## **CHAPTER I**

## INTRODUCTION

## A. Background

Financial Technology (Fintech) has become a new phenomenon in financial market in Indonesia. According to Indonesia Fintech Landscape Report by Fintech Singapore, at least there were 162 Fintech players in May 2018. Those Fintech players were engaged in payment, lending, personal finance and wealth management, comparison, insurtech, crowdfunding, pos system, cryptocurrency and blockchain, and accounting. Based on the report, transaction value of Fintech in Indonesia in 2018 was projected at USD 22.338 million with expected growth 16,3% annually. Fintech in payment and lending were Fintech players with the highest growth among others Fintech players with each 38% and 31% growth. By entering financial market for payment and lending, Fintech continuously tried to take part in intermediary function that has been undertaken by Banks.

Banks have main function as financial intermediaries that collect deposits from surplus unit and distribute financing to deficit unit. The role of credit and financing from bank gives positive impact to economic growth. Increase in credit or financing demand will increase purchasing power, create more entrepreneurship, and support investment. Those conditions then cause multiplier effect such as

reduce unemployment and increase production. Credit and financing from bank then will give positive impact to economic growth.<sup>1</sup>

Generally, as showed in Table 1.1., Banks in Indonesia had positive assets growth from the past 3 years. Commercial Banks had the highest total assets among all banks. But, looking from the number of banks in Indonesia from 2015 until 2017 as showed in Table 1.2., Rural Bank had highest number of banks and followed by Sharia Rural Bank. The data recorded 1.619 Conventional Rural Banks and 167 Sharia Rural Banks from the total 1.935 banks in December 2017. In term of number of banks, Sharia Rural Banks had better growth than other banks.

TABLE 1.1.

Total Assets of Banks in Indonesia per December 2015 – 2017

(in Billion Rupiah)

|                        | 2015      | 2016      | 2017      |
|------------------------|-----------|-----------|-----------|
| Commercial Bank        | 6.095.908 | 6.729.799 | 7.387.144 |
| Rural Bank             | 101.713   | 113.501   | 125.945   |
| Sharia Commercial Bank | 213.423   | 254.184   | 288.027   |
| Sharia Rural Bank      | 7.739     | 9.158     | 10.840    |
| Sharia Business Unit   | 82.839    | 102.320   | 136.154   |
| Total                  | 6.501.623 | 7.208.962 | 7.948.111 |

Source: Indonesia Financial Service Authority (2017)

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<sup>&</sup>lt;sup>1</sup> Anung Herlianto E. C, "Pertumbuhan Kredit Vs Pertumbuhan Ekonomi: Kausalitas?", <a href="https://www.wartaekonomi.co.id/read182729/pertumbuhan-kredit-vs-pertumbuhan-ekonomi-kausalitas.html">https://www.wartaekonomi.co.id/read182729/pertumbuhan-kredit-vs-pertumbuhan-ekonomi-kausalitas.html</a>, (accessed August 28, 2018)

**TABLE 1.2.**Number of Banks in Indonesia per December 2015-2017

|                        | 2015  | 2016  | 2017  |
|------------------------|-------|-------|-------|
| Commercial Bank        | 118   | 116   | 115   |
| Rural Bank             | 1.636 | 1.633 | 1.619 |
| Sharia Commercial Bank | 12    | 13    | 13    |
| Sharia Rural Bank      | 163   | 166   | 167   |
| Sharia Business Unit   | 22    | 21    | 21    |
| Total                  | 1.951 | 1.949 | 1.935 |

Source: Indonesia Financial Service Authority (2017)

Despite the positive growth, the financial inclusion problem recently emerged because of limit access range and financing service that has not met the needs of unbankable society.<sup>2</sup> Banks were also considered to prefer distributing the fund to one big bankable company, not to Small-Medium Enterprises.<sup>3</sup> Whereas, SMEs became one of the important factors for Indonesian economy as Indonesia Ministry of Cooperatives and SMEs explained that SMEs sector contributed 62,57% to Indonesian GDP in 2017. By having huge number of banks spread throughout Indonesia, Rural Banks could support financial inclusion and broaden the access range. Rural Banks also target Small-Medium Enterprises (SMEs) as market for financing and has distributed IDR 45,7 trillion financing in 2017.

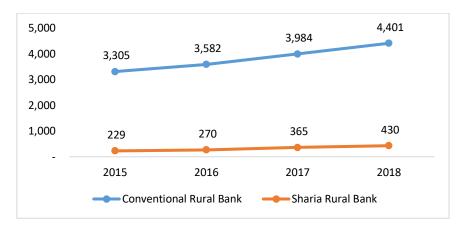
Sharia Rural Banks also have been helping the SMEs actors to expand their business through Islamic financing product. As in Special Region of Yogyakarta Province, according to the data of Indonesia Financial Service Authority, currently there are 55 Conventional Rural Banks and 12 Sharia Rural Banks. The increasing

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<sup>&</sup>lt;sup>2</sup> Randi Eka, "Mendalami Masalah Utama Inklusi Finansial di Indonesia", https://dailysocial.id/post/inklusi-finansial-indonesia, 2018, (accessed 28 August, 2018)

<sup>&</sup>lt;sup>3</sup> Yoga Sukmana, "Masalah Klasik UMKM, "Feasible" tetapi Tidak "Bankable", <a href="https://ekonomi.kompas.com/read/2017/02/14/210000726/masalah.klasik.umkm.feasible.tetapi.tid">https://ekonomi.kompas.com/read/2017/02/14/210000726/masalah.klasik.umkm.feasible.tetapi.tid</a> <a href="https://ekonomi.kompas.com/read/2017/02/14/210000726/masalah.klasik.umkm.feasible.tetapi.tid">https://ekonomi.kompas.com/read/2017/02/14/210000726/masalah.klasik.umkm.feasible.tetapi.tid</a> <a href="https://ekonomi.kompas.com/read/2017/02/14/210000726/masalah.klasik.umkm.feasible.tetapi.tid">https://ekonomi.kompas.com/read/2017/02/14/210000726/masalah.klasik.umkm.feasible.tetapi.tid</a> <a href="https://ekonomi.kompas.com/read/2017/02/14/210000726/masalah.klasik.umkm.feasible.tetapi.tid">https://ekonomi.kompas.com/read/2017/02/14/210000726/masalah.klasik.umkm.feasible.tetapi.tid</a> <a href="https://ekonomi.kompas.com/read/2017/02/14/210000726/masalah.klasik.umkm.feasible.tetapi.tid">https://ekonomi.kompas.com/read/2017/02/14/210000726/masalah.klasik.umkm.feasible.tetapi.tid</a> <a href="https://exonomi.kompas.com/read/2017/02/14/210000726/masalah.klasik.umkm.feasible.tetapi.tid</a> <a href="https:/

growth of credit and financing for the past 4 years, as seen in Figure 1.1., indicated the increasing demand for credit and financing by Rural Bank in Special Region of Yogyakarta Province. Even though the amount of financing by Sharia Rural Banks was lower than the credit by Conventional Rural Banks, but the growth was positive.



Source: Indonesia Financial Service Authority (2018)

FIGURE 1.1.

Credit and Financing of Rural Banks in Special Region of Yogyakarta Province per February 2015-2018 (in Billion Rupiah)

Table 1.3. shows the data of total assets, financing, and *Mudharabah* investment by Sharia Rural Banks in Special Region of Yogyakarta Province. Bangun Drajat Warga (BDW) Sharia Rural Bank had the highest assets and financing from 2016 to 2017. BDW Sharia Rural Bank also had highest *Mudharabah* investment in 2016. According to the data, BDW Sharia Rural Bank had the best financing among Sharia Rural Banks in Special Region of Yogyakarta Province. It reflects that BDW Sharia Rural Bank also helped financial inclusion in Indonesia.

TABLE 1.3.

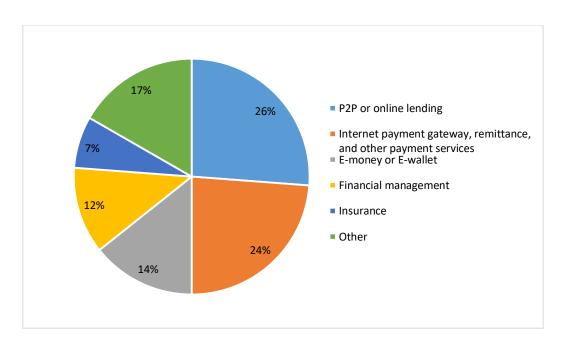
Total Assets, Financing, and Mudharabah Investment of Sharia Rural Banks in Special Region of Yogyakarta Province per September 2016 – 2017 (in Thousand Rupiah)

|                                     | Total Assets |             | Financing  |            | Mudharabah Investment |            |
|-------------------------------------|--------------|-------------|------------|------------|-----------------------|------------|
|                                     | 2016         | 2017        | 2016       | 2017       | 2016                  | 2017       |
| PT BPRS Margirizki<br>Bahagia       | 46.138.140   | 53.745.526  | 30.347.022 | 33.674.483 | 29.545.369            | 29.970.504 |
| PT BPRS Bangun<br>Drajat Warga      | 91.361.552   | 108.340.733 | 58.571.797 | 56.853.052 | 53.120.601            | 61.350.122 |
| PT BPRS Madina<br>Mandiri Sejahtera | 44.316.375   | 67.846.823  | 38.238.597 | 53.790.500 | 31.904.424            | 45.658.756 |
| PT BPRS Mitra Amal<br>Mulia         | 36.166.188   | 45.072.070  | 27.142.170 | 31.860.508 | 24.993.742            | 25.614.362 |
| PT BPRS Danagung<br>Syariah         | 34.110.725   | 40.033.993  | 17.708.489 | 19.326.656 | 19.142.939            | 20.607.038 |
| PT BPRS Mitra<br>Cahaya Indonesia   | 24.094.035   | 56.042.497  | 12.360.260 | 24.394.315 | 19.565.543            | 31.714.431 |
| PT BPRS FORMES                      | 30.087.380   | 33.019.298  | 18.223.922 | 20.408.577 | 15.747.454            | 19.538.282 |
| PT BPRS Cahaya<br>Hidup             | 14.260.186   | 21.252.170  | 10.721.197 | 14.201.859 | 7.990.868             | 13.766.884 |
| PT BPRS Dana<br>Hidayatullah        | 21.807.068   | 24.497.184  | 14.801.608 | 17.778.832 | 16.147.283            | 14.510.630 |
| PT BPRS Barokah<br>Dana Sejahtera   | 70.453.777   | 92.356.991  | 46.338.429 | 56.169.846 | 46.217.225            | 62.950.638 |
| PT BPRS Mitra<br>Harmoni Yogyakarta | 26.661.034   | 42.258.518  | 23.079.461 | 32.147.432 | 14.824.550            | 23.430.510 |
| PT BPRS Unisia<br>Insan Indonesia   | 21.711.279   | 31.886.029  | 15.235.582 | 20.496.211 | 9.113.052             | 20.352.116 |

Source: Indonesia Financial Service Authority (2017)

Bangun Drajat Warga Sharia Rural Bank was established in 1994 at the suggestion of Economic Council of Muhammadiyah Yogyakarta Regional Leader to establish a financial institution based on Sharia principles. BDW Sharia Rural Bank has been operating for 24 years and prioritizing best customer service. Customer satisfaction is the goal of BDW Sharia Rural Bank in offering financial service. In order to achieve customer satisfaction, the bank should consider to adopt technology in financing service because these days Sharia Rural Banks are not the only institution serving SMEs sectors. Technology innovation in financial market has risen tight competition in SMEs market.

Technological advance has hit banking sector through a phenomenon of disruption by Financial Technology (Fintech) institutions. Central Bank of Indonesia explained Financial Technology as the use of technology in financial system that create new product, service, or business model that can give impact on monetary stability, financial system stability, and payment system. Fintech institutions as emerging non-bank institutions offering financial service with technological benefit entered financial market and also target SMEs market. According to Indonesia Fintech Association (AFTECH), which was established in 2015, there are at least 5 types of Fintech institutions, which are Fintech online lending, remittance, e-money, financial management, and insurance.

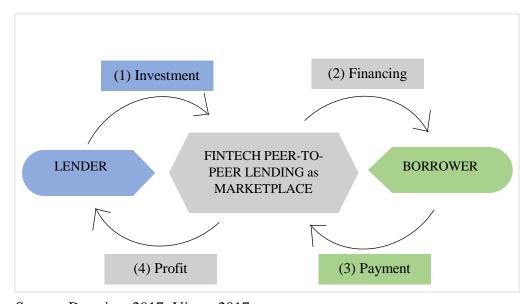


Source: Fintech Report 2017 by Indonesia Fintech Association

# **FIGURE 1.2.** Types of Fintech Firms

Based on the survey on members of AFTECH conducted by AFTECH in 2017 as shown in Figure 1.2., Fintech online lending was the fastest growing

Fintech type in Indonesia with 26% percentage among all Fintech. Indonesia Financial Service Authority Regulation (POJK) No.77/POJK.01/2016 explains about Fintech online lending or Fintech Peer-to-Peer Lending as a type of Fintech institutions that acts as marketplace for lender and borrower to meet and conduct loan and borrowing agreement through electronic system using internet network. As shown in Figure 1.3., Fintech Peer-To-Peer Lending allows individuals and companies to invest in a business without banks intermediation (Vives, 2017). Fintech had the ability to match the lenders and borrowers directly using technology (Dermine, 2017).



Source: Dermine, 2017; Vives, 2017

**FIGURE 1.3.** Operational Scheme of Fintech Peer-To-Peer Lending

Based on its operation, Fintech Peer-To-Peer Lending in Indonesia can be divided into Conventional Fintech and Sharia Fintech. Conventional Fintech uses interest rate on its operation, while Sharia Fintech uses profit-loss sharing instead.

National Sharia Board – Indonesian Council of Ulama in a rule No.117/DSN-

MUI//II/2018 explains that Technology-Based Financial Service Based on Sharia Principles is the implementation of financial services based on Sharia principles that connects Financiers with Financing Receivers in order to perform financing contract through electronic system using internet network. The rule also explains the financing contracts used by Sharia Fintech which are also used by Sharia Banks.

The main difference between Conventional Fintech and Sharia Fintech is the using of interest that leads to the difference of contracts and financing products. Sharia Fintech is still categorized as newcomer compared to Conventional Fintech. The data in Indonesia Financial Service Authority recorded 64 Fintech Peer-To-Peer Lending registered on June 2018. Among those institutions, Ammana and Danasyariah are Sharia Fintech institutions. Investree is a Conventional Fintech that has Sharia business unit. Ammana has distributed IDR 2 billion financing to 500 SMEs actors since March 2018<sup>4</sup>, while Sharia product by Investree distributed IDR 2,7 billion financing since November 2017 until January 2018<sup>5</sup>.

Fintech entered financial market providing similar financial services as banks, such as transforming savings into loans (Navaretti, et al., 2017). Sharia Rural Banks and Sharia Fintech serve financing using profit-loss sharing. Sharia Fintech is in lead for its new technology that allows its borrowers to choose and fill out the requirement for financing via online. Fintech changed the way customers access the

<sup>4</sup> Antara and Kodrat Setiawan, "Asosiasi Ungkap Tantangan Fintech Syariah di Indonesia", <a href="https://bisnis.tempo.co/read/1104163/asosiasi-ungkap-tantangan-fintech-syariah-di-indonesia">https://bisnis.tempo.co/read/1104163/asosiasi-ungkap-tantangan-fintech-syariah-di-indonesia</a>,

<sup>2018, (</sup>accessed July 12, 2018)
<sup>5</sup> Umi Kulsum and Sanny Cicilia, "Fintech lending syariah tak kalah saing dengan konvensional", <a href="https://keuangan.kontan.co.id/news/fintech-lending-syariah-tak-kalah-saing-dengan-konvensional">https://keuangan.kontan.co.id/news/fintech-lending-syariah-tak-kalah-saing-dengan-konvensional</a>, 2018, (accessed July 11, 2018)

product and services (Andersson & Holmgren, 2017). Fintech Peer-To-Peer Lending became favorable for its product innovation (Dermine, 2017). The lack of Fintech compared with Banks is on the limitation of the financing given. Fintech Peer-To-Peer Lending give financing for short-term only, while Banks give more option for long-term or short-term financing.

Fintech Peer-To-Peer Lending in Indonesia focuses on targeting SMEs sector as its market. Some Fintech credit in US, British, French, and China also competed with banks in unsecured consumer loan, residential lending, and Small-Medium Enterprises (SMEs) market (Dermine, 2017). As in Indonesia, Fintech Peer-To-Peer Lending helps to fill IDR 1.000 trillion lack of fund for SMEs. The amount of financing by Fintech Peer-To-Peer Lending in December 2017 was IDR 2,6 trillion and reached IDR 4,7 trillion in March 2018.<sup>6</sup> The new way of providing financial services by Fintech disrupted mostly small banks and banking jobs (Navaretti, et al., 2017).

Before the emergence of Financial Technology, people chose financing services by financial institutions that were not yet technology-based. Some people who avoid interest (*riba*) chose Islamic financial institutions, including Sharia Rural Banks. After Financial Technology entered financial market in Indonesia, people have more various option for using financial services. Fintech Peer-To-Peer Lending was welcomed in Indonesia and developed into Conventional and Sharia

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<sup>&</sup>lt;sup>6</sup> Umi Kulsum and Sofyan Hidayat, "Maret 2018, NPL fintech P2P lending turun ke level 0,5%", <a href="https://keuangan.kontan.co.id/news/maret-2018-npl-fintech-p2p-lending-turun-ke-level-05">https://keuangan.kontan.co.id/news/maret-2018-npl-fintech-p2p-lending-turun-ke-level-05</a>, 2018, (accessed July 12, 2018).

Fintech. The growth was seen from the number of Fintech institutions, the amount of loan given, and the number of investors and borrowers attracted to Fintech. It was recorded that 330.154 borrowers and 115.897 investors were attracted to Fintech Peer-To-Peer Lending in January 2018.<sup>7</sup>

Looking to the case of digital banking or internet banking in Indonesia, it was also well accepted. Indonesia Financial Service Authority recorded 50,4 million e-banking users in 2016. 8 The interest to use internet banking was influenced by several factors, such as perceived value, perceived risk, perceived easy to use, perceived of information technology, and product feature (Amijaya, 2010; Widyarini, 2005). The perceived of information technology influenced the interest to use internet banking the most (Amijaya, 2010). The research showed that bank's customers accepted the technology innovation on financial service. Reflecting on the previous research, there is possibility that people will also accept Fintech on financial market, since both Fintech and internet banking adopt the advanced technology.

Sharia Rural Banks have been serving financing longer than Sharia Fintech.

But Sharia Fintech emerged to financial market offered new product innovation that brought the gap between Fintech and Rural Banks on the technological aspect.

Nowadays, Rural Banks have not yet to adopt the advanced technology, whereas

<sup>7</sup> Umi Kulsum and Sofyan Hidayat, "Januari 2018, tekfin P2P lending salurkan pinjaman Rp 3 triliun", <a href="https://keuangan.kontan.co.id/news/januari-2018-tekfin-p2p-lending-salurkan-pinjaman-rp-3-triliun">https://keuangan.kontan.co.id/news/januari-2018-tekfin-p2p-lending-salurkan-pinjaman-rp-3-triliun</a>, 2018, (accessed July 12, 2018).

<sup>&</sup>lt;sup>8</sup> Dwitya Putra and Paulus Yoga, "OJK: Empat Tahun Pengguna E-Banking Meningkat 270%", <a href="http://infobanknews.com/empat-tahun-pengguna-e-banking-meningkat-270/">http://infobanknews.com/empat-tahun-pengguna-e-banking-meningkat-270/</a>, 2017, (accessed July 12, 2018)

Fintech is welcomed by people. Even though Sharia Rural Banks give more option of financing products, but Sharia Rural Banks should be aware of the presence of Sharia Fintech since both targets the same SMEs market and people welcome the technology innovation. Fintech had good effectiveness to improve financial service quality, even though its implementation was still new in Indonesia (Chrismastianto, 2017).

Sharia Rural Banks must learn how Sharia Fintech might influence their customers in short-term and long-term. Sharia Rural Banks must understand the customer's need, especially from debtor's side. Sharia Fintech offers the new way of getting financing and it could change the preference of Sharia Rural Bank's customers on choosing financing service. Customers showed the preference for convenient transaction through mobile and internet (Agrawal, 2017) which are offered by Sharia Fintech. Bank's customer intention could be influenced by the perceived risk, perceived value, perceived ease of use, usefulness of the products, the environment, bank's service quality, and product feature (Widyarini, 2005; Floh & Treiblmaier, 2006; Amijaya, 2010).

Therefore, according to the explanation above and depending on the demand and need from debtors, there was possibility that Sharia Rural Banks need new technological advances (Umar, 2017). Understanding debtor's behaviour helped to set the strategy based on the environment and consumer's need (Widyarini, 2005) to offer the best financing service to compete with Sharia Fintech. There was a need to analyze how network change in financial sector affects customer behavior (Shih & Fang, 2004). Based on the background of the study, it would be necessary to

analyze how debtors' preference, expectation, and opinion if bank also adopt technology-based financing service, especially on Sharia Rural Banks' debtors. Perceived Financial Technology, Service Feature, Perceived Ease of Use, and Perceived Risk are used to measure the influence of Sharia Financial Technology on Debtors' Preference to choose a financial service.

#### **B.** Limitation of The Problem

This study focuses to analyse the change of Debtors' Preference on Sharia Rural Banks only. The independent variables used are perceived Financial Technology, Service Feature, Perceived Ease of Use, and Perceived Risk. This study does not analyse the change of debtors' preference on other financial and banking institutions. The respondents of this research are the debtors of a Sharia Rural Bank in Special Region of Yogyakarta Province. The respondents are debtors who are SMEs actors, currently in productive financing in the form of *Mudharabah* and *Musyarakah*, as well as users of internet or technology. Bangun Drajat Warga Sharia Rural Bank is used as case study because it had the highest number of financing among Sharia Rural Banks in Special Region of Yogyakarta Province from 2016 until 2017. Research period for this study is from September to October 2018.

## C. Research Questions

Based on the background explained, the problem is formulated as below:

- a. How is the influence of Perceived Financial Technology toward the change of Debtors' Preferences on Sharia Rural Bank?
- b. How is the influence of Sharia Fintech Service Feature toward the change of Debtors' Preferences on Sharia Rural Bank?
- c. How is the influence of Perceived Ease of Use toward the change of Debtors' Preferences on Sharia Rural Bank?
- d. How is the influence of Perceived Risk toward the change of Debtors'

  Preferences on Sharia Rural Bank?
- e. How is the influence of Perceived Financial Technology, Sharia Financial Technology Service Feature, Perceived Ease of Use, and Perceived Risk toward the change of Debtors' Preferences on Sharia Rural Bank simultaneously?

## **D.** Purpose of The Study

This study is conducted to:

- a. Analyse the influence of Perceived Financial Technology towards the change of Debtors' Preferences on Sharia Rural Bank.
- b. Analyse the influence of Sharia Fintech Service Feature towards the change of Debtors' Preferences on Sharia Rural Bank.
- c. Analyse the influence of Perceived Ease of Use towards the change of Debtors' Preferences on Sharia Rural Bank.

- d. Analyse the influence of Perceived Risk towards the change of Debtors' Preferences on Sharia Rural Bank.
- e. Analyse the influence of Perceived Financial Technology, Sharia Financial Technology Service Feature, Perceived Ease of Use, and Perceived Risk towards the change of Debtors' Preferences on Sharia Rural Bank simultaneously.

## E. Significance of The Study

The result of this study is expected to be useful to provide:

- a. Information for Sharia Rural Banks in Indonesia about debtors' preference in using a financing service to provide best services based on debtors' need.
- b. Information for Sharia Rural Banks in Indonesia to set strategy that improves Sharia Rural Banks competitiveness among other financial institutions and Financial Technology in financing market.
- c. Academic study about the influence of the emergence of Sharia Financial Technology towards the change of Debtors' Preferences on Sharia Rural Bank in Indonesia.
- d. A reference for policy maker in arranging the policy about Financial
   Technology and financial institution in Indonesia.