

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **A. THEORIES**

##### **1. Financial System Stability Theory**

The banking industry by some economists is considered an industry that requires special attention because it is considered to be easily influenced by banking external factors of banking and is an integral part of the payment system. According to Susanti (2016) the banking industry is an industry that requires special supervision because the collapse of a bank will cause a snowball effect on the existing economic system. Individual banking failure is not very influential, but if the failure occurs in the banking sector as a whole it will worsen economic conditions.

According to Bank Indonesia (2017) the importance of the role of the financial system in the economy makes it an absolute thing to maintain its stability. A stable financial system will ensure the continuity and expeditious distribution of funds from excess parties to those in need of loans. Thus, the economic system can support the smooth running of economic activities so as to encourage economic growth. In accordance with Bank Indonesia's efforts to strengthen the momentum of economic recovery, policies aimed at maintaining financing system stability are directed to be more accommodating. In the

second semester of 2017, financial system stability showed a better development compared to the previous period despite the limited banking intermediation. This stable condition is indicated by the movement of the financial system stability index (ISSK) which is maintained in the normal zone (ISSK is declared to be in a crisis if it exceeds the threshold level, which is 2.00). ISSK shown a decline to the level of 0.77 at the end of 2017. This figure is lower than the level of 0.82 in mid-2017. Even throughout the second semester of 2017, ISSK moved at a lower level with a range of 0.74-0.81. The decline in pressure on ISSK is a reflection of the stability of Indonesia's financial system is getting stronger.

## **2. The Generation of Financial Crisis**

The financial crisis and banking crisis have generally occurred in various countries in the world. Understanding of the causes of the crisis is still diverse depending on the condition of the country which is the case. However, if observed in depth, the financial crisis and banking crisis have certain characteristics or patterns that are always repeated. The following is an explanation related to the Financial Crisis Generation:

### **a. First Generation Financial Crisis**

The first generation crisis was introduced by Salant and Handerson (1978), which was later developed by Krugman (1978) and Flood & Garber (1984) which is called the Canonical Crisis theory is an exchange rate crisis or

balance of payments crisis experienced by a country with an open economy size small and apply a fixed exchange rate. The Canonical Crisis theory is in the background by the Salant price stability model which explains the occurrence of speculative attacks on a commodity. Speculators will take the initiative to buy a commodity supply when they estimate that the commodity is increasing rapidly in the future (for example gold), this is done in an effort to increase profits. From the Salant model, Krugman developed it to analyze the process of the currency crisis.

According to Krugman (1979) the government uses high budget deficits with financing from credit expansion. The impact of this policy is an increase in the money supply or the market is experiencing excess liquidity. Therefore, inflation tends to be high. This excess liquidity will be converted into foreign currency and the demand for foreign money increases. While inflation in the main partner countries is relatively low, the domestic currency is *overvalued*. If the market is aware of this, then speculators will attack the domestic currency. Meanwhile, because it uses a fixed exchange rate, foreign exchange reserves will be depleted to maintain exchange rate stability (Sumandi, 2017).

In the canonical crisis model there are two underlying assumptions. First, the government of a country prints large amounts of money to finance its budget deficit. Second, the central bank has a number of foreign exchange reserves used to intervene the market with the aim of stabilizing the exchange rate in accordance with the target.

#### b. Second Generation Financial Crisis

In an economy where the fundamental condition of the exchange rate system shows a good trend does not rule out the possibility that the country can experience a crisis. The economy can experience a crisis due to speculative attacks even though the facts show that the fundamentals of a strong exchange rate system (meaning that the central bank has enough foreign exchange reserves to support a fixed exchange rate), this kind of crisis is called self-fulfilling crises. The role in the second generation crisis is played by changes in expectations as the main cause of the financial crisis.

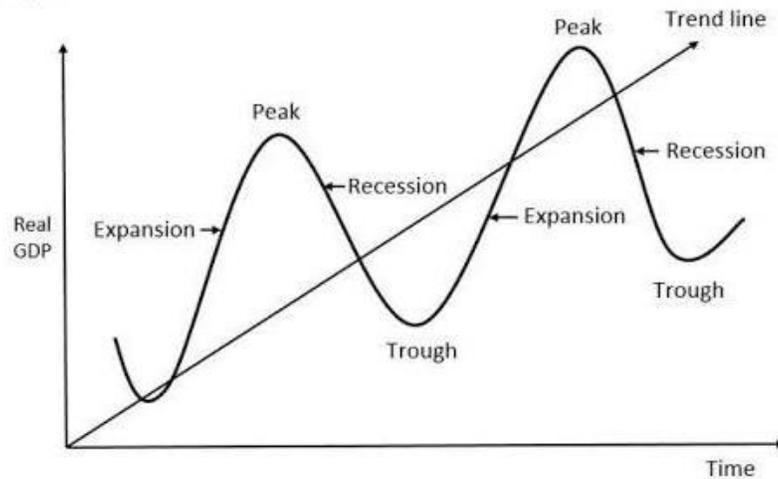
#### c. Third Generation Financial Crisis

The first and second generation models have been able to explain previously related to episodes of currency crisis, but the first and second generation models cannot help researchers predict crisis (Sumandi, 2017). The third generation crisis is a crisis that occurs simultaneously between the banking crisis and the exchange rate crisis (twin crisis). On the banking side, the root causes of the crisis in Asia are moral hazard problems. This is related to the government's guarantee of domestic financial institutions to obtain investment credit even though the financial institution is actually not credible.

### **3. Business Cycle Theory**

This business cycle is the ups and downs or natural fluctuations of economic growth that usually occur from time to time. Economic growth is

business expansion can occur and cycles where depression. This cycle is a useful tool for analyzing economic performance.



Source: corporatefinanceinstitute.com

**FIGURE 2.1**  
**Business Cycle Phases**

Overall a greater change in the economy of a nation is a change in joint economic activities. These changes are referred to as business cycles, which are generally regular and periodic cycles. There are five phases that mark the business cycle, namely, expansion, peak, recession, through and recovery.

When the point of expansion reaches its maximum level and economic factors stabilize and there is also an increase in living standards, in this situation will lead to the beginning of the recession phase, this situation is called the peak of business decline in economic activity. In this phase, entrepreneurs become pessimistic by holding their funds from investment. A further decline in

economic factors has a certain limit in decreasing economic activity. This phase is called the business cycle. Furthermore, the recovery phase will occur after the recession, as well as through recession. Economic conditions are usually over time facing the expansion phase, in the recovery phase

#### **4. Resilience Theory**

Today the resilience of the financial sector is very important. The term related to the issue of financial sector resilience, especially the banking sector is the main focus of various countries in the world. In relation to resilience in the banking sector, Crosen (2014) meet two conditions such as: (i) banks are able to absorb shocks without having to rely on support from the government, (ii) the ability of the banking sector to carry out functions - economic functions in a sustainable manner, especially in carrying out its function as an intermediary institution, such as providing credit, collecting funds from the public, payment and service transactions or money mapping.

According to Berry & Greenham (2015) resilience in the banking sector is a condition where banks are able to withstand shocks from various sources or external shocks, either from internal banking or external banking. Banks will be able to absorb adjusting or absorbing risks and respond quickly to any shocks that arise, when there are symptoms of shocks to banks, so that banks are able to anticipate early potential shocks that can affect the performance of the banking sector itself.

On the other hand, Bank Indonesia (2010) explained that the importance of banking sector resilience for Indonesia is because this sector is one of the main sectors that play a role in running the Indonesian economy and the majority of the market share of financial institutions in Indonesia is dominated by the banking sector.

#### **5. Vulnerability Theory**

Vulnerability are associated with conditions (preexisting feature) is to strengthen the financial system (amplify) and accelerate the deployment of shock. Vulnerability is a financial element characteristic in the form of a vulnerability node that applies and propagates the initial shock, so that it has the potential to increase the shock of the financial system Harun et al (2016). Identification of vulnerabilities includes time series and cross section dimensions using the financial system ratio approach, namely Credit, Liquidity, Market and Operations Risk.

#### **6. Intermediary Theory**

Bank can reduce transaction costs and information asymmetry by building financial intermediary, which arises from the relationship between debtors and creditors. It is contrast to the view of Islamic economists on financial intermediary is standard economic agents who are develop Islamic values. And keeping the purpose of shariah (Maqasid al-shariah). Therefore, it can be stated that financial intermediation currently provides a satisfying understanding of financial functions.

According to Kamil (2018) Islamic bank and conventional one actually have similar understanding on the intermediary objectives of commercial banks in management activities for they require benefit as a purpose. Therefore, the classical financial intermediation function remains important role in Shariah Banking. Though, as a financial intermediary, Islamic banks has it legality from consensus of economists, bankers and also Islamic scholars, Islamic bank acting as an financial intermediary in a different way as a conventional one.

The aim of Islamic economics is the system that opposes economic and financial activities in the parameters of socio-economic justice (Nor & Hashim, 2015). Shariah Banking deviations based on the fundamentals of the Islamic economic system is enough to separate the Shariah Banking system from the others. It mean that the prudential motivation in understanding Shariah Banking in the contract of financial intermediary will solely different to the conventional term for both have different fundamental base. In conventional contract, bank has their company vision and mission that will influence the function of financial intermediary. While, Islamic bank influenced by the fundamental teaching of Maqasid al-Shariah.

The main principles of Shariah Banking are the prohibition of interest, avoiding *gharar* transactions, prohibitions on gambling *maysir* transactions and also prohibitions involving the prohibited *haram* aspect such cigarette, prostitution, pork, and activities that are dangerous life and opposing the principles in Shariah rules called Fiqh Muamalah.

## **7. Efficient Market Hypothesis Theory**

The factors that distinguish the banking sector companies from the market sector are:

1. Companies in the banking sector are more vulnerable than companies in other sectors because of the immaturity inherent in their balance sheets which exposes to potential ruins bank.
2. Transmission of other sectors is more slowly compared to the banking sector that is more real and fast.
3. The banking sector interacts most the real economy, which confronts the economic turmoil originating from the financial system.

There are two specific sections of literature in financial economics: first, literature is an efficient market hypothesis. Second, literature is a day-of-the-week hypothesis. According to Narayan, et al (2015) the efficient market hypotheses can be widely tested and the various applications have been carried out. There are also studies that carry out simple tests of autocorrelation of daily and weekly stock returns.

## **B. CONCEPTS**

### **1. Definition of Shariah Banking**

Shariah Banking or sharia Banking are banks that operate in accordance with Islamic principles. The existence of financial institutions in the economic system is very important, because without a good and professional financial institution will disrupt business activities and economic wheels. In general,

Shariah Banking is a financial institution that main business is to provide financing and other services in payment traffic as well as the circulation of money which operations are in accordance with Islamic Sharia principles. (Imamudin Yuliadi, 2007:127)

The definition of Shariah Banking which is in accordance with Law No. 21 of 2008 is everything concerning Sharia Banks and Sharia Business Units (BUS and UUS), including institutions, business activities, and the processes in carrying out its business activities. Shariah Banking in conducting its business activities is based on Sharia Principles, economic democracy and prudential principles. Sharia Banking aims to support the implementation of national development in order to improve justice, togetherness and equality of people's welfare. (Law No. 21 of 2008, concerning Shariah Banking)

Indonesia is one of the largest Muslim population in the world using banking as one of the institutions together with conventional banking. Shariah Banking must not deviate from the process of Islam in implementing tasks, but they will also help others to create prosperity (Akwan, 2018). As mentioned in the letter an-Nisa verse 29 which is the basis of Islamic law regarding Shariah Banking:

يَا أَيُّهَا الَّذِينَ آمَنُوا لَا تَأْكُلُوا أَمْوَالَكُمْ بَيْنَكُمْ بِالْبَاطِلِ إِلَّا أَنْ تَكُونَ تِجَارَةً عَنْ تَرَاضٍ مِنْكُمْ ۗ وَلَا تَقْتُلُوا  
 أَنْفُسَكُمْ ۗ إِنَّ اللَّهَ كَانَ بِكُمْ رَحِيمًا.

*“O you who have believed, do not consume one another's wealth unjustly but only [in lawful] business by mutual consent. And do not kill yourselves [or one another]. Indeed, Allah is to you ever Merciful.”*

## 2. Shariah Banking Performance

According to Dahlia (2012) describes the company's performance is a part of providing information about target of certain activities, what the different between the standards are used, and recommend solutions that given. So, it seems clear that in conducting performance evaluation, whatever is needed is needed to measure the measurement as a reference.

In the economic literature the performance of banks is gaining big attention, because banks played an important role in the economy. There are several aspects of bank performance that can be analysed. The determinants for banking performance constitute external variables, namely macro-economic and macro-finance, which reflect the laws in which the bank operates and in the economic environment it located (Akwan, 2018).

## 3. Risks on Shariah Banking

Risk arises when there is an unknown or unclear outcome and the risk when there are possible outcomes. According to Misman (2010) Risk is the volatility of unexpected results or variability. Risk can be divided into two types:

systematic risk and unsystematic risk. The risk itself can be measured by standard deviation of historical results.

According to Wiranatakusuma & Duasa (2017) there are two important risks that cover the Shariah Banking Resilience Index (IBRI), which are liquidity risk and credit risk. Credit issues are related to banking operations amidst high non-performing loans. Banks as a financial intermediaries have to meet short-term obligations. When the value of a bank fails to achieve the value of their obligations, that means the bank is at a risk of bankruptcy. These assets can be influenced by loans to fulfil their current and future obligations. In addition, given that the problem of liquidity risk will emerge due to the loan defaults. In this case, capital will be influenced by the emergency need in operating and mitigating the systematic risks. Therefore, credit risk can trigger liquidity risk. But in this study, not only credit risks were discussed, but also operational risk.

A unique risk for the company industry is an unsystematic risk. Non-systemic risks are such labour strikes, loss of key accounts, consumer preferences, labor difficulties, mismanagement of companies and regulatory actions. All investment or business activities will be exposed to various types of uncertainty.

Shariah Banking Operate are based on Sharia principles. The difference between Islamic banks from conventional banks is the existence of riba variable.

As a result of the unique structure of assets and liabilities, Islamic banks must also face new and unique losses. According to them, mandatory to demand sharia is a new consequence. Among the nature of operations in Islamic financial institutions is on the profit to loss sharing. As with general financial institutions, it is necessary to banking institutions, to ensure that they operate efficiently. Risks to banks that will be discussed in this study include: Liquidity Risk, Credit Risk and Operational Risk

a. Liquidity Risk

The definition of liquidity risk can be broadly defined as the ability to meet cash needs immediately and at an appropriate cost. Liquidity is important for banks to carry out their business transactions, address urgent needs, satisfy customer demands for loans and provide flexibility in achieving attractive and profitable investment opportunities.

According to Sholikhah (2018) banking liquidity management is managing how banks can fulfill both current liabilities and future liabilities in the event of an asset liability withdrawal or repayment that is in accordance with the agreement or which has not been agreed (unexpected). Bank liquidity management is also part of liability management. Through good liquidity management, banks can convince the depositors that they can take their funds at any time or at maturity.

The liquidity risk is a risk where banks cannot meet the needs of customers in the short term. According to Ikatan Bankir Indonesia (2015) if a bank is unable to meet the liquidity needs of its customers. Therefore, the level of public trust will decrease. It will cause liquidity problems in banks and give an impact on other financial aspects which can threaten the bank business continuity. Liquidity risk is influenced by several factors, including accuracy of cash flow planning, accuracy in managing funds, availability of assets that are ready to be converted into cash and the ability to create access to the interbank market. Variables used later on this liquidity risk is Financing to Deposit Ratio (FDR).

b. Credit Risk

Credit risk is a major source of financial systems. According to the Indonesian Bankers Association (2015) credit risk is the risk of losses due to counterparties to fulfil their obligations. Usually this risk comes from several banking functional activities such as credit or commonly referred to as Financing. Today the productive assets of national banks are dominated by loans, while the most important sources of bank funds are from third party funds or DPK so that if there is a significant increase in credit risk to banks, the influence on bank performance will be large and can reduce the performance of banking rating.

Credit policy plays an important role as a guide in the implementation of all activities related to performance of credit and bank beneficiaries, therefore with the existing of policies the bank can apply their credit principles in a more consistent and sustainable manner. For this reason on credit risk the author will use the Non Performing Financing (NPF) variable.

c. Operational Risk

According to the Indonesian Bankers Association (2015) Operational risk is the risk about awareness and accountability. The greater the level of human awareness, the stronger a bank is against shocks due to operational risks. Therefore, the operational risk process will later help daily activities, including the responsibility to assess and control risks.

Every incident related to operational risk can have one or several reasons. The point is because a major thing increases the likelihood of an event occurring, therefore, in identifying the main cause of an event is the bank must be able to determine the most dominant cause. Hence, in this study the writer uses The Operational Expenses to Operational Revenue (BOPO).

#### 4. Asset Liquidity and Management on Shariah Banking

Shariah Banking has an asset structure that is more dominated by types of financing based on fixed rate assets which cannot be adjusted to changes in market interest, this is different from conventional bank asset structure that is more flexible in responding to interest rate fluctuations. At the same time, Islamic banks have a liabilities structure that is sensitive to changes in interest rates. As a result, Islamic banks have difficulty reacting directly and quickly to the changes in market interest due to the different structure of their assets and liabilities *mismatch*. This condition will put Islamic banks experience a displaced commercial risk or transfer of risk related of deposits to equity holder (Musri & Rama, 2015).

Shariah Banking faces various forms of financial risk in its operations. Among them is the rate of return risk as recognized by the IFSB (*Islamic Financial Services Board*). According to Musri & Rama (2015) the main source of the risk of the rate of return experienced by Shariah Banking as a consequence of the unique structure of the liability (*liabilities*) of Islamic banks. It majority are based on floating rate of return, while others are use fixed-return assets. This condition causes asset-liability mismatch. Asset-liability mismatch occurs because of the passiva and assets are not interconnected. Thus, in the context of overall balance sheet exposure, Islamic banks are exposed to asset-liability mismatch as a result of having a fixed-asset return such as murabahah

whose funding sources are taken from investment accounts, while investment account owners expect to get a parallel return with the benchmark rate (*benchmark level*). The increase in the benchmark rate causes investors or fund providers to expect high profit sharing rates.

### **C. PREVIOUS RESEARCH**

Nugraheni & Alam (2018) which is also supported by Bello, et al (2018) in their research "The Effect of Liquidity Risk on Profitability in Islamic and Conventional Banking in Indonesia" summarizing the ratio of profitability to Islamic and conventional banking empirically. The study also comparing liquidity and profitability in Sharia and Conventional banking. FDR (Financing to Deposit Ratio), Liquid Asset to Deposit (LAD), Liquid assets to total assets (LTA), the third variable which is a proxy for liquidity. From the study it was produced that it was portrayed by Shariah, FDR and LTA positive for profitability, while LAD was negative for profitability. In Conventional banking, the effect of the LTA variable is negative and significant on its profitability and for FDR and LAD the increase is not significant for its profitability.

Amalia (2018) conducts research on what factors influence NPF in Islamic banks in Indonesia. In this study the data used is secondary data obtained from the Financial Services Authority (OJK) method used by Multiple Linear Regression analysis with Ordinary Least Square (OLS). The factors that

influence the level of financing are NPF as the dependent variable, while financing to Deposit Ratio (FDR), Return on Assets (ROA), and Operational Costs to Operating Income (BOPO) and Capital Adequacy Ratio (CAR) as independent variables. From the analysis in the study resulted that the FDR, ROA and CAR variables had a positive and significant effect on NPF. While the BOPO variable has a negative and significant effect on NPF. Therefore the results of this study, Sharia banking is suggested to continue to increase the FDR, ROA and CAR variables and reduce the BOPO variable in order to keep the NPF value stable.

Purwanti (2016) is supported by Verawaty, et al (2017) Conducting research on the effect of Operational Efficiency (BOPO), Market Risk (NIM), Credit Risk (NPL and LDR), Return on Equity (ROE), Capital Adequacy Ratio ( CAR) on Return on Assets (ROA) as a proxy for the financial performance of national commercial banks based on 2014. From the analysis they used panel data using the Fixed Effect model of all dependent variables shows the variables NIM, LDR, and ROE have a positive and significant effect on ROA. The NPL variable has a negative and significant effect on ROA, and the BOPO and CAR variables have no effect on ROA. And the results of determination (adjusted R-Square) indicate that the ability of independent variables (BOPO, NIM, NPL, LDR, ROE and CAR) in influencing the dependent variable (ROA) is 95.49%. The rest of 4.51% shows that ROA is influenced by other factors not found by the model.

Muharam & Kurnia (2012) Ali & Naysary (2014) conducted research on the risk of liquidity in Shariah Banking and conventional banking in Indonesia. Islamic and conventional banks are facing quite similar risk problem. This study examine the effect of Capital Adequacy Ratio (CAR), profitability ratio, Net Interest margin (NIM), Liquidity Gap, and Risky Liquid Assets to Total Assets (RLA) of the Liquidity risk in the banking industry. The paper concluded that there were a significant and negative effect of CAR and ROE on liquidity risk in conventional banks, while ROA and RLA have a positive and significant effect on NIM and ROE.

Sholikhah (2018) investigated the factors that affect the liquidity of Islamic banks in Indonesia. The data used was secondary data that collected from the Financial Services Authority (OJK). The method used in this study was Ordinary Least Square (OLS). The variables used in the study were as follows: Short Term Mismatch (STM), Capital Adequacy Ratio (CAR), Return on Assets (ROA), Return on Equity (ROE), and Non Performing Financing (NPF). The study resulted that the variable CAR, ROE and NPF have a positive and significant effect on STM. While the ROA variable has a positive but not significant effect on the STM variable.

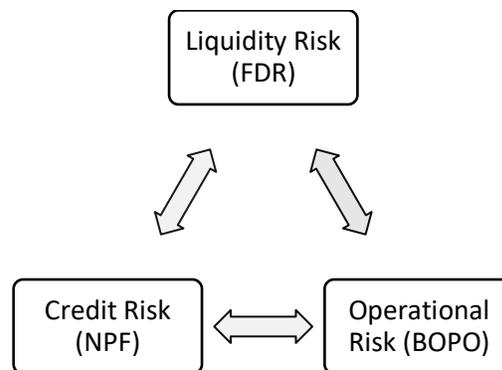
Sukmana & Febriyati (2016) conducted research on the analysis of financial performances in Shariah Banking and conventional in Indonesia. Critically evaluate and compare the financial performance of conventional banks and Islamic banks. Capital Adequacy Ratio (CAR), Return on Assets

(ROA), Operational Costs to Operational Income (BOPO), Non Performing Loans (NPL), Loan Deposit Ratio (LDR) / Financing to Deposit Ratio (FDR) for Islamic and Conventional banks. The results of this analysis show that CAR, ROA, BOPO and conventional banks are higher than FDR. Based on the results of capital coverage, the analysis show that Islamic banks must have big amount of capital to deal with the risks involved as in conventional banking.

No	Title	Method	Result of Research
1	"The Effect of Liquidity Risk on Profitability in Islamic and Conventional Banking in Indonesia"	Multiple linear regression analysis	The results of this study on Islamic banks show that FDR has a positive and significant effect on profitability, which means that the greater the funding channeled, the profitability will increase. Meanwhile the results of research on conventional banks show that the LAD has no significant effect on profitability.
2	"Credit Risk Analysis of Islamic Banks in Indonesia"	Multiple Linear Regression with Ordinary Least Square (OLS)	From the analysis in the study resulted that the FDR, ROA and CAR variables had a positive and significant effect on NPF. While the BOPO variable has a negative and significant effect on NPF
3	"The Effect of Operational Efficiency (BOPO), Market Risk (NIM), Credit Risk (NPL and LDR), Return on Equity (ROE), Capital Adequacy Ratio (CAR) on Bank Financial Performance at National Commercial Banks"	Panel data regression using the fixed effect model	The independent variables (BOPO, NIM, NPL, LDR, ROE and CAR) in influencing the dependent variable (ROA)

No	Title	Method	Result of Research
4	“Liquidity Risk on Banking Industry: Comparative study between Islamic Bank and Conventional Bank In Indonesia”	Multiple Linear Regression with Ordinary Least Square (OLS)	The results in the Islamic bank, the positive and significant impact of the NIM and ROE on the dependent variable, while the Liquidity gap and the Risky Liquid Assets to Total Assets (RLA) have a significant effect.
5	“Analisis of Liquidity on Islamic Banks in Indonesia”	Multiple linear regression analysis	Produce that variable CAR, ROE and NPF have a positive and significant influence on STM. While the ROA variable has a positive but not significant effect on the STM variable.
6	“Islamic Banks vs Conventional Banks in Indonesia: An Analysis on Financial Performances”	Simple t-test Method	The results of this analysis show that CAR, ROA, BOPO and conventional banks are higher than FDR.

#### D. RESEARCH FRAMEWORK



**Figure 2.2**  
**Research Framework**

The research framework of this study is to analyse the risks in Shariah banking which aims to find out which risk will become dominant among the

others. Namely, liquidity risk, credit risk and operational risk. The three risks each has a proxy variable, which are the proxy of liquidity risk is Financing to Deposit Ratio (FDR), proxy of credit risk is Non Performing Financing (NPF) and proxy of Operational risk is The Operational Expenses to Operational Revenue (BOPO).

#### **E. HYPOTHESIS**

Based on the observation, the theories, and the previous studies, so the researcher adduces hypothesis:

- H1 : Liquidity Risk has significant effect compared to the other risks in Shariah Banking in Indonesia
- H2 : Credit Risk has significant effect compared to the other risks in Shariah Banking in Indonesia
- H3 : Operational Risk has significant effect compared to the other risks in Shariah Banking in Indonesia