



NON-TRADITIONAL BANKING ACTIVITIES
IN ASEAN-5 COUNTRIES

BY

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ABSTRACT

There has been a gradual change in commercial bank businesses that has reshaped the landscape of banking and financial systems across the globe including in Southeast Asia. The present study seeks to find the determinants of non-traditional activities and how these new activities impact the performance of commercial banks' in ASEAN-5 countries namely Indonesia, Malaysia, Singapore, the Philippines and Thailand. Additionally, the issue of Islamic banks and the 2008 Global Financial Crisis are also investigated. Data from 136 commercial banks data were collected for the period between 2004 and 2012. The results of panel data regressions suggest a negative association between non-traditional and traditional activities. In view of this, combining the two activities in a portfolio of bank assets can minimise portfolio risks. Moreover, two sources of income namely income from non-traditional and traditional activities are positive and significantly influence the profitability indicators. We also found evidence that source of income contributes to higher probability of insolvency risk. In other words, non-traditional banking activities have a potential to substitute traditional banking activities. Islamic banks exhibit a lower level of non-traditional income ratio compared to their conventional peers. Finally, we found that the 2008 Global Financial Crisis significantly affected non-traditional activities and moderately impacted the profitability of commercial banks.

الملخص

شهد القطاع المصرفي تغيرات تدريجية، وأعدت تشكيل المشهد المصرفي والنظم المالية في جميع أنحاء العالم بما في ذلك جنوب شرق آسيا. تهدف الدراسة الحالية إلى تسليط الضوء على عوامل ومحددات الأنشطة غير التقليدية وكيفية تأثير هذه الأنشطة الجديدة على أداء المصارف التجارية في بلدان رابطة أمم جنوب شرقي آسيا الخمس (إندونيسيا وماليزيا وسنغافورة والفلبين وتايلند). بالإضافة إلى ذلك، تهدف الدراسة أيضا إلى دراسة حالة البنوك الإسلامية والأزمة المالية العالمية لعام 2008م، إذ تم جمع بيانات 136 مصرفا تجاريا للفترة 2004-2012م. وتحليل البيانات ذات السلسلة الزمنية (Panel data) ظهر بان هناك علاقة سلبية بين الأنشطة التقليدية وغير التقليدية للبنوك التجارية في الدول الخمس. وبالنظر إلى هذه النتيجة، فإن الجمع بين الأنشطة التقليدية وغير التقليدية للبنك التجاري قد يساعد في تخفيف المخاطر. علاوة على ذلك، فقد أظهرت نتائج التحليل أن الدخل الناتج من الأنشطة غير التقليدية والتقليدية يؤثر إيجاباً على مؤشرات الربحية للبنوك التجارية في الدول الخمس. بالنظر إلى نتائج الدراسة الحالية، يمكن القول أنه لا يوجد دليل على أن مصدر الدخل يسهم في زيادة مخاطر المديونية أو الإعسار. وبعبارة أخرى، يمكن القول أن الأنشطة المصرفية غير التقليدية يمكنها أن تكون بديلاً للأنشطة المصرفية التقليدية. كما تشير نتائج الدراسة إلى أن البنوك الإسلامية في بلدان رابطة أمم جنوب شرقي آسيا الخمس في مستوى أقل من الدخل الناتج من الأنشطة غير التقليدية مقارنة بالبنوك التقليدية. أخيراً، وجدت الدراسة أن الأزمة المالية العالمية لعام 2008م أثرت تأثيراً كبيراً على الأنشطة غير التقليدية وأثرت بشكل طفيف على ربحية المصارف التجارية في بلدان رابطة أمم جنوب شرقي آسيا الخمس.

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DECLARATION

I hereby declare that this dissertation is the result of my own investigation, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

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TABLE OF CONTENTS

Abstract	ii
Abstract in Arabic	iii
Approval page	iv
Declaration	v
Copyright page	vi
Acknowledgement	vii
Table of Contents	viii
List of Tables	x
List of Figures	xi
List of Symbols / Equations	xii
CHAPTER ONE: INTRODUCTION	1
1.1 Background	1
1.2 Statement of the Problem	13
1.3 Research Question	15
1.4 Objective	16
1.5 Significance of the study	17
1.6 Organisation of the study	20
CHAPTER TWO: LITERATURE REVIEW	21
2.1 Introduction	21
2.2 Types of non-traditional activities	23
2.3 Non-Traditional Activities in Some Countries	26
2.3.1 United States of America (USA)	26
2.3.2 Europe	31
2.3.3 Asia (Japan and ASEAN-5 countries)	33
2.4 Global Changes Around Banking Industry	35
2.4.1 Structural Change, Deregulation and Competition in Financial Market	37
2.4.1.1 Deregulation of banking sector in ASEAN-5	39
2.4.2 Technological change, innovation and digital economy	45
2.4.2.1 Digital Economy in ASEAN-5	47
2.4.3 Strategic business decision	50
2.5 NTA and commercial banks diversification	51
2.5.1 Modern Portfolio Theory	52
2.5.2 Economies of scope	54
2.5.3 Bank portfolio and Diversification benefits	55
2.6 Empirical Studies on Non-Traditional Activities	56
2.6.1 Determinants of non-traditional activities	58
2.6.2 Non-traditional activities and profitability	59
2.6.3 Non-traditional activities and financial stability	60
2.6.4 Non-traditional activities in Islamic banks	65
2.6.5 Financial crisis and non-traditional activities	68
2.7 Conclusion	71

CHAPTER THREE: METHODOLOGY.....	73
3.1 Econometric Models	73
3.1.1 Determinants of non-traditional activities	73
3.1.2 Non-Traditional Activities and Profitability Model	81
3.1.3 Non-Traditional Activities and Financial Stability Model	83
3.1.4 Non-Traditional Activities of Islamic Bank Model.....	87
3.1.5 Non-Traditional Activities and the 2008 Global Financial Crisis Model.....	88
3.2 Sample and Data Collection.....	89
3.3 Estimation Methods	90
CHAPTER FOUR: RESULTS AND DISCUSSION	92
4.1 Descriptive Statistic	92
4.2 Determinants of Non-traditional activities.....	95
4.2.1 lnOBSA (Off-balance sheets activities)	96
4.2.2 lnTA (Size)	97
4.2.3 NIM (Net Interest Margin)	98
4.2.4 lnDEPOSITS (natural logarithm of deposits).....	100
4.2.5 PERSONNEL (personnel expenses to total assets ratio)	102
4.3 Non-traditional activities and profitability.....	104
4.3.1 NTI (Non Traditional Income)	105
4.3.2 NIM (Net Interest Margin)	107
4.3.3 LOAN (loans to total assets ratio)	109
4.3.4 lnTA (natural logarithm of total assets).....	110
4.4 Non-traditional activities and Financial Stability	111
4.4.1 NTI (Non-traditional income)	112
4.4.2 NIM (Net interest margin).....	114
4.4.3 EQUITY (Equity to total assets ratio)	115
4.4.4 lnTA (natural logarithm of total assets).....	119
4.4.5 NPL (Non performing loans).....	120
4.5 Non-traditional activities of Islamic and conventional banks.....	121
4.5.1 The determinants of non-traditional activities (ISLAMIC)....	121
4.5.1 Profitability model (ISLAMIC).....	129
4.5.2 Financial stability model (ISLAMIC)	133
4.6 Non-traditional activities and financial crisis	139
4.6.1 The determinants of non-traditional activities (CRISIS).....	141
4.6.2 Profitability Model (CRISIS)	144
4.6.3 Financial Stability Model (CRISIS)	147
4.7 Conclusion	152
CHAPTER FIVE: CONCLUSION AND IMPLICATION	156
5.1 Empirical findings.....	156
5.2 Implication	162
5.3 Contribution	171
5.4 Future Studies	172
REFERENCES.....	173
APPENDIX: A SELECTED EMPIRICAL STUDIES	185
APPENDIX: B SAMPLES OF COMMERCIAL BANKS	187

LIST OF TABLES

Table 1.1	Types of Income from Non-traditional Activities	2
Table 1.2	Share of net non-traditional income out of gross income in selected developed countries (in percent)	7
Table 2.1	Digital economy in ASEAN 5	47
Table 3.1	Determinants of non-traditional activities model Dependent variable: Non-interest to total operating income ratio	79
Table 3.2	Non-traditional activities and profitability model Dependent variable: ROA, ROE, RA_ROA, ROA_ROE	82
Table 3.3	Non-traditional activities and insolvency risk model Dependent variable: Z_1 and Z_2	86
Table 4.1	Descriptive statistic Dependent and explanatory variables in the models	93
Table 4.2	Determinants of Non-traditional Activities	96
Table 4.3	Non-Traditional Activities and Profitability Model	106
Table 4.4	Non-Traditional Activities and Insolvency Risk Model	113
Table 4.5	Determinants of Non-traditional Activities (ISLAMIC)	122
Table 4.6	Non-traditional activities and profitability	128
Table 4.7	Mean and standard deviations of ROA	130
Table 4.8	Non-traditional activities and insolvency risk	134
Table 4.9	The elements of Z-score (mean)	136
Table 4.10	Determinants of Non-traditional activities (CRISIS)	142
Table 4.11	Non-traditional income ratio of commercial banks in ASEAN-5	143
Table 4.12	Non-traditional activities and profitability (CRISIS)	145
Table 4.13	Non-traditional activities and insolvency risk (CRISIS)	148
Table 4.14	Components of Z-score Equation	150
Table 4.15	Summary of Findings	153

LIST OF FIGURES

Figure 1.1	Mean of non-interest income (NII) ratio of commercial banks in each ASEAN-5 countries	4
Figure 1.2	Mean of NIM of commercial banks in ASEAN-5 countries	6
Figure 2.1	Activities of commercial banks	53
Figure 4.1	Mean of NTI ratio of conventional and Islamic banks	123
Figure 4.2	Mean of ROA of conventional and Islamic banks	129
Figure 4.3	Mean of ROE of conventional and Islamic banks	132
Figure 4.4	Mean of RA_ROA of conventional and Islamic banks	133
Figure 4.5	Mean of Z_1 Conventional & Islamic	135
Figure 4.6	Mean of Non-traditional income (NTI) ratio	140
Figure 4.7	Mean of Return on equity (ROE)	146
Figure 4.8	Mean of Probability of insolvency risk (Z_1)	149
Figure 4.9	Mean of Equity to total assets ratio	151

LIST OF SYMBOLS / EQUATIONS

Equation 2.1	Expected return of assets portfolio	52
Equation 2.2	Variance of return of assets portfolio	52
Equation 2.3	Variance of return of assets portfolio (modified)	53
Equation 3.1	Determinants of non-traditional activities model	74
Equation 3.2	Non-traditional activities and profitability model	81
Equation 3.3	First Z-score equation (Z_1)	84
Equation 3.4	Second Z-score equation (Z_2)	84
Equation 3.5	Non-traditional activities and risk model	85
Equation 3.6	Hausman test	91
Equation 4.1	ROE and ROA relationship	110

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

Commercial banks have gradually evolved from financial intermediaries to financial institutions that lend funds through financial market (Mishkin, 2010)¹. This development has been manifested in the form of commercial banks dealing more with risk transfer and risk trading activities (Allen & Santomero, 1998). In view of this, there have been gradual changes in commercial banks businesses that have reshaped the landscape of banking and financial systems.

In general, commercial banks scope of activities can be divided into traditional and non-traditional banking activities. Traditional banking activities comprise of commercial banks operating in granting loans and keeping deposits. Meanwhile, non-traditional activities have been defined as;

all other fee-generating activities of banks, ranging from underwriting activities to cash management and custodial services. The term “non-traditional activities” may in other contexts imply more than just these activities. (Rogers & Sinkey, 1999)

Sinkey (2002) identified two main sources of bank revenues into two major categories namely: interest (traditional) and non-interest (non-traditional) income. The former generates income from lending activities and holding and selling securities while the later consists of fees from financial products such as credit card, loan origination and servicing, etc. While, Rose (2002) classifies three types of non-traditional (non-interest) incomes earned by commercial banks namely; fee incomes, incomes from

¹This process is also known as disintermediation process (see Rajan (2005) for more discussion).

fiduciary activities and service charges on deposits². Additionally, Stiroh (2003) adds trading revenue as a sort of non-traditional incomes and Feldman and Schmidt (1999) include the other non-fee income to the list of non-traditional income³. Sources of income from non-traditional activities can be seen in table 1.1 below.

Table 1.1
Types of income from non-traditional activities

Type of non-traditional income	Example of non-traditional activities Under each category
Fee Income	Loan commitment fees, safe deposit boxes, commissions, land, rental fees, refinancing home mortgage loans, securities brokerage commissions, ATM fees, check usage fees, commission from sales of unit trust
Income from Fiduciary Activities	Income from administering investment for others, fees for managing and protecting customer's assets
Service Charge on Deposits	Charges for excessive withdrawals, overdraft charges
Trading Revenue	Income from trading cash instruments, off-balance sheet contracts, mark-to-market changes in the carrying value of assets and liabilities
Other non-fee income	Income from data processing service, sales of miscellaneous assets and other income not mentioned above

Source: Rose (2002), Stiroh (2003), and Feldman and Schmidt (1999)

²Non-interest income is used as a proxy in econometrics model to represent non-traditional activities at commercial banks (Rogers & Sinkey, 1999).

³DeYoung & Torna (2013) classify non-traditional activities which generate non-interest income into three different categories namely: stakeholder activities, fee-for-service activities, and traditional fee banking activities.

The term ‘non-traditional activities’ has been used in academic works (Edwards & Mishkin, 1995; Rogers & Sinkey, 1999)⁴. Moreover, other studies use the similar term with slight modifications such as: ‘non-bank activities’ (Boyd & Graham, 1986), non-interest activities (Mercieca, Schaeck, & Wolfe, 2007), non-intermediation activities (DeYoung & Rice, 2004), non-interest income generating activities (Stiroh, 2004), fee income activities (Shahimi, Ismail, & Ahmad, 2006), and non-traditional lending activities (Hubbard, 2005). All these terms refer to the banks’ new activities such as loan commitments, letter of credit, bank guarantee, underwriting securities that produce non-interest and fee incomes.

The term ‘non-traditional activities’ in the present study is therefore employed to mean banks’ new financial services beyond the scope of traditional banking activities. Moreover, the term ‘non-traditional income’ is used to indicate the products or results of such activities. One of the main reasons of using the term is due to its wide acceptance in academics as well as business.

Non-traditional activities have gained a significant presence in banking industry. In developed countries, for example the proportion of non-traditional income has increased substantially and accounted for about fifty percent of commercial banks operating income (Matthews & Thompson, 2008). Meanwhile, in developing countries, notably Indonesia and Malaysia, non-traditional income share has risen to supplant the declining portion of traditional income⁵. As indicated by Lee, Yang, and Chang (2013) has witnessed a soars with an estimation of 66 percent contribution to

⁴Rogers and Sinkey(1999) quotes the statement of American Bankers Association (ABA) President, Daniel R. Smith in 1994, who classified banks activities into traditional and nontraditional areas (activities).

⁵ See Hidayat et al.,(2012) and an article entitled “Banks profit growth moderate” at <http://biz.thestar.com.my/news/story.asp?file=/2012/12/11/business/12440994&sec=business> accessed on 22nd January 2013.

the total income of commercial banks⁶. As we can observe in figure 1.1 below, most ASEAN 5 countries experience increasing trend in non-traditional income particularly post the 2008 global financial crisis period. In view of this, the development of banking industry in the region follows the trend that has taken place in developed countries.

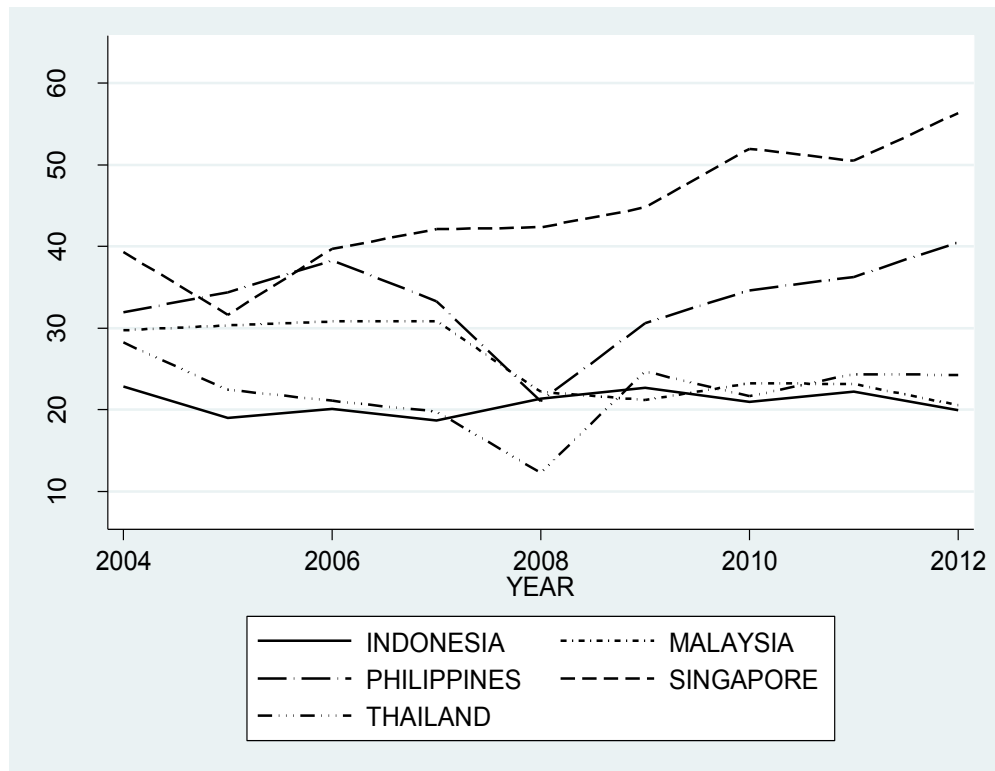


Figure 1.1 Mean of non-interest income (NII) ratio of commercial banks in each of ASEAN-5 countries

The increasing trend of non-traditional activities in banking industry is not a random event. It is a consequence of rapid global changes and pressures to banking industry worldwide. Deregulation, structural change, advancement in information and communication technology (ICT) and financial innovations are a number of factors that have deconstructed the structure of financial market.

⁶The figure is taken from Bankscope data of 22 Asian countries during 1995-2009 period (Lee et al., 2013)

Banking industry has been badly affected by the development in financial industry. Deregulation and structural changes in the world economy have made it possible for the rivals from bank and non-bank institutions, local and international to serve the financial markets. It is believed that with more market players and financial services providers, public and investors will benefit from enhanced efficiency. Moreover, the developments in ICT and financial innovations have facilitated more products, better efficiency, and faster decision-making process.

Heightened competition in financial market has undoubtedly contributed to the lost of commercial banks competitive advantages (Rogers & Sinkey, 1999). The phenomena can be observed through bank's balance sheets. In the assets side, commercial banks have undergone tough competition from capital market. Given the rise of capital market role, private entities can issue securities notably common stocks, bonds, and commercial papers to supply their financing needs (disintermediation). Meanwhile in the liabilities side, the new competitors have come from non-bank financial institutions notably insurance companies, unit trust (mutual funds), finance companies and hedge funds that offer financial products which resemble commercial banks traditional financial services. The involvement of non – financial institutions such as telecommunication providers in providing remittance services and financing granted by retailers to consumers who want to pay for their purchases in instalments mount pressure on the profitability of commercial banks. This thus necessitated the search for alternative source of income to augment profitability

The erosion of commercial banks' competitive advantages in their traditional domain particularly in the United States market can be observed from the decline of total financial intermediary assets and share of non-financial borrowing (Edwards & Mishkin, 1995). Moreover, another indicator of traditional activities namely the net

interest margin (NIM) particularly in ASEAN-5 countries during the period of 2004-2012 suggests the decline of commercial banks role in financial market (Figure 1.2)⁷. Similarly, the downward slope of NIM can be inferred that commercial banks in the region have experienced similar trend.

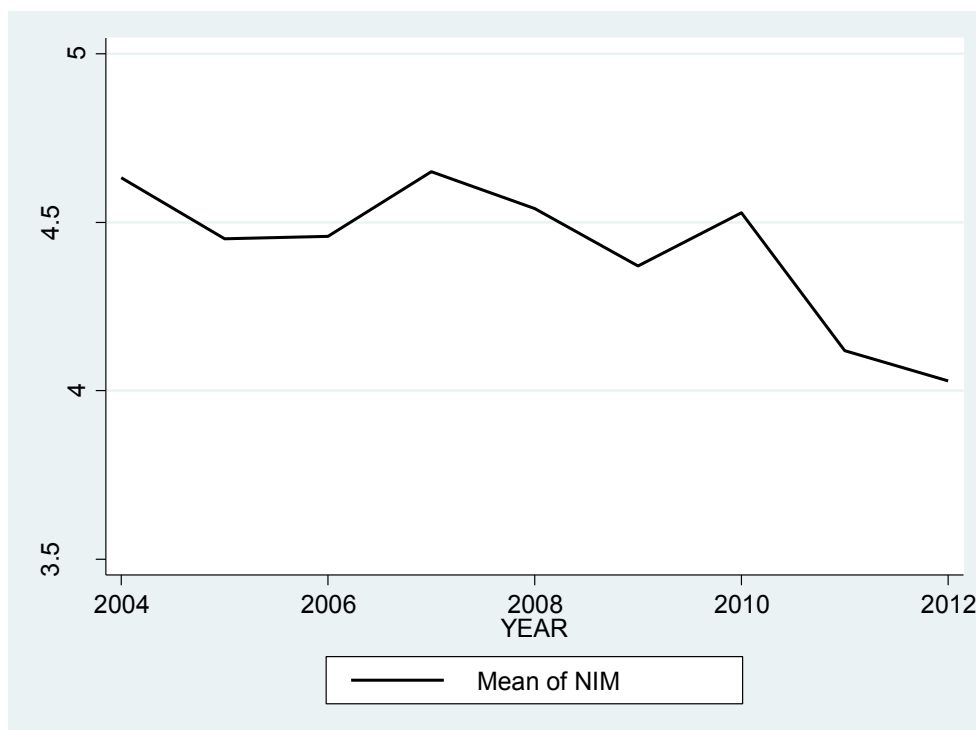


Figure 1.2 Mean of net interest margins (NIM) of commercial banks in ASEAN-5 countries

The trend of declining net interest margin (NIM) in developed countries has prompted the need for diversification to non-traditional activities (Matthews & Thompson, 2008). As we can see in Table 1.2, non-traditional activities in the US and several European countries have increased. Rose and Hudgins (2013) outline a number of reasons behind the rise of fee income in commercial banks namely: to supplement traditional sources of funds, to lower and offset higher production costs, to promote cross-selling and to reduce overall risks. Additionally, non-traditional

⁷Net interest margin is equal to interest income minus interest expense divided by interest bearing assets. This is one main indicator of commercial banks traditional activities.

activities have been viewed not only as supplements but also as better source of revenues compared to traditional activities⁸. Such opinion emanates from the idea that non-traditional activities are insensitive to market interest rate movements. Therefore, when the interest rate is too volatile, income from non-traditional activities tend not to be affected and can replenish the lost revenues of traditional sources.

Table 1.2
Share of net non-traditional income out of gross income
In selected developed countries (in percent)

Country	1984	2005
USA	34.2	42.7
UK	40.0	57.6
Switzerland	38.7	63.8
Germany	25.9	45.6
France	13.0	69.2

Source: OECD (in Matthews & Thompson, 2008)

The notion that non-traditional income contributes to a more stable bank's earnings is supported by a number of empirical investigations (Brewer III, 1989; Chiorazzo, Milani, & Salvini, 2008; Lee et al., 2013; Rogers & Sinkey, 1999; Smith, Staikouras, & Wood, 2003; Wall, 1987). However DeYoung and Roland, (2001); Stiroh (2002; DeYoung and Rice (2004); and Demirgüç-Kunt and Huizinga (2010) show that non-traditional income is more unpredictable compared to the traditional income which hitherto could affect the stability of bank earnings. The empirical findings on the impacts of non-traditional income on commercial banks profitability and risk are mixed and inconclusive. In view of this, further studies are needed to further shed more light on the role of non-traditional activities in banking industry.

⁸DeYoung and Roland (2001) documents statements made by banker, financial analyst, and regulator who support the notion that fee based income is less volatile than income from traditional activities. Moreover, the authors explain the reason of such endorsement is due to fee based income and traditional income are deemed as not perfectly correlated (covary).

The strategy of diversification to non-traditional activities can be observed not only in terms of its impact on bank's profitability but also on risk exposure (Sinkey, 2002). With that in mind, diversification gain is an important issue that needs to be addressed when discussing non-traditional activities. The idea basically is discussed in the modern portfolio theory which explains how combining assets with different risk and return profiles and lower correlation coefficient can produce lower portfolio risk. If the income of non-traditional activities and the income of traditional services are negatively correlated, this suggest that commercial banks can benefit from diversification (Rose & Hudgins, 2013). Moreover, they explain that if two different financial products have negative correlation, it will yield better return and low variance (risks). Given the diversity of revenues of non-traditional activities, the conventional wisdom about these activities is a debatable subject. To further shed light on this issue, the present study intends to probe the linkage between non-traditional activities, profitability and risk.

The phenomena of diversification to non-traditional activities have swiftly spread across the globe. Meanwhile, the research in this area is highly skewed towards the US and European contexts and only few studies covered other parts of the world⁹. The findings for the case of U.S. and European countries cannot be generalized to other region to contextual difference and exposure. Particularly, a number of developed countries are facing various degree of economic challenges accompanied with massive public debts¹⁰. In contrast, most emerging countries especially from most Asia countries have increasingly playing important role in global economy.

⁹To the best of our knowledge those few studies are Hidayat et al. (2012); Kiweu (2012); Lee et al. (2013); Nguyen, Skully, & Perera, (2012); Shahimi et al. (2006)

¹⁰From the CIA World Fact Book, the top ten on the list of countries according to ratio of public debt to GDP, seven from Europe, two from Asia, one from Africa.

One region that has demonstrated consistent growth and development in the economy and financial market is Southeast Asia. The region has emerged as an important region in the world characterized by high GDP growth and stable political condition. According to a report published by Deutsche Bank research, ASEAN countries is expected to play a more vital role in global economy given its GDP which is estimated to be about USD 2.3 trillion in 2012 with a stable economic growth of 6% per year (DB Research, 2013). This positive outlook is still maintained even during the 2008 global financial crisis (Rillo, 2009). Given its potentials, ASEAN region is predicted to be a major world financial centre along with other existing centres in developed countries¹¹.

Commercial banks in Southeast Asia are not left out in activities considered as non-traditional activities. Importantly, these activities have continued to play a crucial role in improving ASEAN commercial banks' earnings in the aftermath of the Asian financial crisis 1997 (Hidayat, Kakinaka, & Miyamoto, 2012; Nguyen, Skully, & Perera, 2012). Given the trend towards non-traditional activities, it is relevant to get more insight on how non-traditional activities have been practised within ASEAN banking industry particularly in the post global financial crisis period.

One latest issue that will impact the financial and banking industry in the region is the implementation of ASEAN economic community (AEC). Under this cooperation, there will be minimum barriers for free flow of goods, capital, labour, and services (ADB, 2013). In financial sector, reforms such as liberalisation of financial industry which is which has potential to lower barriers and enhanced

<https://www.cia.gov/library/publications/the-world-factbook/rankorder/2186rank.html>, accessed on 13th July 2014.

¹¹According to report published by ICAEW (2012) "Economic Insight, Southeast Asia, Quarterly briefing Q4 2012"

financial inclusion of neighbouring countries serving the local financial markets. Consequently, competition in financial industry will be getting intensified.

It is expected that in AEC, consolidation of banks and other financial institutions is inevitable (ADB, 2013). The proposal stems from the perception that big banks have better capacity to contend with foreign rivals. So far, a number of merger and acquisition (M&A) plans have been discussed but none of them have come into realisation. If the proposal of consolidation is positively accepted by regulatory bodies and shareholders, Another wave of banks consolidation apart from the one that took place in post 1997 Asian financial crisis.

Similar to the progress in conventional banking system, Islamic banks have embarked on non-traditional activities¹². Islamic banks have been employing several *muamalah* contracts to accommodate non-traditional activities (Shahimi et al., 2006)¹³. Furthermore, the *muamalah* contracts have been implemented in several financial services such as; insurance, custodial services, guarantees etc. (Shahimi et al., 2006)¹⁴.

A number of ASEAN countries have undergone significant changes and development of Islamic banking system in the region. Malaysia has gone through remarkable endeavours to establish herself as a global leader in Islamic Islamic finance hub in the regional as well as global market (Vernados, 2012). Meanwhile, Indonesia has equally undertaken concrete steps to improve Islamic banking penetration in their territory (Hamzah, 2010). Singapore is not left out in the agenda of developing Islamic finance considering the issuance of a number of regulations to promote Islamic banking system in their jurisdiction (Selvam, 2010). In view of this, it

¹²The recent development in conventional banking system means the direction of commercial banks toward non-traditional activities. This trend is followed by Islamic banking industry as well.

¹³ A number of Islamic financial contracts that have been used are; *wakalah*, *hiwalah*, *ujr* and *kafalah*

¹⁴Revolving credit facility-i, bank guarantee-i, stock broking services are some Islamic financial products that are categorized as the non-traditional activities of Islamic commercial banks in Malaysia (Shahimi et al., 2006).

is expected that in the future, Islamic banking system can play a pivotal role in financial markets around the region.

Financial crisis is an essential subject that cannot be neglected particularly in discussing financial market and institutions issues. Stiglitz (2000) underscores the liberalisation of capital market as an antecedent that has contributed to recurrent financial and economic crises around the world. The 2008 financial disaster was the latest colossal catastrophe that has negative effect on the stability of financial markets in many countries¹⁵. Price-bubble, excessive risk-taking and financial innovations were blamed for the failure of the financial institutions (Ahmed, Asutay, & Wilson, 2014). Moreover, financial innovation that has been manifested in a form of highly-structured and exotic financial products notably collateralised debt obligation (CDO) and credit default swap (CDS) (Smolo & Mirakhor, 2010) was merely a Trojan horse used by bankers to bet on people's money in financial markets. The consequence of abusing opaque financial instruments is the subprime financial crisis that had adverse impact on the global economy.

One of infamous cases on misusing financial innovation (CDO fraud) was the case of Securities and Exchange Commission (SEC) versus Goldman Sachs in the United States. The Goldman Sachs was sued by the SEC of selling highly structured and mortgages related securities (CDO) that it knew would fail (Story & Morgenson, 2010). Moreover, to protect its position, Goldman purchased the default protection scheme namely credit default swap (CDS) as the safety net should the CDO turn into sour investments.

¹⁵This episode of crisis-which is considered as the worst financial crisis after the Great Depression in 1933 (Laeven & Valencia, 2012)- continued to spill over across the border. Moreover, under the notion of "too big to fail", governments in many countries have wasted trillion of taxpayers' money to bail-out giant financial institutions in a rushing attempt to avoid the meltdown of entire financial system.

When the interest rate climbed and the resultant price-bubble in property market burst, many mortgage borrowers were unable to repay their debts (Ahmed et al., 2014). Massive defaults of housing loans transmitted adverse consequences for residential mortgage bonds and destructive interruption of the stream of cash flows to the securities in the midst of subprime financial crisis. Many investors including international financial institutions suffered from the plunge of their investment values. Meanwhile, Goldman Sachs reaped gains from this catastrophe by awarding nominal payment of its CDS.

It is evident that there was a serious conflict of interest in this fraud case. It is simply that Goldman failed to act in the best interest of its clients (Whalen & Tan Bhala, n.d.). Instead of giving transparent and correct information on the downside risk of the securities, it kept promoting and selling the toxic assets to the clients. Given Goldman was fully aware that the mortgage related CDOs was going to crumble, relying on CDS to prevent huge losses without informing the clients. Technically Goldman bet against the falling of the securities it sold. In other words, Goldman made money at the expense of its clients' negative returns and had deliberately misled them. Eventually, Goldman Sachs was fined US\$550 million for the fraud settlement guilty of spreading incomplete information about the risk of the funds in its marketing materials (Chan & Story, 2010).

Cihak et al., (2012) find that countries experienced crises have less rules and regulation that govern non-traditional activities notably insurance, real estate and underwriting securities. Furthermore, the results revealed the linkage between financial crisis and diversification of commercial banks. Risky financial instruments, therefore, have to be monitored carefully. Failure to detect the danger of financial