1 Research Introduction

1.1 Introduction

Banks in traditional definition are financial institutions that accept deposit and distribute loan to their customers. Starting with this definition, banking institutions have been expanding their functionalities into wider area in the industry as financial intermediaries that transform assets and liabilities from one source into another form of assets and liabilities. The expansion of banking institution functionalities leads to an economy dependency of a country. Banking institutions have been becoming the core engine to run the economy of a country which leads to the importance to manage performance of the banking industry as well.

In the evolution of banking industry development, with both successful story of banking institution as financial intermediation, and the failure of the banking institutions including how they contribute the effects to the economy, the banking regulators have studied and developed various banking indicators as foundation to continuously evaluate and monitor the healthiness of the banking industry. Risk management becomes the most crucial topic that is always put as main concern in any banking discussion. Learning on how the banking crisis that hits the industry for several times, risk management leads the research and discussion to be more intensive among the banking industry players to produce comprehensive recommendation to the regulator in order to manage the industry in better ways.
Globalization and better knowledge in managing risk in banking industry have pushed banking institutions to enhance their functionalities from receiving deposit and making loan, towards fee and other non interest based income generating activities. In the globalization era, banking institutions have better opportunities in spreading and expanding their activities without concerning the limit of space and time. The rapid growth development of technology contributes a faster globalization penetration in the banking industry. Nowadays banking institutions have no more functionality in providing interest based services only. Investment products like unit trust, insurance, pension fund, etc, have been becoming part of bank activities that create new phenomenon in the financial industry. Competition among banking institutions in promoting their products has become a day to day ordinary situation for the people.

With the situation and condition described above, banking institutions have developed a new discussion topic which is considered as important as risk management. It is known as bank diversification. Similar as bank risk management, bank diversification is continuously developed in the industry. Strict regulation imposed by the banking regulator in risk assessment and management has led banking institutions to have limited space in engaging with higher risk interest based activities. In the same time, the management of the banks is pushed by their shareholders to obtain positive growth of return. This situation makes the banking institution to open door widely in the activity diversification to meet the share holder’s objectives, while in the same time they are also required to have capability in reducing risk to meet the regulator rules and objective.

Product mix now also becomes one of top topic in any bank management meeting to define the bank operation strategy. Engaging relationship with marketing consultant on
how to promote new products has been becoming a regular activity in a bank marketing plan preparation with dedicated budget allocated. Rapid and continuous banking advertisement has led in a significant reduction of the difference between banking and retail industry in customer perspective as the marketing target, potential user and buyer of the products offered. This evidence has been making the banking regulators to put more concerns and to develop valid indicators to assess and to monitor these diversification activities.

1.2 Background of Study

Globalization has contributed very positive effects to the rapid development of diversification in the banking industry. Better accessibility and opportunity to reach the other sides of the world has become the common justification for the banking institutions to put so many efforts in activity diversifications. Larger potential market is the direct effect that can be seen clearly as globalization impact. For the banking institution, this situation will bring more opportunities not only in gaining larger funding sources but also in promoting products to the customers in the different market locations.

Risk management is another most important reason in bank diversification. To avoid the possibility of bank failure, banking institutions should diversify their risk in the form of activity diversifications. Banking crisis has given a very valuable lesson on how excessive risk with poor risk management in the banking institutions is able to easily lead banks to a huge problem and contributing in the possibility of bank failure. The bank failure is not the end of the story. As banking industry is the heart that ensures the economy of the country is running well, bank failure will create chaos in the economy which most of the time requires a long time and complicated process to remedy.
Diversification in the banking industry offers various forms of implementation. First is the operational diversification. A lot of banks nowadays opened new branches for both locally and internationally. With diversified operation locations that serve many types of market with different characteristics and behaviors, banking institutions are able to reduce their risk especially on the systematic risk. Bad conditions happened in one market will not directly contribute huge impacts to the banks. They can still put dependency on the other markets in ensuring their overall profitability. Beside consideration on the risk level, diversified markets also allow banks to have larger penetration of their products to more potential customers. This situation definitely will contribute better bank performance indicators.

Another type of bank diversification is the various ranges of product type offered to customers. Engaging in interest based product as traditional activity of the bank seems to expose bank institution to a higher risk, especially learning from the lesson of banking crisis. Banking institutions have been putting more focus in the innovation of new financial based products that are expected to gain more interests and responses from the customer. Investment product, insurance, Islamic financial product, or even ICT based transaction services have led to a very aggressive competition among the banking institutions in the industry. Nowadays, it is a convenient condition for us to choose which financial products that suit with our needs and requirements with lower cost, as result of competition in banking industry.

Besides opening more opportunities in generating more revenues, bank diversification also creates possibility in obtaining more options in funding strategy. Traditionally, banking institutions will always depend on deposit based funding in
running their daily operation. Strict liquidity requirements imposed by the financial regulator lead banking institutions to diversify their funding strategy to create more portion of non deposit based funding sources. This is expected to be able to avoid bank liquidity problem which usually ended with bank rush, one of indicators of banking crisis.

Theoretically, diversification will always create positive effects to the banking industry as it is expected to reduce the risk of the bank and increase bank performance. However several researches and studies on the impact of diversification show different results compared to what have been expected. Several studies in US and Europe banking industry show that diversification lead to a higher risk level of the bank. Diversification also creates higher volatility of bank revenue stream compared with less diversified banking operation. There is no definitive regulation yet from the financial regulators in many countries on how to monitor and to assess the riskiness of bank diversification.

Non interest based income generating activities are the most crucial components defined in many researches and studies to identify the both direct and in-direct impacts of bank diversification. It is the most favorite object as it is simple to obtain, giving a real figure and it can be taken easily from bank level accounting data compared to other diversification indicator such as location or market condition. We know that in the income statement, banks divide their income into two parts, interest based income which is mostly obtained from loan distribution activity, and non interest income component which sometime is clearly informed as construction of fiduciary, service charge, trading and other income.

Malaysia is one of the countries in South East Asia region that experienced the impacts of banking crisis in 1997. Excessive risks held by the bank institutions and poor
risk management are main components that trigger the crisis. Similar actions with the other countries in the region were taken by the Bank Negara Malaysia (BNM) as banking regulator to form a better framework on the risk management assessment and monitoring of the bank institutions. As it has been discussed before, strict regulation in risk management tends to lead banking institution to engage in bank diversification in order to maintain their operation objective.

1.3 Problem Statement

With regard to the contribution of non interest based income generating activity in the bank diversification, and based on several study results that give a different perspective on how the non interest based income generating activity is associated with un-preferable conditions in the banking industry, it is important to monitor and to assess the implications of excessive activities engaged in the implication on the healthiness of the banking institutions in the industry.

Stable revenue stream growth of banking institution is the most condition that is expected by all stakeholders in the banking industry. With stable revenue stream, regulator can easily plan, manage and develop the banking industry, because less volatility tends to reduce the uncertainty condition that might happen. For the management of the banks, stable revenue growth will indicate a better performance of the bank. They will have ability to properly develop the planning and strategy with a long term target. The positive revenue growth will also increase the trust of economy in the banking sector, so that it can expand and grow in better and stable condition. When bank institutions are engaged more in non interest based income generating activities, it will create some question on how the revenue growth will be effected. As part of revenue
generating component of banking institution, the non interest income based revenue growth will not be a good component if it brings more volatility revenue stream.

How banks decide which strategy to be adopted in defining diversification is effected by several determinants. They can vary from bank level determinants to the market level determinants. It is important to identify which determinants that have significant relationship with the decision to increase the share of non interest based income generating activities, so that risk management of the bank operation can be improved to avoid higher risk resulted from the activities. Wrongly monitored determinants that are affecting the non interest based income generating activities will lead to an excessive risk generated from the activities. It might have significant possibility in triggering another form of banking crisis.

The main objective of banking institution operation is to increase the value to their shareholders which mostly reflected in the bank return indicator. Bank diversification is expected to contribute to a better bank performance which eventually will reflect in a higher value to shareholder. If activity diversification does not give better value to shareholder, it is not a favorable state for bank management to allocate more efforts to activity diversifications. It will be better for the management of the banks to focus on bank traditional interest based activities which have proven to give better values to shareholders.

1.4 Objective of the Research

There are multi purposes expected to be obtained from this research. Generally, it is interested to study how the non interest income based generating activity contributes in bank diversification objectives, especially in Malaysian banking industry.
While in details, the objectives of this research can be breakdown as following:

- To examine the contribution of non interest based income generating activities to the revenue volatility of the banking institutions.
- To observe the determinants among the banking institution parameters, for both internal and external, that having strong relationship to the decision of banking institutions engaging in non interest based income generating activities.
- To observe the relationship of non interest based income generating activities with the banking institution performance

In order to achieve the objectives of the research, I deploy hypotheses examination approach. As described by Sekaran (2003), hypotheses can be defined as logically conjectured relationship between two or more variables expressed in the form of testable statement. By testing the hypotheses and confirming the conjectured relationships, it is expected that solutions can be found to correct the problem encountered.

1.5 Research Questions

From the description of research objectives in previous section, several research questions are developed based on each objective as guidance to entire research and to ensure that all activities and approaches conducted will not deviate from the defined objectives.

1.5.1 Research Questions for Objective 1

In order to study the volatility of revenue stream of banking institutions as result from non interest based income generating activities, research questions are developed as following:
• How the variance of the non interest based income of bank institutions contributes to the variance of total income of the banking institutions based on two different time intervals?

• How the variance of the net interest income of banking institution contributes to the variance of total income of the banking institutions based on two different time intervals?

1.5.2 Research Questions for Objective 2

In the observation of the determinants of banking institutions in making decision of the engagement to non interest income based generating activities, research questions are developed as following:

• What is the relationship between banking institution internal parameters such as asset, risk and funding strategy with the portion of non interest based income?

• What is the relationship between macro economy condition such as GDP and inflation with the portion of non interest based income of the banking institutions?

1.5.3 Research Questions for Objective 3

In the observation of the relationship between banking institutions performance and non interest based income generating activities, research questions are developed as following:

• What is the relationship between non interests based income generating activities with the return on assets of the banking institutions?

• What is the relationship between non interests based income generating activities with the return on equity of the banking institution?
• How the non interest based funding strategy affecting the banking institution performance compared to the non interest based income generating activities?

1.6 Significances of Study

Through the study and examination of the significance level of non interest based income generating activities in contributing bank diversification implementation, this research is aimed to give additional perspectives of the existing literatures in the same area and topics. Starting with the examination of revenue portfolio volatility, then the observation of non interest based income generating activities determinants, until the examination of values that the diversification based on non interest income contribution.

The results of this research are expected to give recommendation to the management of banking institutions as they are the ones who directly involve in the decision of bank diversification focus in order to achieve the shareholder’s objectives. The result of the study is also important for the regulator and policy makers of banking industry as there are not many regulations have been imposed to the banking institution diversification activities while based on several literatures, diversification of banking institution activities might contribute to the performance of the banking industry in the country as a whole. The professional and academicians are able to use the result of this research as additional knowledge in the banking discussion and research and to give a better foundation for them to engage in similar research topic with more variables to be selected, to obtain more comprehensive research approaches and results.

1.7 Scope of the Study
The discussion of diversification can lead to very wide area in the banking industry as it is another new interesting topic in ensuring banking institution healthiness together with bank risk management. It is not the intention for me to cover the whole aspect of diversification such as the market and location diversification. This research will not go down to the breakdown components of non interest based income generating activities and study each of them and the impacts to other banking indicators.

Therefore the scope of this study is limited to:

- Using the both aggregate non interest based income of banking system as representative of non interest based income generating activities published in Bank Negara Malaysia annual report and also individual bank parameters taken from Datastream content provider.
- Examining the effect of non interest income share growth to the volatility of revenue growth of banking institutions.
- Observation of determinants of non interest income portion.
- Observation of how non interest income share contributes values to bank performance compared to other determinants.
- Focusing in Malaysia banking system.

1.8 Research Organization

This research is structured into several chapters that deliver different proposes of the research process.

- Chapter 1: Research Introduction
This chapter gives some brief information of the research. Starting on the introduction, then continue with the background of the study, objective of the research, the significance of the research, scope of the study and finally some explanation on how the research is constructed.

- **Chapter 2: Literature Review**

  This chapter conducts discussion and review of the literatures that have been defined as main references in this research topic. Several literature results which are mostly taken from several international journals and papers are grouped and discussed to support my understanding, knowledge and idea on the research objectives.

- **Chapter 3: Research Methodology**

  This chapter explains in details on how I construct the theoretical framework of the research and break it down to several equations and variable. From the theoretical framework, then hypotheses are developed. It also gives some information on how the data analysis are being planned and strategized, and also how the data are collected.

- **Chapter 4: Data Analysis**

  This chapter discusses the data analysis result and some development of analysis interpretations based on the result. The interpretations are the most important components in the research as they will give empirical understanding on the research objective achievement.

- **Chapter 5: Conclusion and Recommendation**
This is the last chapter of the research that gives overall summary result of the research. This chapter also discusses on the recommendation that can be contributed to the banking regulator or academician in the similar research topic area.