$$
- Independent variables in this study include:
 - a. Micro Banking Segment Financing :The number of micro banking segment portfolio, which is distributed to customers
 - b. Business Banking Segment Financing: The number of business banking segment portfolio, which is distributed to customers
 - c. Consumer Banking Segment Financing: The number of consumer banking segment portfolio, which is distributed to customers
 - d. Commercial Banking Segment Financing: The number of commercial banking segment

- portfolio, which is distributed to customers
- e. Corporate Banking Segment Financing: The number of corporate banking segment portfolio, which is distributed to customers
 - f. Non-Performing Financing of Retail Segment. The formula is: $\frac{\text{Bad financing in Retail Segment}}{\text{Total Retail Financing}}$
 - g. Non-Performing Financing of Wholesale Segment: $\frac{\text{Bad Financing in Wholesale Segment}}{\text{Total Wholesale Financing}}$

Based on the variables in this study both independent and dependent variables, can be presented research framework how the influence of independent variables of the dependent variable as follows:

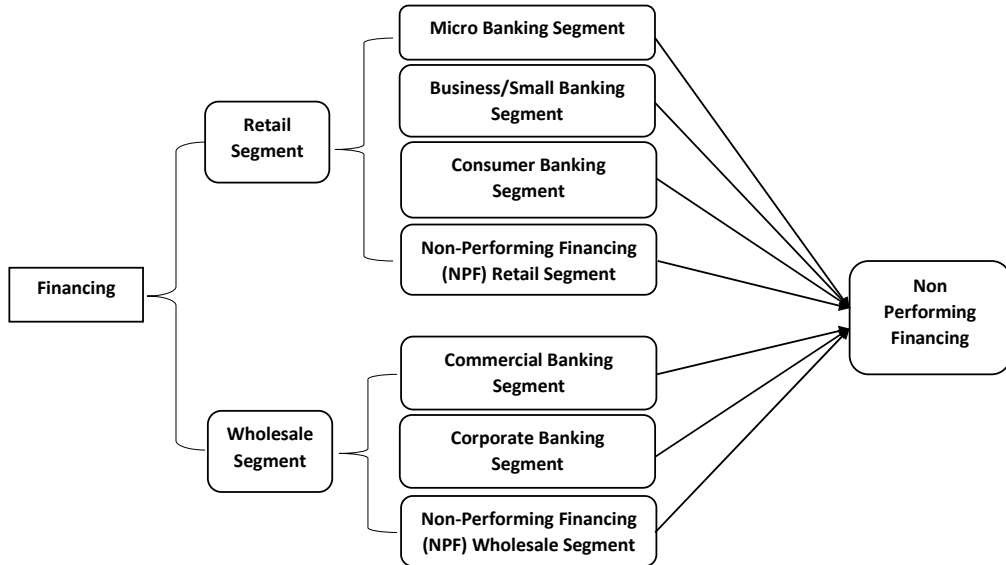


Figure 4: Conceptual Framework
Source: Own

The data analysis method used in this research is multiple regression. The function of the regression analysis method, in addition to measuring the strength of the relationship between two or more variables, also shows the direction of the relationship between the dependent variable and the independent variable. The statistical model used in this research is as follows:

Equation I

$$NPF = \alpha + \beta_1 Mcr + \beta_2 Sml + \beta_3 Csmr + \beta_4 NPF \text{ Retail} + e$$

Equation II

$$NPF = \alpha + \beta_1 Cmr + \beta_2 Crp + \beta_3 NPF \text{ Wholesale} + e$$

The symbols mean:

α = Constants

Mcr = Outstanding Micro Financing

Small = Outstanding Small Financing

Csmr = Outstanding Consumer Financing

Cmr = Outstanding Commercial Financing

Crp = Outstanding Corporate Financing

NPF = The Bad Financing Ratio of All Segments

NPFRetail = The Bad Financing Ratio from Retail Segment

NPFWholesale = The Bad Financing Ratio from Wholesale Segment

4. Analysis

4.1 The Impact of the Retail Segmentation on The Financing Quality

A quantitative research method in this study using a regression approach with statistical tools in Stata version 13 to determine the effect of a retail segment on asset quality (NPF). The statistical regression results of the variables are as follows:

Table 1: Regression Statistic of NPF, Micro Financing, Small Financing, Consumer Financing and NPF Retail Segment

Source	SS	df	MS			
Model	.001107794	4	.000276948	Number of obs =	36	
Residual	.000077609	31	2.5035e-06	F(4, 31) =	110.62	
Total	.001185403	35	.000033869	Prob > F =	0.0000	
				R-squared =	0.9345	
				Adj R-squared =	0.9261	
				Root MSE =	.00158	

NPF	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Micro	4.52e-06	1.56e-06	2.90	0.007	1.34e-06	7.71e-06
Small	-6.53e-06	1.09e-06	-6.00	0.000	-8.75e-06	-4.31e-06
Consumer	-4.64e-07	5.74e-08	-8.08	0.000	-5.81e-07	-3.47e-07
NPFRetail	1.036831	.1092653	9.49	0.000	.8139827	1.259679
_cons	.0808165	.0060144	13.44	0.000	.06855	.0930831

Source: Regression by Stata Ver.13

Based on table 1 above, then the regression equation I from the statistical results with Stata version 13 is as follows:

$$NPF = 0.08 + 4.52MCR - 6.53Sml - 4.64Csmr + 1.04 + e$$

From the result of the equation above (table 1) can be interpreted that constant 0.08 is if there is no channeling of retail segment financing done by BSM, then NPF is 0.08%. The coefficient of micro-segment financing regression states that every micro-financing disbursement of Rp 1, it will cause an increase of NPF of 4.52%. While for small and consumer segment financing has a negative effect, which means that every increase in small segment financing of Rp 1, will decrease NPF by 6.53%. Furthermore, if there is the distribution of consumer financing Rp.1, it will reduce the NPF by 4.64% and e the error variable. Nevertheless NPF retail has a positive impact on the NPF whereas the increasing NPF retail 1% will cause the increasing of NPF 1.04%

Also, the Adjusted R-squared generated by the above equation model is properly, reaching 0.9261 so that the four variables (Micro Financing, Small Financing, Consumer Financing and NPF Retail) can explain the relationship with the NPF variable of 92.61%. Then also generated probability F statistic 0.0000 < 0.05 which means all four variables have a significant influence on the NPF.

4.2 The Impact of the Wholesale Segmentation on The Financing Quality

The quantitative research method in this study using regression approach with statistical tools Stata version in 13 to determine the effect of the wholesale segment on asset quality (NPF). The statistical regression results of the variables are as follows:

Table 2: Regression Statistic of NPF, Commercial Financing, Corporate Financing, and NPF Wholesale Segment

Source	SS	df	MS			
Model	.000709104	3	.000236368	Number of obs =	36	
Residual	.000476299	32	.000014884	F(3, 32) =	15.88	
Total	.001185403	35	.000033869	Prob > F =	0.0000	
				R-squared =	0.5982	
				Adj R-squared =	0.5605	
				Root MSE =	.00386	

NPF	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Commercial	-2.40e-06	1.41e-06	-1.70	0.098	-5.26e-06	4.69e-07
Corporate	-3.97e-06	6.72e-07	-5.91	0.000	-5.34e-06	-2.60e-06
NPFWholesale	.0946718	.0198455	4.77	0.000	.0542479	.1350956
_cons	.0972257	.0165716	5.87	0.000	.0634704	.130981

Source: Regression by Stata Ver.13

Based on table 2 above, then the regression equation II from the statistical results with Stata version 13 is as follows:

$$NPF = 0.09 - 2.40Cmr - 3.97Crp + 0.09NPFWholesale + e$$

From the result of the equation above (table 2) can be interpreted that constant 0.09 is if there is no channeling of wholesale segment financing done by BSM, then NPF is 0.09%. The coefficient of commercial segment financing regression states that every commercial financing disbursement of Rp 1, - it will cause the decrease of NPF of 2.40%. While corporate financing also has a negative impact on NPF that the disbursement of corporate banking Rp1, - cause the decrease of NPF 3.97%. Furthermore, for NPF Wholesale segment has a positive impact on NPF, which mean the increasing of NPF wholesale 1% will increase NPF 0.09%, and e is the error variable.

Also, the Adjusted R-squared generated by the above equation model is very good, reaching 0.5605 so that the four variables (Micro Financing, Small Financing, Consumer Financing and NPF Retail) can explain the relationship with the NPF variable of 56.05%. Then also generated probability F statistic 0.0000 <0.05 which means all four variables have a significant influence on the NPF.

4.3 Retail Segment VS Wholesale Segment and Its Impact on The Asset Quality

According to the regression results from the equation I and equation II above, it is known that the retail segment has a more significant influence on asset quality / NPF BSM. This shows that the management of sharia banks should give priority to the retail segment to maintain asset quality. Also, the distribution of microfinance/microcredit by BSM should be more cautious due to the high risk of micro-financing (Arafah & Nugroho, 2016a; Nugroho, 2014b; Roberts, 2013; Morduch, 2000). The high risk of micro financing should be anticipated with the competence of human resources of sharia banks to channel the funding that has better quality. However, sharia banking should have concern for poverty alleviation as well as micro-financing services. Microfinance in BSM is not only provided to those who are bankable (having collateral) but also for those who are unbanked. BSM has financing products to microentrepreneurs for a maximum ceiling of Rp.10.000.000, - (ten million rupiahs) which does not require collateral in the financing application requirements. The Sharia bank must own the social function without abandoning the ability to maintain stability and business continuity from sharia bank. Also, according to Prastowo, (2015), Islamic banks also must carry out environmental responsibility so that the existence of Islamic banks in promoting the economy of society also has a concern for the environment. Therefore, the distribution of Islamic bank financing

should not be used for businesses that cause environmental damage. Sharia financing distribution should be aimed at preserving the environment.

Furthermore, the financing portfolio in the wholesale segment in BSM only amounted to 56.05% of the asset quality while the retail segment had an impact of 92.61%. Therefore, if management aims to improve the quality of BSM assets, it must give its business priority to the retail segment. BSM's retail segment consists of the micro segment, small segment, and consumer segment. Based on the regression results in the retail segment, then that should get special attention is the micro-segment. The micro segment has a positive relationship with the NPF. Furthermore, to anticipate the increase of NPF, it is necessary to anticipate measures as follows:

- Investigate appropriately on aspects: character, capacity, capital, conditions and where necessary the collateral aspect;
- Ensure that prospective borrowers are obedient to banking laws and regulations;
- Consider the customer's business risk and repayment capability.

Therefore, it can be interpreted that the guarantee of credit is a belief in the ability and the ability of the debtor to pay and repay the debts for the period that has been approached.

5. Conclusion

We observe that segmentation has a significant influence on the asset quality. Nevertheless, according to the regression resulted from BSM data that segmentation divides by retail segment and wholesale segment, the retail segment has a more significant influence on the asset quality than a wholesale segment. Furthermore, also regarding the result and also in line with sharia principles that sharia bank should contribute to the social and environmental aspects. Thus BSM management should concern the retail segment for banking development. Especially for micro-financing, this segment needs special treatment to maintain the quality of improving the asset quality and sharia bank performance.

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