Faculty of Economics and Business

FINANCIAL PERFORMANCE OF BANKING SECTORS IN MALAYSIA

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Corporate Master in Business Administration
2013

FINANCIAL PERFORMANCE OF BANKING SECTORS

IN MALAYSIA

By

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This Research Paper Submitted In Partial Fulfillment ofthe
Requirement forthe Degree of Corporate Master in
Business Administration

Faculty of Economic and Business

Universiti Malaysia Sarawak

2013

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APPROVAL PAGE

I certify that I have supervised and real this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a research paper for the degree of Corporate Master in Business Administration.

Certified by Supervisor

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This research paper was submitted to the Faculty of Economic and Business, UNIMAS and is accepted as partial fulfillment of the requirement for the degree of Corporate Master in Business Administration.

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I hereby declare that this research is the result of my own investigations, except where otherwise stated. Other sources are acknowledged by footnotes giving explicit references and a bibliography is appended.

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ACKNOWLEDGEMENTS

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ABSTRACT

This research attempts to evaluate the financial performance of banking sectors in Malaysia from year 2007 to 2011. Then, the analysis uses the financial ratios, Economic Value Added and Shareholder Value Creation to compute and evaluate the value of shareholder for the banking sectors in Malaysia.Moreover, this study also examines the relation between Financial Ratios, EVA, and SVC. Overall, the results from this study indicated that the relationship between EVA and MVA are best by far when compared to the relation between MVA and Financial Ratios. Notably, the Malaysia Banking Sector appears to have destroyed theshareholder value and hence, the banking sectors should make improvement in order to perform in the future performance.

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The banking industries are the backbone of the Malaysian economy. Hence, they play an important role as financial intermediary and is a primary source of financing for the domestic economy, accounting for about 70% of the total assets of the financial system as at end-1999. The financial performance of the banking industry is very critical to the health of the general economy at large. These banks have existed since 19th century. Consequently, banks industry have gone through revolution as major reorganization and formalization in their operations in order to achieve operation efficiency enhance performance and strengthen their competitiveness since last two decades.

The banking industry' theories have played important roles, which assumed the banks earn profits by purchasing transactions deposits from depositors at low interest rate. Subsequently, Banks reselling those funds to the borrowers such as business firms at higher interest rate, which its interest rate based on firms' competitive advantage at gathering information and low risk (Santos, 2000)

Post Asian Financial Crisis between 1997 and 1998, Malaysia has experienced another round of financial crisis, namely "Credit Crisis", which has resulted global credit crunch phenomena in 2007. It has directly affected global economic activities especially toward America and European countries. Subsequently, Malaysia has experiencing the contagion effects, such as volume in export and import activities, unemployment rate, and currency exchange stability. As a result, Malaysia positioned in risk of economy recession. The global economy has not fully recovered after the

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Asian Financial Crisis in 1997-98, the financial crisis caused by the Europe debt Crisis threatens the economic growth even more. This situation had become worsen due to change in inflation rate and subtraction of government subsidiary for necessity goods. On the others hand, the Mergers and acquisitions (M&A) between banks aftermaths of financial crisis 1997-98 has circulated some rumors and predicted that Malaysia market is starting upsurge of M&A to overcome the downturn period by increase the firm's efficiency. For instance, EON Bank has been takeover by Hong Leong Bank on May 2011.

Malaysia banking sector has evolved into one where economics of scale in funding and lending activities is of great importance, thus acquisitions are preferred over organic growth by those seeking to enlarge their franchise. Furthermore, the margins is narrowed by higher competition in banking sector are likely to come up with more products to earn more money to provide more comprehensive consumer services, in return to gain profit. Thus, in the intensity of competition in banking sector, it is very important to analysis the banking industries performance in order to identify how the banks positioning themselves and how they outperforming against their competitors. As a result, it is acknowledgeable that accounting measures playing an important role in evaluating Banks performance. It exists since the 17th century, remaining the most common used metric to evaluate business performance (Richard et al., 2009) and there are previous studies on profitability and other measures have been conducted by Samad (1998), Ariff (1989), Dirrar (1996), Mohiuddin (1991), Sum (1995) and Hassan (199), which are far from satisfactory. This is because the limited reliability of accounting profit measurement to reflect banks sector performance. Therefore, in this project is wise to perform studies on banking industries performed through accounting profit measurement like Financial Ratio and economy profit measurement such as

Economy Value Added (EVA) and Created Shareholder Value (CSV), which is aim to identify the healthiness of banking sector's performance.

1.1   Background of the Banking Sectors in Malaysia

The first established commercial bank in Malaysia is the branch of a British Exchange Bank, which is also known as "The Chartered Mercantile Bank of India, London and China" (later Mercantile Bank, Ltd). The banks operate at Penang in 1859, and later renames as the Mercantile Bank. Afterwards, it changes again to "The Chartered Bank" in 1875.

In July 1913, there was the first domestic bank has been established in Kuala Lumpur, and is known as KwongYik (Selangor) Banking Corporation. Followed by, investment of foreign banks such as Singapore-incorporated bank to open branches at Malacca and Muar in 1917. Subsequently, businesspersons and traders incorporated new indigenous banks constitute the ancient banking system of India by carrying on their age-old banking operation in 1920s and 1930s.

In 1907, the established of the Currency Board is aims to issue the currency and protects its value. This was following the recommendation on the World Bank Mission in 1955 which was reviewed the country's economic situation and potential for development of the Central Bank of Malaya Ordinance called "Bank Negara Malaysia" on January 26, 1959.

After gone through a full evolutionary cycle from 1950s to 2012, a new wave is now developing. The impact of the Asian Financial Crisis (AFC) in 1997-1998 on Malaysia was huge. The stock and currency market nearly collapsed during the crisis. Consequently, the knowledge-based Economy Master plan was introduced in year

2002, which was aimed of the transforming the economy into an innovation-based economy to improve their efficiency and productivity in order to enable Malaysia to achieve "high-income country" status by 2020, which is a mission set in 1991 by the Prime Minister, Dr. Mahathir Mohamad in Vision 2020. Aftermaths of Asian Financial Crisis 1997-98 and Credit Crisis 2007-08, the financial industry has faced another phase of consolidation by merging the commercial banks in order to enable the financial institutions to become one-stop financial centers in order to competent and well prepaid for impending liberalization especially for financial service sector (Financial Sector Master Plan 2001-2011). The government under the new Prime Minister NajibRazak is trying to address the structural issues and in the process of producing a blueprint for Malaysia in order to achieve high-income country status by 2020. Hence, it has taken a few initial small steps to liberation some restrictions and distortions associated with the New Economic Policy.

1.2   The Evolution of the Banking Sectorsin Malaysia

The revolution of the banking sectors in Malaysia over this recent decade had provides an important stage in order to develop a more resilient, competitive and dynamic financial system with best practices to support the future growth of the economy throughout the economic cycle. Indeed, much of the revolution had been guided by the implementation of the Financial Sector Master Plan (FSMP2001-2011) on March 1, 2001. Therefore, the FSMP has an outlined a 10-year plan for orderly development of the banking sector which is beginning with building the institutional capacity of the domestic intermediaries and developing the domestic financial infrastructure. The plan has strengthen the economic performance and it stability has enabled the financial system to achieve effectiveness and efficiency to face the

challenging conditions during the economic turmoil. Since 2001, the financial

industry has expanded at an average annual rate of 7.3% to account for 11.7% of real

GDP in 2010 (2001: 9.7%) and below table shows the evolution of the financial

industries in Malaysia.

Exhibit 1-1   Evolution of the Banking Sectors in Malaysia

1997		2010
Pre-Asian Financial Crisis		Key Achievements
• Fragmented banking system with 77 domestic banking institutions • Less of developing bond market. • Over-reliance by corporations on the banking system for financing • There was a more rigid and prescriptive rule-based regulation and supervision • There was a limited prominence of Islamic finance • Inflexible price mechanisms • Gaps in access to financing	**Financial** **Master plan** **(FSMP)** 2001	• There was a consolidation and rationalization of banking industry in Malaysia. • There was varying of financial sector with deep and liquid debt securities market. • The strengthened of the corporate governance and risk management practices. • Efficient delivery channels for financial products and services. • Strategic alliances with foreign institutions • Enhanced access to financing especially for SMEs and micro-enterprises. • Greater market orientation. • Strengthened financial and economic linkages.

Source: Central Bank of Malaysia: Financial Sector Blueprint 2011-2020.

1.3   Problem Statement

Banking industry in Malaysia is facing several forces of change that can influence the

Banking Sectors in Malaysia such as merger or acquisition to become bigger in size

and improve in quality services. In July 29, 1999, Tan Sri Ali Abul Hassan Sulaiman

has announced the merger programme for domestic banking institutions to form six domestic financial groups that would ensure the domestic banking institutions would be able to withstand pressures and challenges arising from globalization and from an increasingly competitive global environment. Besides, Bank Negara had justified the consolidation program on grounds that Malaysia needed to build strong banks to compete globally when its financial services market opens up in 2003 under WTO rules.Under this programe, Malaysia's 54 banks and financial institutions had merged into 10 anchor groups in a sweeping consolidation in 2001 under the auspices of the government, which are Malayan Banking Berhad, Bumiputra-Commerce Bank Berhad, RHB Bank Berhad, Public Bank Berhad, Arab-Malaysian Bank Berhad, Hong Leong Bank Berhad, PerwiraAffin Bank Berhad, Multi-Purpose Bank Berhad, Southern Bank Berhad and EON Bank Berhad.Consequently, this study will investigate whether the M&A activity in past time has enabled Malaysia Banking Sectors enjoy financial performance. Is the banking sectors able to sustain profitability, liquidity, risk, and solvency? How does their economy profit? Besides, it is very important to the bank's owner as well to the investors in order to assess and adjusts the performance of banks and the regulation to maximize profit by Mamatzakis, &Remoindos, 2003; Pasiouras, &Kosmidou, 2007). Resulting in, there were a few recent studies in examining the financialperformance through Economic Value Added (EVA) and Shareholder Value Creation (SVC).Therefore, this study intends to measure the financial ratio, economic value added (EVA) and shareholder value creation (SVC) of the banking sectors in Malaysia. In this study, it will focus on Local Banks Sectors include Affin Bank Berhad, Alliance Financial Group Berhad, AMMB Holding Berhad, CIMB Group Holdings Berhad, Hong Leong Bank Berhad, Malayan Banking Berhad, Public Bank Berhad and RHB Bank Berhad.

1.4 Research Objectives

1.4.1 General Objective

The general objective of this research is to evaluate the financial performance of banking sectors in Malaysia from year 2007 to 2011. In this study, the evidence of improved financial performance will be measure by the financial ratio, EVA and SVC for the eight banking sectors in Malaysia for the five-year period from the year 2007 until 2011.

1.4.2 Specific Objective

In addition, the specific objective of this research are to evaluateand analysis

    i.   The Financial Ratios for each Bankin Malaysia.

    ii.   The Economic Value Added for each Bank in Malaysia.

    iii.   The Economic Value Added Adjustment for each Bank in Malaysia.

    iv.   The Shareholder Value Creation for each Banks in Malaysia.

    v.   The Ranking of Banks based on SR, SVA, and SVC in Malaysia.

    vi.   The Relationship between EVA and Financial Ratios.

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    viii.   The Relationship between SVAand EVA.

    ix.   The Relationship between SVA and Financial Ratios.

    x.   The Relationship between MVA and EVA.

    xi.   The Relationship between MVA and Financial Ratios.

    xii.   The Relationship between SR and EVA.

    xiii.   The Relationship between SR and Financial Ratios.

    xiv.   The Relationship between SVC and NOPAT.

1.5   Research Questions

This study is to highlight about the Financial Ratios, Economic Value Added (EVA), and Shareholder Value Creation (SVC) determining the profitability, liquidity, risk, and solvency, economic profit of the Banking Sectors in Malaysia. The following key research questions are proposed.

i.   What are their Financial Ratios for each bank in Malaysia?

ii.   What are their Economic Value Added (EVA) for each bank in Malaysia?

iii. What are their EVA Adjustment for each bank in Malaysia?

iv.   What are their Shareholder Value Creation for each bank in Malaysia?

v.   Does any relationship exist between EVAandFinancial Ratios?

vi.   Does any relationship exist between EVA adjustment and Financial Ratios?

vii. Does any relationshipexist between Market Value Added (MVA) and EVA?

viii. Does any relationship exist between MVA and Financial Ratios?

ix.   Does any relationshipexist between Shareholder Return (SR) and EVA?

x.   Does any relationship exist between SR and Financial Ratio?

xi.   Does any relationshipexist between Shareholder Value Creation (SVC) and NOPAT?

1.6   Significance of the Study

This research paper attempts to evaluate the Financial Performance of Banking Sectors in Malaysia by identifying the Financial Ratios, EVA as well as SVC for the five-year from 2007-2011 and it relationship with dependent variables by using Correlation tests.

The significance of this research on EVA and SVC is to provide useful information to point organizations toward efficiency and increase the organization's value as well as investors with the investing opportunity.

Besides, significance of this research is to measure the true financial performance of the each bank in Malaysia as well as to indicate the wealth of shareholder over the periods.The SVC, it is crucial for investors to identify the organization's performance whether they are creating value or destroying shareholder value. Consequently, they can establish a new strategies, policy and objectives as well to strengthens their organization competitive advantages and sustain their profitability.

1.7 Operational Definitions

Definition of Financial Ratio

Financial Ratiois financial data of the company that restated in relative term in order to aid investors identify and quantify a company's financial strengths and weakness, evaluate its financial position, and understand the risks involved in the company, (Eugene, Joel, Yao, Hong, & Bany, 2010).

Definition of Liquidity Ratios

Liquidity Ratios is ratios that show the relationship of a company's cash and other current assets to its current liabilities, (Eugene, Joel, Yao, Hong, & Bany, 2010).

Definition of Profitability Ratio

Profitability Ratios is a group of ratios that show the combined effect of liquidity, assets management, and debt on operating results, which is will reflect the result of all

the financing policies and operating decisions, (Eugene, Joel, Yao, Hong, & Bany, 2010).

Definition of Risk and Solvency Ratios

Risk and Solvency Ratios is a set of ratios that measure how effectively a company is managing its assets, which a company becomes risky if it is insolvent (Eugene, Joel, Yao, Hong, & Bany, 2010).

Definition of Economic Value Added

Economic Value Added is an estimate of the company's economic profit, whether the shareholders' value the company's equity above or below the amount of capital, they originally invested. Therefore, EVA will reflect the earned profit of the company, whereby shareholders gain when the return from the capital employed is greater than the cost of the capital (Stern, Stewart, & Chew, 1991).

Definition of Economic Value Added (EVA) Adjustment

The objective of the EVA adjustments is to adapt accounting statement to an economic profit. The essential step is to calculate Net Operating Profit after Taxes ((Investopedia, 2013).

Definition of Shareholder Value Creation

Shareholder Value Creation is first defines the increase of equity market value, the shareholder value added, the shareholder return, and the required return to equity(Fernandez, 2002).

Definition of Accounting Profit

Accounting Profit is the access of company total income over the company expenses, while the company earns revenues after selling their goods and services. Therefore, the company earns the revenues is more than the company expenses, it said that the company has made an accounting profit (Investopedia, 2013). Accounting Profit (Net Income) does not take into consideration the opportunity cost of capital, but economic profit does (Stern, Stewart, & Chew, 1991).

Definition of Economic Profit

Economic Profit is the access of the company total income over the total of company expenses, while to the cost of an investment; it also adds the opportunity lost cost of another investment option (Investopedia, 2013).

Definition of Intertemporal

Intertemporal is an economic term describing that how the investors or company current decisions affect what options become available in the future.If the investors or company not intense today, expenditure levels will increase significantly in the future, and vice versa. In order world, for investors, these decisions relate more saving and retirement, while for company, various investment decisions involve intertemporal choice (Investopedia, 2013).

Definition of Mean

The mean is defined as a simply the arithmetic average, which is perhaps the most common tool that used to measure of central tendency (William, Barry, Jon, & Mitch, 2010).

Definition of Standard Deviation, S.D

Standard deviation is a measure of how far the actual return is likely to deviate from the expected return, or standard deviation is a statistical measure of the variability of set of observation (Eugene, Joel, Yao, Hong, & Bany, 2010).

Definition of Pearson Correlation, r

Pearson Correlation, r is a statistical that use to measure of the degree of relationship between two variables. The correlation coefficient can range from +1.0 (perfect positive correlation) and -1.0 (perfect negative correlation). The correlation of zero indicates that two variables are not related to each other (Eugene, Joel, Yao, Hong, & Bany, 2010).

1.8   Organization of Paper

This study consist of five chapters namely:-

Chapter One: Introduction, it will be a brief introduction of banking sectors in Malaysia, Background and Evolution of Banking Sectors in Malaysia. Besides, in this chapter, a clear define of problem statement of the research, research questions,

research objective, significance of this research, operational definition, organization of paper and chapter summary.

Chapter Two: Literature Review, it will start with introduction. In this chapter, it will clear discuss the previous study on the Financial Ratios, Economic Value Added and Shareholder Value Creation to evaluate the Financial Performance of Banking Sectors in Malaysia.

Chapter Three: Research Methodology, it will start will introduction, followed by the dimensions and factors will be highlighted in order for the development of the research hypothesis and research framework,Financial Ratios Measurement, EVA Measurement, EVA Adjustment Measurement, SVC Measurement, and Pearson Correlation Measurement. Besides, in this chapter also discuss the data collection model and method of measurement.

Chapter Four: Analysis and Interpretation of result that will be tested the hypothesis developed in chapter three.

Chapter Five: Conclusion, this chapter will be discussed based on the research results (Chapter Four), policy applications and limitation of the research.

1.9   Chapter Summary

The Banking Sectors are the backbone of the Malaysian economy and it plays a very important role as financial intermediary as well as a primary source of financing for the domestic economy.This is very important for the banking sectors to evaluate their performance by using the Economic Value Added and Shareholder Value Creation and not only by using Financial Ratios. This is because EVA is attempted to measure the Banking Sectors' economic profit, which Financial Ratios attempts to measure the

Banking Sectors' accounting profit, in a given years. In addition, when a Banking Sectors has shown a positive value for EVA, its economic profit is improved by investing more capital. By contract, when a Banking Sectors has shown a negative value for EVA, this mean more capital will actually decrease economic profit. Consequently, this shown the whether good growth or bad growth of the Banking Sectors in Malaysia for the periods from 2007-2011, which is an important concept in value creation. On the other hands, SVC measures to identify the shareholder value of the Banking Sectors whether the Banking Sectors have a good indication of future growth or reliable strategies that can improve their financial health.

CHAPTER 2:   LITERATURE REVIEW

2.0   Introduction

Economists and accountants discuss differently on the proper definition of profit. Accountants defined that the profit is the excess of revenue over expenses and taxes and is best measured by earnings. In contrast, economist argued that earnings fail to include an important expenses item, the opportunity cost of the equity capital contributed by the shareholders of the company. Therefore, the company earns economic profits only to the extent that its earning exceeds the returns it might earn on other investments. Indeed, earnings will always exceed economic profits, and a firm can be profitable in an accounting sense yet unprofitable in an economic sense.

2.1   Accounting Profit Measurement

The important of financial management is to create shareholder value, which is focusing on accounting information, such as earning. In perfect world, the investor would rely on market values relating to a firm's assets rather than its accounting data. In spite of this, they would rarely have market values to guide decision-making and predicting firm's future performance. As a result, financial ratio as accounting information can be very useful for this purpose. It can also give early word of warning about the slowdown of firm's financial performance (Ohlson, 1980)

2.2   Financial Ratios

Nevertheless, financial analysts use accounting information differently compared to accountant do, whereby the accountants focus on using the information principles (GAAP). They also use this information to measure a company's performance and make projections in order to improve its future financial performance. Financial ratios

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have existed since the 17th century. It usefulness and simplicity had leading to it is widely acceptance and remain the most robust used metrics in measure a company performance (Richard, P., Devinney, T., Yip, G., & Johnson, G., 2009). In general, financial ratio presented two ways of making meaningful comparisons of the company financial data. Firstly, it is using to examine the ratios across time such as past five years company's annual report in order to compare a company current and past performance. Secondly, it is using to compare each company's ratios with those of other companies.

Conversely, the empirical studies argued that there is no single accounting measure, which is use to discuss the variability in the shareholders wealth (Chen & Dodd, 1997). In addition, the financial measures that use in evaluating company performance must be highly correlated with shareholders wealth. Otherwise, it should not be subjected to randomness inherent in it. The traditional performance measures including profitability, liquidity, risk, and solvency such as ROE, ROI, and EPS etc. Accounting profit is not limited of its consistency in predictor a company value. Value based management system has obtained popularity in academic literature, which is used to measures its performance is Economic Value Added (EVA) and Created Shareholder Value (CSV).

2.3   Economic Value Added (EVA)

The EVA is a statistical measure company's performance, which is economic profit measurement (Hawawini, 2003). EVA has greatly become very useful and growth in popular since introduction by Stern and Stewart (1996). Stern Stewart and company argued that EVA is not limited only for measuring the earnings from operations, but it also measure of both internal and external performance. Furthermore, it is well

acknowledged because of its best practical to evaluate the company's performance (Stern, Stewart, & Chew, 1991). EVA stands well out from the crowd as the single best measures of value creation on continuous basic, and EVA is almost 50% better than its closet accounting based measures including EPS, ROE, and ROI in explaining in changes in the shareholders wealth (Cities in House Research, Stewart, 1994). Therefore, Stern Stewart has introduced a significant presence in the highly competitive valued-based performance thereby consulting market with "exactly hundreds of firms by using the EVA such as Coca-Cola Co., Eli Lilly and Co., and the Postal Service in the United States (Biddle, 1998).

As a result, EVA will be tested in measuring banking sectors performance in Malaysia against financial ratio. Thus, the relationship between EVA and Financial Ratiosneeded to be identified and the following hypothesis areproposed for testing.

H_{A1}: There is a positive relationship between EVA and Profitability.

H_{A2}: There is a positive relationship between EVA and Liquidity.

H_{A3}: There is a positive relationship between EVA and Risk and Solvency.

2.4   EVA Adjustments

In finding economic profit, this is an important to calculate the net operating profit after taxes (NOPAT). However, the adjustments made in the EVA analysis are essential to both the accuracy and identify of the EVA metric, while an unadjusted EVA analysis is just using accounting data that does not necessarily reflect the current financial performance of the company (Investopedia, 2013). In addition, a study in a paper shows that the results of over 300 companies, which is included only the five major adjustments included those to "successful efforts accounting, research and

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development, deferred taxes, provisions for warranties and bad debts, LIFO reserves, depreciation, goodwill, operating leases, restructuring charges, and accounting for capital charge" (Anderson, Bey, & Weaver, 2005). Additionally, the compared the results with those calculated by the originators of the EVA metric, (Stern Stewart & Co, 2013). The outcomes of the observation showed that the two figures for each company were over 90% similar and providing that for the most part, adjustments could be minimal for ease of use and shows accurate results. Hence, the following hypothesis are proposed for testing.

H_{A4}: There is a positive relationship between EVA Adjustment and Profitability.

H_{A5}: There is a positive relationship between EVA Adjustment and Liquidity.

H_{A6}: There is a positive relationship between EVA Adjustment and Risk and Solvency.

2.5 Shareholder Value Added (SVA)

Instead of financial performance, it is also important to identify the banking sector value creates for their shareholder. To measure the value created for the shareholder, it is important to identify through economic profit that are EVA, MVA, SVA and CSV. Stewart (1990) conducted the first study of the correlation between EVA and Market Value Added (MVA) or Shareholder Value Added (SVA) and argued that both correspond with each other in actuality quite popular among US companies. The correlation between negative EVA and negative MVA does not hold very well. Additional, the study also argued that EVA and MVA correspond to each other best when changes in EVA and MVA are not the absolute levels. The correlation measured between EVA and the traditional measures of financial performance and their study

based on the data of 241 US company (Lehn & Makhij, 1997). The study argued that the EVA is superior to accounting profits as a measure of shareholder value creation and this correlation was slightly better than with traditional performance measures such as ROA, ROE, and ROS.

Hence, the relationship between SVA Profitability Measures which is including EVA, ROI, ROA, ROE, and ROS based on the data of eight banking sector in Malaysia is required to be tested. Therefore, the following hypothesis areproposedfor testing.

H_{A7}:   There is a positive relationship between SVA and EVA.

H_{A8}:   There is a positive relationship between SVA and Profitability.

H_{A9}:   There is a positive relationship between SVA and Liquidity.

H_{A10}:   There is a positive relationship between SVA and Risk and Solvency.

2.6   Market Value Added (MVA)

The study based on 100 bank holding companies for 10 years period. They found that the correlation of MVA with EVA is significantly higher that with other traditional measures like EPS, ROE, ROA, and Net Income. The outcomes suggests that the correlation between MVA and those measures are: EVA was 40 percent, ROA was 13 percent, ROE was 10 percent, Net Income was 8 percent, and EPS was 6 percent(Uyemura, Kantor, & Petit, 1996).

The evaluated the correlations between MVA with EVA and MVA with financial ratio such as EPS, EPS growth, ROE, FCF or FCF growth in the US. They found that MVA is more highly correlation between MVA and several financial

performance measures. They find EVA to correlation is better with MVA than compare to other measures. For the finding, R squared for EVA is 42 percent, for EPS growth 34 percent and for ROE and EPS it was 29 percent, (Milunovich & Tsuei, 1996). Therefore, the following hypothesis are proposed for testing.

H_{A11}: There is a positive relationship between MVA and EVA.

H_{A12}: There is a positive relationship between MVA and Profitability.

H_{A13}: There is a positive relationship between MVA and Liquidity.

H_{A14}: There is a positive relationship between MVA and Risk and Solvency.

2.7 Share Return (SR)

The study based on 566 US companies under the period from 1983 to 1992 in order to evaluate the correlation between stock return and different profitability measures which is including EVA, non-adjusted residual income, ROA, EPS and ROE. This is the most demanded tool for the company in every conditions and it has been implemented in numerous large companies to motivate managers to create shareholder value. In their study of finding, ROA explained stock return best with R squared of 24.5 percent. Hence, the R squared for other metrics are: EVA was 20.2 percent, residual income was 19.4 percent and EPS and ROE approximately about 5.0 percent to 7.0 percent, (Dodd & Chen, 1996).

Hence, the relationship between Shareholder Return (SR) and Profitability Measures which is including EVA, ROI, ROA, ROE, and ROS based on the data of eight banking sector in Malaysia is required to be tested. Hence, the following hypothesis areproposed for testing.

H_{A15}:   There is a positive relationship between SR and EVA.

H_{A16}:   There is a positive relationship between SR and Profitability.

H_{A17}:   There is a positive relationship between SR and Liquidity.

H_{A18}:   There is a positive relationship between SR and Risk and Solvency.

2.8   SVC and NOPAT

Pablo Fernandez (2002) argued that it is impossible for accounting based measures such as EVA, Economic Profit (EP), or Cash Value Added to measure value creation, whichis based on accounting information in term of historic in nature. NOPAT consist of the most significant correlation with the MVA, meaning that the company's EVA, Economic Profit (EP) or Cash Value added increase in value does not mean that the firm is making value, as the shareholders' value creation has very little to do with EVA, (Fernandez, 2002).

Hence, this research also tests the relationship between NOPAT and Shareholder Value Added (SVC) to identify whether the banking sector create value for their shareholder. The following hypothesis is proposedfor testing.

H_{A19}:   There is a positive relationship between SVC and NOPAT.

CHAPTER 3   RESEARCH METHODOLOGY

3.0   Introduction

The research methodology can be described as how the research is carried out in terms of research framework, data collection model, and method of measurement. The research framework is included financial ratio measurement, which is can be divided into profitability, liquidity, risk, and solvency of the bank. In addition, economic value added is used to measure developed by the investment-consulting firm and shareholder value creation is used to indication of future growth or reliable plan of the bank.Since 1980s, there have been an increasing number of using Traditional Accounting Measures in order to analysis the company's performance. Then, Rapport (1986) and Stewart (1991) turned to the concept of shareholder value and how itcan be created, sustainable competitive advantages, and measured. Consequently, this led to the development of a number of "Value Metric" and it can be classified as Accounting Metrics and Economic Value Metric.

There are eight local are selected in this study in the period of the year 2007 to 2011. Thus, the banks that have been chosen are Affin Bank, Alliance Bank, AmBank, CIMB, Hong Leong Bank, Maybank, Public Bank and RHB Bank. The time span has been chosen, as it was five-years from 2007 to 2011.

3.1   Research Framework

Exhibit 3-1 illustrates the research framework for this study. Subsequently, it is also provides the measurement methods of the Financial Performance of Banking Sectors in Malaysia based on Accounting Profit and Economic Profit. Accounting profit can

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be divided into three groups namely profitability, liquidity, risk, and solvency of banking sectors. Then, Economic Profit also divide into three group namely EVA, EVA Adjustments, and SVC.

Exhibit 3-1   Research Framework Model

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                    ┌─────────────────────────────┐
                    │  Banking Sectors in Malaysia │
                    └─────────────────────────────┘
                                  │
        ┌─────────────────────┐       ┌──────────────────┐
        │  Accounting Profit  │       │  Economic Profit │
        └─────────────────────┘       └──────────────────┘
                  │                              │
          ┌──────────────┐        ┌──────────────────────┐
          │ Profitability │        │   Economic Value     │
          └──────────────┘        │    Added (EVA)       │
                                   └──────────────────────┘
          ┌──────────────┐
          │  Liquidity   │        ┌──────────────────────┐
          └──────────────┘        │ Economic Value Added │
                                   │  Adjustment (EVA     │
          ┌──────────────┐        │    Adjustment)       │
          │  Risk and    │        └──────────────────────┘
          │  Solvency    │
          └──────────────┘        ┌──────────────────────┐
                                   │  Shareholder Value   │
                                   │  Creation (SVC)      │
                                   └──────────────────────┘
```
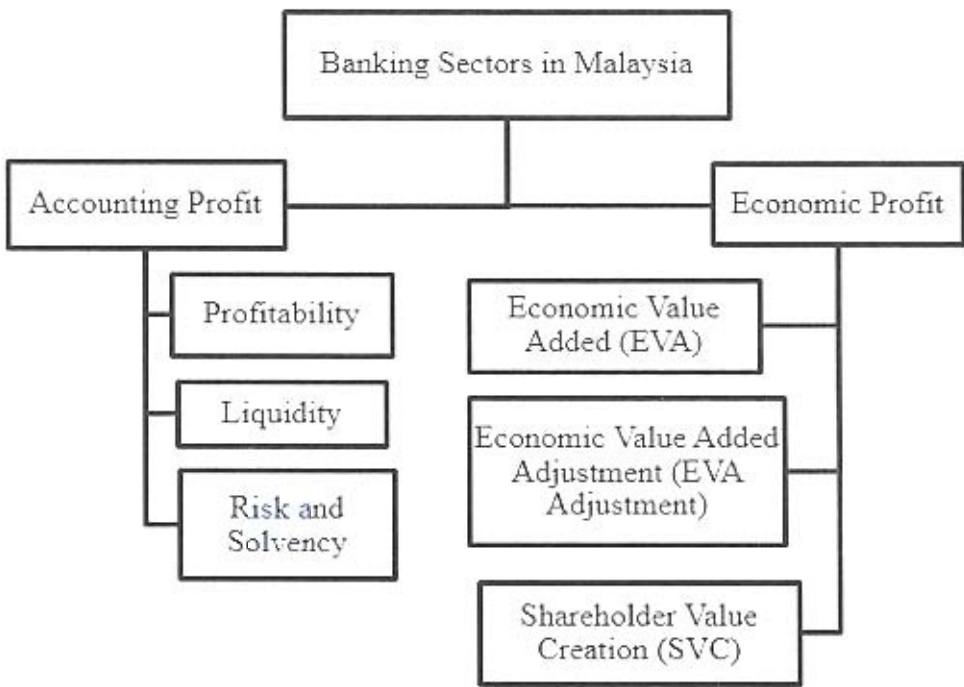
3.2   Accounting Metric

The measure of bank performance focuses on inter-temporal and interbank performance of the banks on the following group of ratios, such as financial ratio, which there are three areas namely, profitability, liquidity, risk, and solvency of the bank sectors in Malaysia during 2007 - 2011.

Financial statement analysis is theories apply, which is use to examine the past and current financial data for measuring a bank's performance, its future risks and potential growth. One of the easiest ways is through using theories is accounting ratios. The data that use in measurement of the bank sectors performance is based on data that provided in external reports and as well as supplementary information from

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management. The accounting ratio measures are quite common tools for measuring the bank performance and it exists since the 17[th] century (Richard, P., Devinney, T., Yip, G., & Johnson, G., 2009). Therefore, financial ratio analysis is very important tools that can help investors, especially shareholders and bondholders to making economic decision such as investment decision. As well, it also important to predicting the future performance of the firms and not only for banking sectors. Hence, this study will analysis and evaluate the financial performance of banking sectors in Malaysia. There were three areas of financial ratios that have been highlighted, which will be focus on in measuring banking sectors in Malaysia through profitability, liquidity, risk and solvency during five years period starting from 2007 to 2011.

3.1.1 Profitability Measures

In this report, profitability refers to the banks performance, which is measuring the ability of the firm in generate profit. It is common ratio used by management and investors to assess the bank's performance on generate profits and how these profits are used to compensation investors that reflect the net result of all the financing policies and operating decisions, and lead to justify how well a bank creating value to their shareholders and how efficient their management team was.There are six main profitability ratio measures are discussed in this study as follows:

i. Return on Total Assets (ROA)

Return on Total Assets (ROA) is a ratio of the net income to total assets, which is an indicator that reflects the ability of the bank's assets in order to generate profit. ROA is an indicator of how well a bank can convert its assets into net income (Samad & Hassan, 1998). Commonly, a higher ROA suggests that efficient management of the bank is utilizing assets affectively. The ROA is computed as follows.

$$\text{Return On Total Assets, ROA} = \frac{\text{Net Income}}{\text{Total Assets}}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

ii.   Return on Equity (ROE)

Return on Equity (ROE) is a ratio of the net income to shareholders' equity, which is commonly used by the management and investors to measure the internal performance on the stockholders value. Usually, ROE is higher compared to the return of investment (ROI) because of financial advantage of the organization. Financial leverage can be described as the use of securities bearing a fixed (limited) rate of return in order to finance a portion of the banks' assets by hopes of increasing the maximize return to the common stockholders' investment. A higher ROE suggested that the investor would earn a higher return on their investment. The ROE is computed as follows.

$$\text{Return On Equity, ROE} = \frac{\text{Net Income}}{\text{Total Stockholders' Equity}}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

iii.   Return on Investment (ROI)

Return on Investment (ROI), also known as ROA or basic earning power ratio, is the ratio of the net income before the influence of taxes and interest in order to measure the ability of the bank's assets to generate the operating profit. Generally, the higher of the ROI suggested that the better performance of the bank. The ROI is computed as follows.

$$\text{Return on Investment, ROI} = \frac{\text{EBIT}}{\text{Total Assets}}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

iv. Return on Sale (ROS)

Return on Sales (ROS), also known as net profit margin, is the ratio measures net income per dollar of the sales. In general, a higher of the operating margin suggested that the better performance of the bank or mean that the bank has less financial risk. The ROS is computed as follows.

$$\text{Return On Sales, ROS} = \frac{\text{Net Income}}{\text{Sales}}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

v. Return on Capital Employed (ROCE)

Return on Capital Employed (ROCE) can be described as the efficiency and profitability of a bank's capital investment, is a ratio of net income before taxes (EBIT) and interest to capital employed. In general, ROCE suggested should always be higher than the rate at which company borrows because the increase in borrowing will affect the shareholders' value. The ROCE is computed as follows.

$$\text{Return On Capital Employed, ROCE} = \frac{\text{EBIT}}{\text{Total Assets} - \text{Current Liabilities}}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

vi. Sales Growth (SG)

Sales Growth (SG) can be described as the percentage change of total sales over a specific period, in order to measure how fast a bank growth over time. The SG is computed as follows.

$$\text{Sales Growth, SG} = \frac{\text{Current Year's Sales} - \text{Last Year's Sales}}{\text{Last Year's Sales}} \times 100$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

3.1.2　Liquidity Measures

Liquidity indicates the ability of the bank to have cash available when needed to meet its financial obligations on a timely and effective manner. Liquidity is related to ease and quickness of the bank can convert its noncash assets into cash, as well as the size of the bank's investment in noncash assets, whichare relatives to its short-term liabilities.(Samad & Hassan, 1998), is states that "liquidity is the life and blood of commercial bank". They are several liquidity measures that were used in this study as follows.

i.　Working Capital (WC)

Working Capital (WC) is used to measures the excess funds of the banks, whichmust be financed with long-term debt and equity. Working capital is known as the excess of current assets over current liabilities. While, current assets include assets are most likely to be converted into the cash in the specific period. The WC is computed as follows.

$$\text{Working Capital, WC} = \text{Current Assets} - \text{Current Liabilities}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

ii.　Net Working Capital (NWC)

Net Working Capital (NWC) is one of the important tools that used to measure the bank's financial performance or stability of the bank as the difference between the current assets and current liabilities of the banks. In general, the positive value of the NWC will show the ability of the bank to pay off its liabilities. Thus, the negative value of the NWC will also be concern. The NWC is computed as follows.

$$\text{Working Capital, WC} = \text{Current Assets} - \text{Current Liabilities}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

iii.   Working Capital Ratio (WCR)

Working Capital Ratio (WCR) is also known as current ratio, which is used to measure of liquidity of the banks in order to meets its payment obligations as they fall due. In general, the higher of the WCR suggested that the greater of the bank flexibility to expand operation. The WCR is computed as follows.

$$\text{Working Capital Ratio, WCR} = \frac{\text{Total Assets}}{\text{Total Liabilities}}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

iv.   Current Ratio (CR)

Current Ratio (CR) is used to measure the liquidity of the bank on how the bank management has been able to meet current liabilities, such as demand deposit with the current assets. Generally, the higher of the CR suggested banks has more liquid assets to pay back the deposit. While, the purpose of selling securities is a withdrawals significant to exceed the new deposits bank in order to replace this shortage of funds. Commonly, the government securities are easily sold and are considered as liquid. Generally, the higher CR suggested a strong, safe liquidity position. The CR is computed as follows.

$$\text{Current Ratio, CR} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

v. Current Assets Ratio (CAR)

Current Assets Ratio (CAR) is a ratio of the current assets to total asset. In general, the higher of CAR suggested that the bank has more liquid assets while compare to the lower ratio will show the illiquidity of the bank management because as more of the assets are long term in nature. The CAR is computed as follows.

$$Current\ Assets\ Ratio, CAR = \frac{Current\ Assets}{Total\ Assets}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

vi. Cash Deposit Ratio (CDR)

Cash Deposit Ratio (CDR) is a ratio measure of cash to deposit. The liquid asset of the bank is known as the cash in a bank. Generally, the higher of the CDR suggested that the bank is relatively more liquid compared to the bank, which has lower CDR. Therefore, the depositors are trust to banks is enhanced when a bank maintains a higher ratio. The CDR is computed as follows.

$$Cash\ Deposit\ Ratio, CDR = \frac{Cash}{Deposit}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

vii. Quick Ratio (QR)

Quick Ratio (QR) is also known as Acid Test Ratio, which is calculated by deducting inventories from current assets and dividing the remainder by current liabilities. This is because inventories are least liquid and they might not be converted to cash quickly as expected if sales are slow down. Therefore, QR is used by bank management to measure the ability of the bank to pay off short-term obligations without relying on the sale of inventories. The QR is computed as follows.

$$\text{Quick Ratio, QR} = \frac{\text{Current Assets} - \text{Inventories}}{\text{Current Liabilities}}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

viii.   Short-Term Loan Deposit Ratio (STLDR)

Short-Term Loan Deposit Ratio (STLDR) is used by the bank to measure the ability of the bank to cover withdrawals made by its customers. Therefore, a bank that accepts deposits must have a certain measure of liquidity to maintain its normal daily operations. In addition, loans that given by the bank to its customers are mostly not considered liquid which mean that they are investments over longer period. Usually, the higher of STLDR suggested that a bank take more financial stress by making excessive loan. Therefore, the lower STLDR is always liquid compare to the higher STLDR. Therefore, the STLDR is computes as follows.

$$\text{Short} - \text{Term Loan Deposit Ratio, STLDR} = \frac{\text{Loans}}{\text{Deposit}}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

3.1.3   Risk and Solvency

The bank can use ratio to measure the solvency of the bank in order to analyze the ability of a bank to meet its long-term financial obligations. Therefore, a bank is called solvent when the total value of its assets is greater than its liabilities. In addition, a bank becomes risky if it is insolvent. Besides that, if the banks are lack liquidity will also be forced to enter bankruptcy even the bank is solvent. Therefore, solvency is essential to staying in business, but the liquidity of the bank is also very important to measure the bank performance to succeed. There are several calculations that used to measure the risk and solvency of the bank.

i.   Debt Equity Ratio (DER)

The Debt Equity Ratio, DER is a measure of total liabilities to stockholder's equity in order to indicator of creditors' risk. This ratio to analyze the amount of advantage used of the bank by measures the number of times that the shareholders capital has been leveraged by the use of debt. In general, a lower of the DER suggested that the better performance for a bank. The DER is computed as follows.

$$\text{Debt to Equity Ratio, DER} = \frac{\text{Total Liabilities}}{\text{Stockholders' Equity}}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

ii.   Debt to Total Assets Ratio (DTAR)

The Debt to Assets Ratio, DTAR is a measures ratio of a bank's total liabilities to total assets in order to measure the solvency of the bank through the portion of the assets of a bank, whichare financed through debt. Indeed, DTAR ranges from 0.00 to 1.00. In general, the lower value of the DTAR is better compared to higher value indicates that higher portion of bank's assets are claimed by their creditor which means a bank involves in more risky business. For instance, DTAR of 0.5 is shows that half of the bank's assets are financed through debt. The DTAR is computed as follows.

$$\text{Debt to Assets Ratio, DAR} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

iii.   Equity Multiplier (EM)

The Equity Multiplier, EM is a measures ratio of total value of a bank's assets to share capital. Generally, the higher of EM suggested greater risk for bank. The EM is computed as follows.

$$Equity\ Multiplier, EM = \frac{Total\ Assets}{Share\ Capital}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

iv.   Loan to Deposit Ratio (LDR)

The Loan to Deposit Ratio, LDR is a measures ratio of the bank's loan to deposit in order to measure the liquidity as well as credit risk for a bank. Indeed, the higher of the LDR suggested that the potential of bank is illiquidity and insolvency. If the ratio is less than 1:1, which is means the bank is called insolvent. The total of the bank's deposits are included customer deposits, central bank deposits, bank and other credit institution deposits and other deposits. While, the bank's net loans are included cover loans to banks or credit institutions; customer net loans; or other loans; mortgages and loans to group companies. The LDR is computed as follows.

$$Loan\ to\ Deposit\ Ratio, LDR = \frac{Loans}{Deposit}$$

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

3.2   Economic Value Metrics

3.2.1   Economic Profit

Based on Economic Profit Model, the value of a company can be defined as the amount of capital invested plus the present value of the economic profit created each

year.Thus, the economic profit in any given period takes in account not only including accounting expenses but also the opportunity cost of the Equity Capital invested in the business. Economic Profit can be calculated as follows.

$$\text{Economic Profit} = \text{Net Income} - (\text{Invested Capital X Cost of Capital})$$

Or

$$\text{Economic Profit} = \text{Invested Capital X (ROIC} - \text{Cost of Capital)}$$

$$= \text{Invested Capital X Spread}$$

Source: (Stern, Stewart, & Chew, 1991)

When a company has shown a positive spread, its economic profit is improved by investing more capital. By contract, when a company has a negative spread, this mean more capital actually decreases economic profit. As the result, this show between the good growth and bad growth is an important concept in value creation.

3.2.2 Economic Value Added (EVA) Measurement

Economic Value Added is a financial performance measure developed by the investment-consulting firm, Stern Stewart & Co. EVA, attempting to measure a firm's economic profit, rather than accounting profit, in a given year. Economic profit is recognized as a cost of the equity capital in addition to interest cost on the firm's debt. This cost is also known as the opportunity cost of the funds provided by the shareholders. However, in the perspective of an accountant, this financing cost is recognized only as the interest expenses when calculating a firm's net income. Therefore, it is wise to take these elements into account in order to capture the real financial performance of a particular firm. Most of the investors like use EVA calculation to evaluated the firm's financial performance in order to identify the

firm's invested capital or capital employed as well as determine the cost of capital (WACC). In others words, it is to say that does the firm has wisely used the capitals that are invested by the investors by determining the returns from the investment exceeds the required rate of return of investors or investors' opportunity cost that they can use the money invest in another place. Thus, the EVA is computed as follows.

$$EVA = NOPAT - Cost\ of\ Capital\ (\%)\ X\ (Total\ Assets - Current\ Liabilities)$$

Source: (Stern, Stewart, & Chew, 1991)

In general, EVA contains five main steps to illustrate economic profit generated by firms (NarcyzRoztocki, 2010). The following are five steps for calculating the EVA.

Step 1 : Review on the Firm's Financial Data

In order to perform EVA calculation, the basic requirement is to obtain the firm's financial statements, in a period of assessment. It also includes extra notes and information whether from internal or external of the firms. This external information of firm can be obtained from investment consulting firms or investment banks that provide financial evaluation report.

Step 2 : Identifythe Firm's Capital Invested

A firm's capital invested is referring to the total capital employed in the firm. It can be estimated by adding all debts (short and long-term liabilities) to the owners' equity. Furthermore, Generally Accepted Accounting Principles (GAAP) is often misleading in illustrating a firm's real financial performance (Clinton & Chen, 1998). Hence, Steward proposed up to 164 adjustments in order to regain the real picture of a firm's financial position. This adjustment is eliminating those financing distortions in a

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company's capital and Net Operating Profit after Tax (NOPAT). However, in this report, a few adjustments are already considered sufficient because for simplicity purpose and some internal information was not disclosed. Therefore, adjustment on invested capital is to exclude non-interest bearing current liabilities from total liabilities. Non-interest bearing current liabilities is referring to account payable, dividend payable and tax provision liabilities. In this report, two scenarios on NOPAT's adjustment has been provided, which is ordinary NOPAT and adjusted NOPAT. Ordinary NOPAT is the figure directly obtained from income statement without adjustment. As for adjusted NOPAT, the key adjustments will include the converting accrual to cash or accrual the interest cost or finance cost, and capitalizing expenses that ought to be treated as investments. To capitalize is to adjust expense to the balance sheet and treat it as a long-term asset instead of short-term expense.

Step 3 : Find out the Firm's Weighted Average Capital Cost (WACC)

In calculation of EVA, WACC carry an important measure to estimate the firm's capital cost. This cost of capital depends on the firm's financial structures, business risks, current interest level, and investors' expectation. Actually, WACC is compromising costs for all capital sources, such as banks debts, corporate bonds, and shareholder's equity (Copeland, Koller, & Murrin, 1996). According to those researchers, Capital Asset Pricing Model (CAPM) is a common method in estimating their cost of equity, which is total of return on risk-free security and firm's systematic risk, and multiply by the market risk premium (Copeland, Koller, & Murrin, 1996).Then,we may use operating cash flow ratios to estimate risk premium. NarcyzRoztocki, Kim 1999 has suggested range for risk premium based on operating cash flow ratio as Exhibit 3-2.

Exhibit 3-2   Suggested Ranges for Risk Premium

Risk Premium	Investment Risk
6% and less	Extremely low risk, established profitable company with extremely stable cash flows.
6% to 12%	Low risk, established profitable company with relative low fluctuation in cash flow.
12% to 18%	Moderate risk, established profitable company with moderate fluctuation in cash flow.
18% and above	High business risk.

Source:(Narcyz & Kim, 1999)

Therefore, the range of risk premium can be a set as a guideline to estimate the risk premium of a firm to avoid under or over judge the value, which in turn enable us to gain EVA value that can reflect the firm's financial performance in creating shareholders value. Usually, the weighted cost of capital of firms as a function of the individual cost of capital, capital structure mix, and the level of the financing necessary to make the investment. Therefore, the WACC is the rate of return that the firm must earn on its investments so that it can compensate both its creditors and stockholders with their individual required rate of return. As a result, in order for a firm to create value rather than destroy shareholder value, they not only have to pursue the project that will give positive NPV, but also with a return that is higher than WACC. Therefore, in calculating the WACC, it will mainly base on creditors required rate of return and stockholders required rate of return, which is also known as Cost of Debt and Cost of Equity. Then, the calculation formula are provided as follows.

$$\text{Cost of Debt, } K_d \text{ (in \%)} = \text{Prime Rate BLR} + \text{Interest Charge}$$

$$\text{Cost of Equity, } K_e \text{ (in \%)} = \text{Risk Free Rate} + \text{Risk Premium}$$

Source: (Stern, Stewart, & Chew, 1991)

In order to calculate after tax cost of debt, it has to minus tax charges as formula below:

$$\text{After Tax Cost of Debt, Kd (in \%)} = K_d (1 - \text{Tax})$$

Source: (Stern, Stewart, & Chew, 1991)

In order to get WACC of K_d in (%), after tax Cost of Debt is multiply by the proportion of debt financing calculated earlier to identify how many percent of the of the investment is financed by debt. For WACC of K_e in (percentage), Cost of Equity, K_e will be multiplied by proportion of equity financing.

$$\text{WACC of } K_d = K_d (1 - \text{Tax}) \times \text{Proportion of Debt Financing}$$

$$\text{WACC of } K_e = K_e \times \text{Proportion of Equity Financing}$$

$$\text{Total WACC} = \text{WACC of } K_d + \text{WACC of } K_e$$

Source: (Stern, Stewart, & Chew, 1991)

After sum up WACC of K_d and WACC of K_e, total WACC is multiply by total invested capital to arrive to Cost of Capital Charges. The following are the formula for the cost of capital charges.

$$\text{Cost of Capital Charges} = \text{Total WACC} \times \text{Total Invested Capital}$$

Source: (Stern, Stewart, & Chew, 1991)

Step 4 : Calculating the Firm's Net Operating Profit after Tax (NOPAT)

According to Dierks& Patel (1997), NOPAT is a measure of a firm's cash generation capability from recurring business activities and disregarding its capital structure. Usually, NOPAT is indicating as the net income distributable to the shareholders in

the Balance Sheet. However, this figure cannot picture the real financial position of a firm due to the loopholes in accounting practice by many firms. Some firms tend to manipulate the figure in order to achieve certain financial benefits such as generate accrual sales to boost up their revenue, so that the NOPAT will increase and aims to attract more investors to invest in their firm. Therefore, in this report, we will provide two scenarios to find out the different between the EVA with adjusted NOPAT and those without adjust NOPAT to look deeper into the calculated EVA.

Step 5 : Calculating the Firm EVA

Subsequently, step fourth and fifth will put into action to calculate EVA. Therefore, the EVA can be calculated by subtracting Capital Charge from NOPAT as follows.

$$EVA = NOPAT - Capital\ Charge$$

Source: (Stern, Stewart, & Chew, 1991)

If EVA calculated equal to positive indicates that the firm's management are doing well in creating shareholder value. By contrast, EVA shows negative value, it indicates that the management has destroyed shareholder value.

3.2.3 EVA Adjustment

Stewart defines that EVA to be "the difference between the profits each unit derives of tis credit line. The NOPAT adjustment can be calculated as follows.

Exhibit 3-3   Measurement Economic Value Added Adjustment Model

Net Sales
- Operating Expenses (Inclusive Interest)
Operating Income (EBT)
- Corporate Taxes
Net Operating Profit after Tax (NOPAT)

+ Interest Cost or finance cost
Net Operating Profit after tax before interest (NOPAT Adjusted)
- Capital Charges [Invested Capital x Cost of Capital]
EVA (Positive or Negative)

Source: (Stern, Stewart, & Chew, 1991)

3.2.4 Total Shareholder Return (TSR)

The TSR can be defined as share price performance of the company including the actual dividend yields to the company's stockholders over that period.

$$TSR = \frac{P_1 + P_0}{P_0} + \frac{D_0}{P_0}$$

$$\downarrow \qquad \qquad \downarrow$$

Share Price Performance   Dividend Yield

Source: (Eugene, Joel, Yao, Hong, & Bany, 2010)

TSR is known as a comprehensive measure reflecting all activities or decisions by a management team including dividend changes in the company, share repurchase, acquisitions, capital structure changes, improvement in operations, new-product, share price and growth by expansion.

TSR is provides a very effective as an early warning signal for the company in order to evaluate the past company strategies have reached the limit of effectiveness. Moreover, most of the investors traded that company shareholder activities were signaled out because of their poor TSRs, even though their accounting performance was fine. Therefore, TSR is a superior measure of shareholder wealth creation.

3.3   Accounting-Based Measures Cannot Measure Value Creation

The increase value of the company over a certain period are commonly represented by the changes in expectations regarding the growth of the company including cash flows and the company's risk. Hence, accounting only reflect the company's history whereby the income statement will explain what happened to the company during certain year, and balance sheet, which is reflect the state of company's assets and liabilities at certain period of time. Therefore, it is impossible for accounting-based measures such as EVA, Economic Profit to measure value creation (Fernandez, 2002).

3.3.1   Shareholders Value Creation (SVC) by Pablo Fernandez Model

According to Pablo Fernandez analysis on S&P 500 from 1991-2010, they destroyed value for the shareholders amounted for $4.5 trillion. The outcomes suggests that for year 1991-1999 it created value of $5.1 trillion, while in 2000-2010, it destroyed $9.6 trillion. He also calculates the created shareholder value of the 500 companies during the 18-year period 1993-2010. The top shareholder value creators in that period have been Apple ($212bn), Exxon Mobil (86), IBM (78), Altria Group (70) and Chevron (67).The top shareholder value destroyers in that period have been American Intl Group ($-217), Pfizer (-188), General Electric (-183), Bank of America (-170), Citigroup (-169) and Time Warner (-130). About 41% of the companies included in the S&P 500 in 2004 or 2010 created value in 1993-2010 for their shareholders, while 59% destroyed value. Therefore, it is very important for those investors to identify and analysis the firms whether they are creating shareholders value or destroying it. Hence, SVC by Pablo Fernandez (2004, chapter 1) is selected to analyze the shareholder value created to their shareholders. The following calculation is the steps for conducting the SVC model illustrated in Exhibit 3-4.

Exhibit 3-4   Measurement Shareholder Value Creation Model

Shareholder Value Creation (SVC)
• Equity Market Value, (EMV)
• Increase of Equity market Value
• Shareholder Value Added, (SVA)
• Shareholder Return
• Required Return to Equity, (K_e)

Source: (Fernandez, 2002)

Step 1 : The Equity Market Value is computed as follows.

Equity Market Value, EMV can be defined as the total market value of a firm's outstanding shares. The EMV is computed as follows.

EMV = Current Market Value per Share X Number of Oustanding Share

Source: (Fernandez, 2002)

Step 2 : The Shareholder Value Added is computedas follows:

Exhibit 3-5   Measurement Shareholder Added Model

Shareholder Value Added (SVA)
Increase of Equity Market Value
+ Dividend Paid during the year
+ Other payments to Shareholder
- Outlays for capital increase
- Debentures

Source: (Fernandez, 2002)

Step 3 : The Shareholder Return is computedas follows.

$$\text{Shareholder Return} = \frac{\text{Shareholder Value Added}}{\text{Equity Market Value}}$$

Source: (Fernandez, 2002)

Step 4 : The Required Return to Equity, K_e is computed as follows.

$$\text{Return to Equity, } K_e \text{ (in \%)} = \text{Risk Free Rate} + \text{Risk Premium}$$

Source: (Fernandez, 2002)

The return to Equity is equal to the cost of equity that calculated at EVA analysis in this report.

Step 5 : The Shareholder Value Creation (SVC) iscomputedas follows.

To identify the Shareholder Value Creation (SVC), the shareholder value added calculated earlier are deducted from Equity market (that multiply with the cost of equity). The SVA is computed as follows.

$$\text{SVC} = \text{Shareholder Value Added} - \text{Equity Market Value X } K_e$$

Source: (Fernandez, 2002)

If created shareholder value show positive means that the company are doing their job in creating shareholders value. However, if created shareholder value show negative means that the firm's management is destroying their shareholders value. Does negative SVC indicate that investors should not invest on that particular firm? Naturally, investors should avoid invest on the firm that destroying the value unless the firm have good indication of future growth or reliable plan that can boost up their firms financial health. This acquires investors to gathers financial information internally or externally of the firm and analysis the effects of economic, politic, technology and social.

3.4 Pearson Correlation (r) Measurement

The Pearson correlation (r) is a statistical that used to identify or test the hypothesis in order to determine the degree of correlation between two at-least interval variables. The Pearson correlation is appropriate, once the correlation estimate relationship between continuous variable. The r, range from - 1.0 (Perfect Negative Relationship) to + 1.0 (Perfect Positive Relationship). The formula for Co-efficient of Correlation is formulated as follows, the symbols for $\bar{X}$ and $\bar{Y}$ represent the sample average of X and Y, respectively.

$$r_{xy} = r_{yx} = \frac{\sum_{i=1}^{n}(X_i - \bar{X})(Y_i - \bar{Y})}{\sqrt{\sum_{i=1}^{n}(X_i - \bar{X})^2 \sum_{i=1}^{n}(Y_i - \bar{Y})^2}}$$

Source: (William, Barry, Jon, & Mitch, 2010)

The purpose of analysis and interpretation the results of the correlation coefficient have been identified into six categories, which is illustrated in Exhibit 3-6:

Exhibit 3-6   Co-efficient Correlation Range

Interpretation	Pearson Correlation, r
Perfect Positive Correlation	r = 1.000
Strong Positive Correlation	r = + 0.9999 to r = 0.9000
Moderate Positive Correlation	r = 0.8999 to r = 0.7800
Weak Positive Correlation	r = 0.7799 to r = 0.0001
Negative Correlation	r = -0.0001 to r = -0.999
Perfect Negative Correlation	r = -1.000

Source:(William, Barry, Jon, & Mitch, 2010)

3.5   Data Collection Model

The data that used in this study are collected from income statement, balance sheets and cash flow statement of selected banks through their annual reports from the year

2007 to 2011. Therefore, the data for banking industries are collected in the period between 2007 and 2011 (5 years). The table below shows the selected banks included in the sample.

Exhibit 3-7   Selected Banks for Financial Performance Measurement

Malaysia Banking Sectors	Period
• Affin Bank Berhad • Alliance Financial Group Berhad • AMMB Holding Berhad • CIMB Group Holdings Berhad • Hong Leong Bank Berhad • Malayan Banking Berhad • Public Bank Berhad • RHB Bank Berhad	2007 - 2011

3.6   Method of Measurement

In order to measure the bank performance which are focuses on intertemporal and interbank performance of the banks on the following group of Financial Ratios, Economic Value Added (EVA), Economic Value Added Adjustments (EVA Adjustments) and Shareholder Value Creation (SVC) of the bank sectors in Malaysia during 2007 till 2011. To assess the Financial Performance for Malaysia Banking Sectors, data were downloaded from Bursa Saham Malaysia to access their annual report. Subsequently, we will use Microsoft Excel and Scientific Package for Social Science (SPSS) version 18.0,and then computed.

3.7   Hypothesis Statements

From the Research Framework Model that illustrates in Exhibit 3-1, the following hypothesis are proposed for testing in this study.

H_{01}: There is a negative relationship between EVA and Profitability

H_{A1}: There is a positive relationship between EVA and Profitability.

H_{02}:   There is a negative relationship between EVA and Liquidity.

H_{A2}:   There is a positive relationship between EVA and Liquidity.

H_{03}:   There is a negative relationship between EVA and Risk and Solvency.

H_{A3}:   There is a positive relationship between EVA and Risk and Solvency.

H_{04}:   There is a negative relationship between Adjustment EVA and Profitability.

H_{A4}:   There is a positive relationship between Adjustment EVA and Profitability.

H_{05}:   There is a negative relationship between Adjustment EVA and Liquidity.

H_{A5}:   There is a positive relationship between Adjustment EVA and Liquidity.

H_{06}:   There is a negative relationship between Adjustment EVA and Liquidity.

H_{A6}:   There is a positive relationship between Adjustment EVA and Liquidity.

H_{07}:   There is a negative relationship between SVA and EVA.

H_{A7}:   There is a positive relationship between SVA and EVA.

H_{08}:   There is a negative relationship between SVA and Profitability.

H_{A8}:   There is a positive relationship between SVA and Profitability.

H_{09}:   There is a negative relationship between SVA and Liquidity.

H_{A9}:   There is a positive relationship between SVA and Liquidity.

H_{O10}:   There is a negative relationship between SVA and Risk and Solvency.

H_{A10}:   There is a positive relationship between SVA and Risk and Solvency.

H_{O11}:   There is a negative relationship between MVA and EVA.

H_{A11}:   There is a positive relationship between MVA and EVA.

H_{O12}:   There is a negative relationship between MVA and Profitability.

H_{A12}:   There is a positive relationship between MVA and Profitability.

H_{O13}:   There is a negative relationship between MVA and Liquidity.

H_{A13}:   There is a positive relationship between MVA and Liquidity.

H_{O14}:   There is a negative relationship between MVA and Risk and Solvency.

H_{A14}:   There is a positive relationship between MVA and Risk and Solvency.

H_{O15}:   There is a negative relationship between SR and EVA.

H_{A15}:   There is a positive relationship between SR and EVA.

H_{O16}:   There is a negative relationship between SR and Profitability.

H_{A16}:   There is a positive relationship between SR and Profitability.

H_{O17}:   There is a negative relationship between SR and Liquidity.

H_{A17}:   There is a positive relationship between SR and Liquidity.

H_{018}:   There is a negative relationship between SR and Risk and Solvency.

H_{A18}:   There is a positive relationship between SR and Risk and Solvency.

H_{019}:   There is a negative relationship between SVC and NOPAT.

H_{A19}:   There is a positive relationship between SVC and NOPAT.

CHAPTER 4   EMPIRICAL RESULTS AND DISCUSSIONS

4.0   Introduction

In this chapter, the Financial Ratios, EVA, EVA adjustments and SVC of Banking Sectors in Malaysia have been examined and interpreted. Besides, it is also tested the relationship between EVA and Financial Ratios, the relationship between EVA adjustments and Financial Ratios, the relationship between EVA and SVC and the relationship between SVC and Financial Ratios as well.

4.1   Analysis of Financial Ratios, EVA,EVA Adjustments, and SVC for Malaysia Banking Sectors for the Period 2007-2011

In this section, the financial performance for the banking sectors in Malaysia have been examined and interpreted based on the hypothesis that developed in Chapter 3. The banking sectors have been evaluated by using Financial Ratios, Economic Value

Added, and Shareholder Value Creation. The resultshave been analyzed in the following manner.

4.1.1 Financial Ratios: To Evaluate the Profitability, Liquidity and Risk and Solvency of the Banking Sectors in Malaysia from 2007-2011. (Specific Objective 1)

Exhibit 4-1   Financial Ratio: The Profitability, Liquidity and Risk and Solvency of theMalaysia Banking

2007-2011

PROFITA BILITY RATIOS	Affin Bank Bhd.		Alliance Financial Group Bhd.		AMMB Holding Bhd		CIMB		Hong Leung		Maybank		Public Bank		RHB	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
ROA	0.88%	0.10%	0.92%	0.37%	0.83%	0.57%	1.31%	0.22%	0.98%	0.17%	0.88%	0.45%	1.31%	0.09%	1.06%	0.15%
ROS	22.39%	5.80%	21.37%	10.67%	11.99%	8.36%	29.32%	4.92%	30.06%	7.14%	17.29%	7.37%	26.00%	2.05%	26.04%	6.05%
ROE	11.19%	1.25%	10.72%	2.60%	8.89%	6.10%	15.27%	2.51%	13.28%	1.03%	11.55%	5.86%	22.75%	1.39%	15.41%	0.60%
ROI	2.86%	0.32%	3.40%	0.21%	3.69%	0.29%	4.31%	0.45%	2.38%	0.36%	3.19%	0.83%	2.93%	0.07%	1.92%	0.15%
ROCE	8.80%	3.12%	17.57%	1.88%	12.61%	2.81%	12.35%	1.16%	11.80%	4.32%	5.95%	0.56%	18.19%	3.76%	3.76%	0.82%
SG	7.34%	11.28%	0.18%	18.91%	7.90%	3.42%	9.51%	4.53%	7.43%	16.67%	1.86%	18.89%	10.68%	11.04%	6.06%	12.56%

LIQUIDITY RATIOS

	Affin		Alliance		AMMB		CIMB		Hong Leung		Maybank		Public Bank		RHB	
NWC	13,149,059	6,828,034	4,909,42	867,528	22,165,937	4,829,878	69,932,983	16,264	13,135	6,599	139,125	19,151	29,277	9,814	55,056	13,411
WCR	1.09	0.00	1.10	0.01	1.10	0.01	1.09	0.01	1.07	0.01	1.09	0.01	1.06	0.00	1.08	0.00
CR	2.18	1.85	1.20	0.03	1.38	0.18	1.45	0.03	1.17	0.04	2.00	0.32	1.16	0.05	2.29	0.83
CAR	0.97	0.01	0.96	0.01	0.94	0.01	0.94	0.01	0.97	0.01	0.91	0.02	0.97	0.01	0.97	0.01
QR	2.18	1.85	1.20	0.03	1.38	0.18	1.45	0.03	1.17	0.04	2.00	0.32	1.16	0.05	2.29	0.83
CDR	1.49	0.30	3.76	3.13	2.15	1.05	2.67	0.51	4.23	1.95	1.16	0.20	2.89	2.23	2.29	0.51
STLDR	4.24	0.53	14.87	7.56	10.11	5.55	12.86	3.40	8.70	3.62	6.86	1.49	10.99	6.03	10.29	1.15
OPCF	1.01	1.38	0.50	1.92	0.52	1.76	0.52	0.82	1.03	2.50	0.11	0.68	0.61	2.02	0.68	1.60

RISK & SOLVENCY RATIOS

	Affin		Alliance		AMMB		CIMB		Hong Leung		Maybank		Public Bank		RHB	
DER	11.63	0.65	10.32	1.28	10.21	1.32	9.99	0.27	14.37	2.47	11.53	0.66	16.55	1.32	12.97	1.07
DTAR	0.92	0.00	0.91	0.01	0.91	0.01	0.91	0.00	0.93	0.01	0.92	0.01	0.94	0.01	0.93	0.01
ETAR	0.08	0.00	0.09	0.01	0.09	0.01	0.09	0.00	0.07	0.01	0.08	0.01	0.06	0.01	0.07	0.01
EM	26.66	5.04	20.78	1.98	32.10	2.61	51.31	12.97	58.01	19.25	54.34	8.86	60.22	8.13	37.62	8.11
LDR	0.66	0.04	0.71	0.05	0.83	0.05	0.73	0.04	0.53	0.06	0.75	0.03	0.72	0.06	0.75	0.05

Interpretation

Performance of banks can be evaluated in many types of methods, it is depending on the types of analysis, and the specific needs of the investors. One of them is through the Financial Ratios methods. Financial Ratios can be divided into three categories, there are Profitability Ratios Measurement, Liquidity Ratios Measurement and Risk and Solvency Measurement, which is summarized in Exhibit 4-1, reveals that, the means and standard deviation of various performance measures of Banking Sectors in Malaysia for the period 2007-2011.

For the Profitability Ratios, it can be observed that the profitability position of the banks has changed over the period. There are six measures of profitability included Return on Assets (ROA), Return on Sales (ROS), Return on Equity (ROE), Return on Investment (ROI), Return on Capital Employed (ROCE) and Sales Growth (SG). The mean of ROA for the period 2007-2011 was high in CIMB Group Holdings Berhad (1.31%); S.D (0.22%) and Public Bank Berhad (1.31%); S.D (0.09%) and followed by RHB Bank Berhad (1.06%); S.D (0.15%).Consequently, the higher the ROA suggests that the company is more profitable with less investment. The mean ROE for the period 2007-2011 was high in Hong Leong Bank Berhadabout (30.06%); S.D (7.14%), followed by CIMB Group Holdings Berhad (29.32%); S.D (4.92%) and RHB Bank Berhad (26.04%); S.D (6.05%).The higher the ROS means that the company has less financial risk. Furthermore, the mean of ROE for the period from 2007-2011 was high in Public Bank Berhad (22.75%); S.D (1.39%), followed by RHB Bank Berhad (15.41%); S.D (0.60%) and CIMB Group Holdings Berhad (15.27%); S.D (2.51%). Mostly, the higher ROE suggests that the company is earning more than other firms in the same sector are. Moreover, the mean of ROI for the

period 2007-2011 was high in CIMB Group Holdings Berhad (4.31%); S.D (0.45%), followed by AMMB Holdings Berhad (3.69%); S.D (0.29%) and Alliance Financial Group Berhad (3.40%); S.D (0.21%). Mainly, the higher ROI means that investment gains compare favorably to investment costs. Additionally, the mean of ROCE for the period 2007-2011 was more efficiency and profitability of the banks' capital investment in Public Bank Berhad (18.19%); S.D 3.76%, followed by Alliance Financial Group Berhad (17.57%); S.D (1.88%) and Hong Leong Bank Berhad (14.80%); S.D (4.32%). Likewise, the mean of SG for bank sectors percentage change of total sales for the period 2007-2011 was high in Public Bank Berhad (10.68%); S.D 11.04%), followed by CIMB Group Holdings Berhad (9.51%); S.D (4.53%) and AMMB Holdings Berhad (7.90%); S.D (3.42%).

In term of Liquidity Ratios, it can be observed under the Net Working Capital (NWC), Working Capital Ratio (WCR), Current Ratio (CR), Current Assets Ratio (CAR), Quick Ratio (QR), Cash Deposit Ratio (CDR), and short-term Loan to Deposit Ratio (STLDR) and Operating Cash Flow to Net Income (OPCF). The outcomes observed that, the mean of Malayan Banking Berhad's NWC (RM 139,125,614), WCR (1.09:1), CR (2.00:1), CAR (0.91:1), QR (2.00:1), CDR (1.16:1),STLDR (6.86:1) and OPCF (0.11:1). Followed by CIMB Holdings Berhad's NWC (RM 69,932,307), WCR (1.09:1), CR (1.45:1), CAR (0.94:1), QR (1.45:1), CDR (2.67:1), STLDR (12.86:1) and OPCF (0.52:1) and RHB Bank Berhad's NWC (RM 55,056,985), WCR (1.08:1), CR (2.29:1), CAR (0.97:1), QR (2.29:1), CDR (2.29:1), STLDR (10.29:1) and OPCF (0.68:1). Besides, liquidity ratios is used to measure the ability of the banking sectors to meet financial obligations as they become due and is crucial to the sustained viability of banking sectors.

The bank's performance of risk and solvency for the period 2007-2011 revealed that Malaysia Banking Sectors involvement in risky business measured in Debt Equity Ratio (DER), Debt to Total Assets Ratio (DTAR), and Equity to Total Assets (ETAR), Equity Multiplier (EM), and Loan Deposit Ratio (LDR). The mean of DER, DTAR, ETAR, EM and LDR for CIMB Holdings Berhad is lower compared to AMMB Holdings Berhad in Malaysia at 9.99(10.21), 0.91(0.91),0.09(0.09), 51.31(32.10), 0.73(0.83). Besides, the mean of Alliance Financial Group Holdings Berhad's DER (10.32), DTAR (0.91), ETAR (0.09), EM (20.78), and LDR (0.71) is low compared to Malayan Banking Berhad's DER (11.53), DTAR (0.92), ETAR (0.08), EM (54.34), and LDR (0.75). The lower the value of DER is indicates that is a good sign for bank sectors. Besides, the higher the DTAR indicates that a bank involves in more risky business. Moreover, the high EM indicates greater risk for a bank and lastly the high value of LDR indicates a potential source of illiquidity and insolvency.

4.1.2 Economic Value Added (EVA) of each Bank in Malaysia (Specific Objective 2)

Exhibit 4-2   EVA of Malaysia Banking Sectors from 2007-2011

EVA	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	(2,237,672.91)	(2,365,318.83)	(2,380,035.44)	(2,975,283.60)	(3,230,907.83)	(13,187,218.62)	(2,637,443.72)	438,051.26
ALLIANCE	(1,837,686.09)	(1,855,315.07)	(2,182,361.80)	(2,263,008.79)	(2,339,764.66)	(10,478,136.40)	(2,095,627.28)	234,214.71
AMMB	(6,228,447.12)	(5,760,411.45)	(5,548,568.15)	(6,812,739.78)	(6,673,816.33)	(31,023,982.82)	(6,204,796.56)	551,871.29
CIMB	(10,922,874.21)	(14,485,301.48)	(14,900,124.04)	(17,667,056.09)	(18,220,234.97)	(76,195,590.79)	(15,239,118.16)	2,919,548.70
HLB	(4,903,294.52)	(5,128,250.61)	(4,906,975.94)	(5,580,551.80)	(9,031,037.52)	(29,550,110.39)	(5,910,022.08)	1,766,356.18
MAYBANK	(16,794,792.00)	(18,228,214.16)	(22,626,291.52)	(22,685,524.51)	(30,499,425.66)	(110,834,247.85)	(22,166,849.57)	5,345,179.75
PBB	(10,883,460.04)	(12,335,623.38)	(12,837,794.90)	(14,199,730.93)	(14,498,960.10)	(64,755,569.35)	(12,951,113.87)	1,468,139.52
RHB BANK	(6,359,448.05)	(6,255,059.58)	(971,547.29)	(1,311,189.26)	(2,596,445.57)	(17,493,689.76)	(3,498,737.95)	2,634,727.91
Total	(60,167,674.94)	(66,411,494.55)	(66,353,699.08)	(73,495,084.76)	(87,090,592.64)			
Mean	(7,520,959.37)	(8,301,436.82)	(8,294,212.39)	(9,186,885.60)	(10,886,324.08)			
S.D	5,056,367.75	5,983,107.93	7,696,532.31	7,986,131.10	9,805,753.51			

From the Exhibit 4-2 illustrates that the results of means, standard deviations (S.D), EVA of the eight Banks in Malaysia of five-year from 2007 to 2011.From the analysis, it indicates that all commercial banks in banking sectors have obtained negative EVA, meaning that they have destroyed the shareholder valuein the year of study. This partially because the effect of mortgage crisis in 2008-2009.

4.1.3 The Economic Value Added Adjustment for each Bank in Malaysia (Specific Objective 3)

EVA (Adjusted NOPAT)	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	(1,388,455.91)	(1,571,518.83)	(1,774,924.44)	(2,214,435.60)	(2,210,060.83)	(9,159,387.62)	(1,831,877.52)	373,172.38
ALLIANCE	(1,288,148.09)	(1,275,840.07)	(1,593,743.80)	(1,785,469.79)	(1,806,588.66)	(7,749,790.40)	(1,549,958.08)	258,325.07
AMMB	(4,335,645.12)	(3,607,290.45)	(3,531,514.15)	(5,084,500.78)	(4,718,038.33)	(21,174,988.82)	(4,234,997.76)	678,949.75
CIMB	(6,131,239.21)	(9,555,474.48)	(10,429,260.04)	(13,035,475.09)	(12,214,973.97)	(51,366,422.79)	(10,273,284.56)	2,697,034.19
HLB	(3,208,257.52)	(3,443,304.61)	(3,329,303.94)	(4,410,343.80)	(7,422,725.52)	(21,813,935.39)	(4,362,787.08)	1,775,665.99
MAYBANK	(11,071,620.00)	(12,187,005.16)	(16,975,934.52)	(18,501,177.51)	(27,521,384.66)	(86,257,121.85)	(17,251,424.37)	6,537,357.76
PBB	(6,675,253.04)	(7,773,227.38)	(9,521,185.90)	(10,683,619.93)	(10,060,861.10)	(44,714,147.35)	(8,942,829.47)	1,667,686.59
RHB BANK	(3,918,931.05)	(4,062,200.58)	520,937.71	511,522.74	(102,168.57)	(7,050,839.76)	(1,410,167.95)	2,369,604.18
Total	(37,915,549.94)	(43,475,853.55)	(46,634,929.08)	(55,203,499.76)	(66,056,801.64)			
Mean	(4,739,443.74)	(5,434,481.69)	(5,829,366.14)	(6,900,437.47)	(8,257,100.20)			
S.D	3,211,476.61	3,954,243.65	5,919,342.77	6,536,547.55	8,847,362.87			

Exhibit 4-3   EVA Adjustment of Malaysia Banking Sectors from 2007-2011

Exhibit 4-3 illustrates that the results of means, standard deviations (S.D), EVA adjustmentof the eight Banks in Malaysia of five-year from 2007 to 2011. From the analysis, the outcomes reveal that all commercial banks in banking sectors have obtained negative EVA, meaning that they have destroyed the shareholder value in the year of study. This partially because the effect of mortgage crisis in 2008-2009.

4.1.4 Shareholder Value Creation: To Evaluate The Increase Of Equity Market Value, The Shareholder Value Added, The Shareholder Return, And The Required Return To Equity.(Specific Objective 4)

Exhibit 4-4 Market Value Added, Shareholder Return, Shareholder Value Added and Shareholder Value Creation of Malaysia Banking Sectors from 2007-2011

Currency: RM '000

Affin Bank	2007	2008	2009	2010	2011	Total	Mean	S.D.
MVA	3,727,748	2,187,713	3,626,998	4,447,391	4,432,998			
SR	33.8%	-67.0%	43.2%	21.3%	3.6%	35%	7%	44%
SVA	1259581	-1465192	1566985	949356	158321	2,469,052	493,810	
SVC	607,225	(1,935,550)	758,164	(29,069)	(830,237)	(1,429,468)	(285,894)	
Alliance	2007	2008	2009	2010	2011			
MVA	3,750,424	2,817,553	4,195,367	4,706,242	6,115,019			
SR	23.1%	-66.7%	35.1%	12.9%	24.8%	29%	6%	41%
SVA	864,546	(1,878,043)	1,473,869	608,759	1,515,862	2,584,994	516,999	
SVC	166,967	(2,483,816)	538,302	(483,089)	152,213	(2,109,423)	(421,885)	
AMMB	2007	2008	2009	2010	2011			
MVA	8,096,147	6,725,736	13,614,850	21,189,721	17,934,401			
SR	18.9%	-52.7%	51.5%	29.7%	-15.6%	32%	6%	41%
SVA	1,534,005	(3,542,719)	7,011,648	6,293,869	(2,791,136)	8,505,667	1,701,133	
SVC	(206,666)	(4,968,575)	4,356,752	1,420,233	(6,826,376)	(6,224,632)	(1,244,926)	
CIMB	2007	2008	2009	2010	2011			
MVA	18,557,996	10,465,878	22,673,938	63,178,588	55,299,846			
SR	34.8%	-82.1%	57.5%	27.6%	-11.6%	26%	5%	55%
SVA	6,466,232	(8,594,269)	13,042,909	17,452,339	(6,392,187)	21,975,025	4,395,005	
SVC	2,995,887	(10,813,035)	7,941,273	3,237,157	(18,724,052)	(15,362,770)	(3,072,554)	
Hong Leong Bank	2007	2008	2009	2010	2011			
MVA	10,033,679	8,058,546	12,862,530	14,536,984	17,223,166			
SR	15.2%	-21.3%	39.3%	13.4%	17.1%	64%	13%	22%
SVA	1,520,499	(1,717,789)	5,054,607	1,951,638	2,947,700	9,756,655	1,951,331	
SVC	(636,742)	(3,087,742)	2,134,813	(1,348,257)	(893,066)	(3,830,994)	(766,199)	
Maybank	2007	2008	2009	2010	2011			
MVA	30,262,060	21,057,165	45,778,324	60,162,856	65,546,369			
SR	1.1%	-70.0%	34.9%	24.9%	1.4%	-8%	-2%	41%
SVA	344,754	(14,738,945)	15,967,696	14,966,395	923,047	17,462,947	3,492,589	
SVC	(6,010,278)	(19,266,236)	5,438,682	1,550,079	(13,824,886)	(32,112,640)	(6,422,528)	
Public Bank	2007	2008	2009	2010	2011			
MVA	36,675,955	29,541,029	39,910,764	45,985,677	47,257,170			

	2007	2008	2009	2010	2011			
SR	33.9%	-17.6%	29.5%	16.0%	6.2%	68%	14%	21%
SVA	12,432,289	(5,190,692)	11,775,490	7,378,709	2,908,739	29,304,535	5,860,907	
SVC	4,987,070	(11,335,226)	2,995,122	(3,060,040)	(8,054,924)	(14,467,998)	(2,893,600)	
RHB	2007	2008	2009	2010	2011			
MVA	11,407,418	12,940,532	17,585,851	28,933,701	24,819,276			
SR	49.1%	-49.8%	26.4%	40.1%	-15.6%	50%	10%	42%
SVA	5,601,918	(6,438,120)	4,645,319	11,591,919	(3,876,518)	11,524,518	2,304,904	
SVC	3,172,138	(9,272,096)	1,180,906	5,023,969	(9,336,759)	(9,231,842)	(1,846,368)	

The Exhibit 4-4 illustrates that the result of Market Value Added (MVA), Shareholder Return (SR), Shareholder Value Added (SVA) and Shareholder Value Creation (SVC) which is obtained eight Malaysia Banking Sectors of Five-year from the period 2007 to 2011. It is also interpreted that the banking sector are destroyed the shareholder value.

4.1.5 Ranking of Malaysia Banking Sectors on the basis of Shareholder Value Added (SVA), Shareholder Value Creation (SVC) and Shareholder Return (SR). (Specific Objective 5)

Exhibit 4-5   Ranking of Malaysia Banking Sectors on the basis of Shareholder Return

Bank Name	Total SR (%) 2007-2011	Five-Year Average SR (%)	Rank
PUBLIC BANK BERHAD	68.03	13.61	1
HONG LEONG BANK BERHAD	63.67	12.73	2
RHB BANK BERHAD	50.22	10.04	3
AFFIN BANK BERHAD	34.94	6.99	4
AMMB HOLDINGS BERHAD	31.91	6.38	5
ALLIANCE FINANCIAL GROUP BERHAD	29.25	5.85	6
CIMB GROUP HOLDING BERHAD	26.31	5.26	7
MALAYAN BANKING BERHAD	(7.69)	(1.54)	8

Interpretation

In this section, the data of the Malaysia Banking Sectors has been analyzed, interpreted and ranked for each banking sector based on Shareholder Return (SR), Shareholder Value Added (SVA) and Shareholder Value Creation (SVC) for five year period from 2007-2011.

The Average Return to shareholder during the period from 2007-2011 was high in Public Bank Berhad (13.61%), followed by Hong Leong Bank Berhad (12.73%), RHB Bank Berhad (10.04%), Affin Bank Berhad (6.99%), AMMB Holding Berhad (6.38%), Alliance Financial Group Berhad (5.85%) and CIMB Group Berhad (5.26%). The banks sectors that have destroyed Shareholder Value are Malayan Banking Berhad (1.54%) are summarized in Exhibit 4-5.

Exhibit 4-6   Ranking of Malaysia Banking Sectors on the basis of Shareholder Value Added

Currency: RM '000

Bank Name	Total SVA 2007 - 2011	Five Year Average SVA	Rank
PUBLIC BANK BERHAD	29,304,535.34	5,860,907.07	1
CIMB GROUP HOLDING BERHAD	21,975,024.95	4,395,004.99	2
MALAYAN BANKING BERHAD	17,462,947.40	3,492,589.48	3
RHB BANK BERHAD	11,524,517.53	2,304,903.51	4
HONG LEONG BANK BERHAD	9,756,655.45	1,951,331.09	5
AMMB HOLDINGS BERHAD	8,505,667.21	1,701,133.44	6
ALLIANCE FINANCIAL GROUP BERHAD	9,756,655.45	1,951,331.09	7
AFFIN BANK BERHAD	2,469,051.60	493,810.32	8

Exhibit 4-6 illustrates the ranking of Banking Sectors in Malaysia on the basis of Shareholder Value Added. The average of SVA during 2007-2011 was high in Public Bank (RM 5,860,907,000), CIMB Group Holding Berhad (RM 4,395,004,000), Malayan Banking Berhad (RM 3,492,589.48), RHB Bank Berhad (RM 2,304,903,000), Hong Leong Bank Berhad (RM 1,951,331,000), AMMB Holdings

Berhad (RM 1,701,133,000), Alliance Financial Group Berhad (RM 1,951,331.09), and Affin Bank Berhad (RM 493,810,000).

Exhibit 4-7   Ranking of Malaysia Banking Sectors on the basis of Shareholder Value Creation

Currency: RM '000

Bank Name	Total SVC 2007 - 2011	Five Year Average SVC	Rank
AFFIN BANK BERHAD	(1,429,467.72)	(285,893.54)	1
ALLIANCE FINANCIAL GROUP BERHAD	(2,109,423.02)	(421,884.60)	2
HONG LEONG BANK BERHAD	(3,830,994.23)	(766,198.85)	3
AMMB HOLDINGS BERHAD	(6,224,632.05)	(1,244,926.41)	4
RHB BANK BERHAD	(9,231,842.32)	(1,846,368.46)	5
PUBLIC BANK BERHAD	(14,467,997.56)	(2,893,599.51)	6
CIMB GROUP HOLDING BERHAD	(15,362,770.21)	(3,072,554.04)	7
MALAYAN BANKING BERHAD	(32,112,640.02)	(6,422,528.00)	8

Analysis of Shareholder Value Creation in banking sectors for the period 2007-2011.

Exhibit 4-7, reveals that, the banking sectors are destroyed shareholder value are Affin Bank Berhad (RM 285,893,000), Alliance Financial Group Berhad (RM 421,884,000), Hong Leong Bank Berhad (RM 766,198,000), AMMB Holdings Berhad (RM 1,244,926,000), RHB Bank Berhad (RM 1,846,368,000), Public Bank Berhad (RM 2,893,599,000), CIMB Group Holding Berhad (RM 3,072,554,000), and Malayan Banking Berhad (RM 6,422,528,000).

Exhibit 4-8   The Comparative Analysis of Malaysia Banking Sectors on the basis of Ranking

No.	Bank Name	SR Rank	SVA Rank	SVC Rank

1	AFFIN BANK BERHAD	4	8	1
2	ALLIANCE FINANCIAL GROUP BERHAD	6	7	2
3	AMMB HOLDINGS BERHAD	5	6	4
4	CIMB GROUP HOLDING BERHAD	7	2	7
5	HONG LEONG BANK BERHAD	2	5	3
6	MALAYAN BANKING BERHAD	8	3	8
7	PUBLIC BANK BERHAD	1	1	6
8	RHB BANK BERHAD	3	4	5

As shown in the Exhibit 4-8, it can be observed that the Ranking of Banking Sectors in Malaysia changes when a comparison between the Shareholder Return (SR), Shareholder Value Added (SVA) and Shareholder Value Creation (SVC). This is because SVA does not take into consideration the Cost of Equity Capital. Therefore, SVA show the higher value compared to the SVC, whichis calculated after charging for the Cost of Equity.

4.2   Testing of Hypothesis (Specific Objective 6, 7, 8, 9, 10, 11, 12, 13 and 14)

Hypotheses are suggestion or a mere statement on the measurement of financial performance for Malaysia Banking Sectors for the period 2007-2011. The financial performance for the banking sectors has been measurement based on the Financial Ratios, Economic Value Added, EVA Adjustments, and Shareholder Value Creation. The validity of which was tested after gathering the relevant data for each banks. It represented as a milestone to derive the stated objectives. At every stage of hypothesis, the required are the direction to steer through the research program.

The Pearson Correlation (r) is a statistical to evaluate the hypothesis of the research. This is essentialto determine the relationship between EVA and Financial Ratios, the relationship between EVA adjustments and Financial Ratios, the relationship between SR and EVA, the relationship between SR and Financial Ratios,

the relationship between SVA and EVA, the relationship between SVA and Financial
Ratios, the relationship between SVC and NOPAT.

The research worksare based on following Hypothesis.

4.2.1 Hypothesis 1: Identify the Relationship between EVA and Profitability

H_{01}: There is a negative relationship between EVA and Profitability

H_{A1}: There is a positive relationship between EVA and Profitability.

Variables	Mean	S.D	1	2	3	4	5	6	7	Inferences
1. EVA	(8,837,963.65)	1,287,978.43	-	-	-	-	-	-	-	-
2. ROA	1.02	0.12	-.585	-	-	-	-	-	-	Accept H_{01}
3. ROS	23.06	4.62	-.885*	.818*	-	-	-	-	-	Accept H_{01}
4. ROE	13.63	1.06	-.537	.921*	.652	-	-	-	-	Accept H_{01}
5. ROI	3.09	0.24	.915*	-.241	-.638	-.249	-	-	-	Reject H_{01}
6. ROCE	11.76	0.81	.261	.425	.074	.239	.442	-	-	Reject H_{01}
7. SG	6.37	6.32	.075	-.465	-.406	-.137	-.110	-.855*	-	Reject H_{01}

Note: (1) *. Correlation is significant at the 0.05 level (1-tailed).

Exhibit 4-9   Pearson Correlation between EVA and Profitability

Result and Inference

Exhibit 4-9 shows the results of the means, standard deviations (S.D) and
correlationbetween EVA and Profitability (ROA, ROS, ROE, ROI, ROCE, and SG)
(see Chapter 3 Subsection 3.1.1).The outcomes of the correlations indicated that EVA
of Malaysia Banking Sectors is strong positive related to ROI with a coefficient of r
= .915. Moreover, the p-value of this coefficient is 0.015 indicating that the
relationship is significant at 5% level. In addition, EVA also positively related to
ROCE with a coefficient of r = .261 and SG r = .075, at p > .05 respectively. The
outcomes suggest that there is no significant and weak positive relationship between
EVA and ROCE as well as SG. Furthermore, this implies that the EVA is negatively

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related to ROS with a coefficient r = -.885 and significantly related to EVA at $p < .05$. Besides, the result also implied that ROA (r = -.585) and ROE (r = -.537) in Banking Sectors Malaysia are also negatively and no significantly related to EVA at $p > .05$. Consequently, the Pearson correlation test result suggests that there were significant and strong positive relationship between EVA and ROI while negatively and significant related to ROS. Thus, the result is supported. Its finding is similar to (Stern Stewart & Co, 2013; Stern, Stewart, & Chew, 1991)EVA is almost 50% better than its closet accounting based measures including EPS, ROE, and ROI in explaining in changes in the shareholders wealth.

4.2.2 Hypothesis 2: Identify the Relationshipbetween EVA and Liquidity

H_{02}:   There is a negative relationship between EVA and Liquidity.

H_{A2}:   There is a positive relationship between EVA and Liquidity.

Exhibit 4-10   Pearson Correlation between EVA and Liquidity

Variables	Mean	S.D	1	2	3	4	5	6	7	8	Inferences
1. EVA	(8,837,963.65)	1,287,978.43	-	-	-	-	-	-	-	-	-
2. WCR	1.08	0.00	-.309	-	-	-	-	-	-	-	Accept H_{02}
3. CR	1.60	0.24	.885*	-.654	-	-	-	-	-	-	Reject H_{02}
4. CAR	0.95	0.01	-.564	.538	-.478	-	-	-	-	-	Accept H_{02}
5. QR	1.60	0.24	.885*	-.654	1.000**	-.478	-	-	-	-	Reject H_{02}
6. CDR	2.58	0.57	.892*	-.406	.814*	-.609	.814*	-	-	-	Reject H_{02}
7. STLDR	9.87	0.61	-.628	.415	-.751	.184	-.751	-.288	-	-	Accept H_{02}
8. OPCF	0.62	0.68	.360	-.696	.695	-.001	.695	.517	-.288	-	Accept H_{02}

Notes: (1)*. Correlation is significant at the 0.05 level (1-tailed).
       (2) **. Correlation is significant at the 0.01 level (1-tailed).

Result and Inference

Exhibit 4-10 illustrates the means; standard deviations (S.D) and correlation between EVA and Liquidity (WCR, CR, CR, CAR, QR, CDR, STLDR, and OPCF) (see Chapter 3 Subsection 3.1.2). The Pearson correlation coefficient of CDR (r = 0.892),

CR and CAR with (r = 0.855) respectively. This indicates that there were moderate positively relationship and significantly related to EVA at p < 0.05. Moreover, EVA also positively related and no significantly related to OPCF with (r = .360), at p > 0.05. Furthermore, the outcomes also implied that the STLDR (r =-.628), CAR (r =-.564) and WCR (r = -.309) are negatively and no significantly related to EVA at p > 0.05. In sum, the Pearson correlation test result suggests that there were significant and strong positive relationship between EVA and CDR; EVA and QR and EVA and CR.

4.2.3 Hypothesis 3: Identify the Relationship between EVA and Risk and Solvency

H_{03}: There is a negative relationship between EVA and Risk and Solvency.

H_{A3}: There is a positive relationship between EVA and Risk and Solvency.

Exhibit 4-11 Pearson Correlation betweenEVA, Risk, and Solvency

Variables	Mean	S.D	1	2	3	4	5	6	Inferences
1. EVA	(8,837,963.65)	1,287,978.43	-	-	-	-	-	-	-
2. DER	12.20	0.63	.245	-	-	-	-	-	Accept H_{03}
3. DTAR	0.92	0.00	.213	.945**	-	-	-	-	Accept H_{03}
4. ETAR	0.08	0.00	-.213	-.945**	-1.000**	-	-	-	Accept H_{03}
5. EM	42.63	4.16	-.779	.316	.354	-.354	-	-	Accept H_{03}
6. LDR	0.71	0.04	-.849*	-.720	-.663	.663	.390	-	Reject H_{03}

Notes: (1) *. Correlation is significant at the 0.05 level (1-tailed)

(2) **. Correlation is significant at the 0.01 level (1-tailed)

Result and Inference

Exhibit 4-11 illustrates the means, standard deviation, and correlation between EVA and Risk and Solvency (DER, DTAR, ETAR, EM, and LDR) (see Chapter 3 Subsection 3.1.3). The outcomes shows that EVA is negatively related to LDR with coefficient of (r = -.849) and the p-value is 0.034, indicating that the relationship is

significant at 5% level. From Exhibit 4.10, EVA is also negatively related to EM ($r = -.779$) at $p > 0.05$ while ($r = -.213$), at $p > 0.05$ for ETAR. The result shows that EM and ETAR are negatively and no significant related to the EVA. The outcomes shows that the performance of Banking Sectors' EVA has $r = 0.245$ and $r = 0.213$ weak positive related to DTAR and DER respectively. The results also reveal that there are no significantly related to EVA at $p > 0.05$. In sum, the Pearson correlation test result suggests that there is significant and negative relationship between EVA and LDR.

4.2.4 Hypothesis 4: Identify the Relationship between Adjustment EVA and Profitability

H_{04}: There is a negative relationship between Adjustment EVA and Profitability.

H_{A4}: There is a positive relationship between Adjustment EVA and Profitability.

Exhibit 4-12 Pearson Correlation between Adjustment EVA and Profitability

Variables	Mean	S.D	1	2	3	4	5	6	7	Inferences
Adjustment EVA	(6,232,165.85)	1,376,018.99	-	-	-	-	-	-	-	-
2. ROA	1.02	0.12	-.603	-	-	-	-	-	-	Accept H_{04}
3. ROS	23.06	4.62	-.930*	.818*	-	-	-	-	-	Reject H_{04}
4. ROE	13.63	1.06	-.496	.921*	.652	-	-	-	-	Accept H_{04}
5. ROI	3.09	0.24	.871*	-.241	-.638	-.249	-	-	-	Reject H_{04}
6. ROCE	11.76	0.81	.207	.425	.074	.239	.442	-	-	Accept H_{04}
7. SG	6.37	6.32	.178	-.465	-.406	-.137	-.110	-.855*	-	Accept H_{04}

Note: (1) *. Correlation is significant at the 0.05 level (1-tailed).

Result and Inference

Exhibit 4-12 shows the results of the means; standard deviations (S.D) and correlation between adjustment EVA and Profitability (ROA, ROS, ROE, ROI, ROCE, and SG) (see Chapter 3 Subsection 3.1.1). The outcomes of the correlations indicated that adjustment EVA of Malaysia Banking Sectors is strong positive related to ROI with a coefficient of $r = .871$ for ROI, at $p < .05$ thus indicating that the relationship is significant at 5% level. In addition, adjustment EVA also positively related to ROCE with a coefficient of $r = .207$ and SG $r = .178$, at $p > .05$ respectively. The outcomes suggest that there is no significant and weak positive relationship between adjustment EVA and ROCE as well as SG. Furthermore, this implies that the adjustment EVA is negatively related to ROS with a coefficient $r = -.930$ and significantly related to adjustment EVA at $p < .05$. Besides, the result also implied that ROA ($r = -.603$) and ROE ($r = -.496$) in Banking Sectors Malaysia are also negatively and no significantly related to adjustment EVA at $p > .05$. Consequently, the Pearson correlation test result suggests that there were significant and strong positive relationship between adjustment EVA and ROI while negatively and significant related to ROS.

4.2.5 Hypothesis 5: Identify the Relationship between Adjustment EVA and Liquidity

H_{05}: There is a negative relationship between Adjustment EVA and Liquidity.

H_{A5}: There is a positive relationship between Adjustment EVA and Liquidity.

Exhibit 4-13 Pearson Correlation between Adjustment EVA and Liquidity

Variables	Mean	S.D	1	2	3	4	5	6	7	8	Inferences
Adjustment EVA	(6,232,165.85)	1,376,018.99	-	-	-	-	-	-	-	-	-
2. WCR	1.08	0.00	-.428	-	-	-	-	-	-	-	Accept H_{05}
3. CR	1.60	0.24	.904*	-.654	-	-	-	-	-	-	Reject H_{05}
4. CAR	0.95	0.01	-.664	.538	-.478	-	-	-	-	-	Accept H_{05}
5. QR	1.60	0.24	.904*	-.654	1.000**	-.478	-	-	-	-	Reject H_{05}

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	Mean	S.D									Inferences
. CDR	2.58	0.57	.929*	-.406	.814*	-.609	.814*	-	-	-	Reject H_{05}
. STLDR	9.87	0.61	-.583	.415	-.751	.184	-.751	-.288	-	-	Accept H_{05}
. OPCF	0.62	0.68	.409	-.696	.695	-.001	.695	.517	-.339	-	Accept H_{05}

otes: (1) *. Correlation is significant at the 0.05 level (1-tailed).

(2) **. Correlation is significant at the 0.01 level (1-tailed).

Result and Inference

Exhibit 4-13 illustrates the means, standard deviations and correlation between adjustment EVA and Liquidity (WCR, CR, CR, CAR, QR, CDR, STLDR, and OPCF) (see Chapter 3 Subsection 3.1.2). The Pearson correlation coefficient of CDR (r = .929) while CR and CAR with (r = .904) respectively. The outcomes indicates that there were strong positively relationship and significantly related to adjustment EVA at $p < 0.05$. Moreover, EVA also positively related and no significantly related to OPCF with (r = .409), at $p > 0.05$. Furthermore, the outcomes also implied that the STLDR (r =-.583), CAR (r =-.664) and WCR (r = -.428) are negatively and no significantly related to adjustment EVA at $p > 0.05$. In sum, the Pearson correlation test result suggests that there were significant and strong positive relationship between adjustment EVA and CDR; EVA and QR and EVA and CR.

4.2.6 Hypothesis 6: Identify the Relationship between Adjustment EVA and Risk and Solvency

H_{06}: There is a negative relationship between Adjustment EVA and Liquidity.

H_{A6}: There is a positive relationship between Adjustment EVA and Liquidity.

Exhibit 4-14 Pearson Correlation between Adjustment EVA and Risk, and Solvency

Variables	Mean	S.D	1	2	3	4	5	6	Inferences
1. EVA Adjustments	(6,232,165.85)	1,376,018.99	-	-	-	-	-	-	-
2. DER	12.20	0.63	.379	-	-	-	-	-	Accept H_{06}

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3. DTAR	.9222	0.00	.349	.945**	-	-	-	-	Accept H_{06}
4. ETAR	0.08	0.00	-.349	-.945	-1.000**	-	-	-	Accept H_{06}
5. EM	42.63	4.16	-.716	.316	.354	-.354	-	-	Accept H_{06}
6. LDR	0.71	0.04	-.913*	-.720	-.663	.663	.390	-	Reject H_{06}

Notes: (1) *. Correlation is significant at the 0.05 level (1-tailed).

(2) **. Correlation is significant at the 0.01 level (1-tailed).

Result and Inference

Exhibit 4-14 illustrates the means; standard deviation and correlation between EVAadjustments, Risk, and Solvency (DER, DTAR, ETAR, EM, and LDR) (see Chapter 3 Subsection 3.1.3). The outcomes shows that adjustment EVA is negatively related to LDR with coefficient of ($r = -.913$), at $p < .05$, thus indicating that the relationship is significant at 5% level. From Exhibit 4.14, adjustment EVA is also negatively related to EM ($r = -.716$) at $p > .05$ while ($r = -.349$), at $p > .05$ for ETAR. The result shows that EM and ETAR are negatively and no significant related to the adjustment EVA. The outcomes shows that the performance of Banking Sectors for adjustment EVA has $r = .349$ and $r = .379$ weak positive related to DTAR and DER respectively. The results also reveal that there are no significantly related to adjustment EVA at $p > .05$. In sum, the Pearson correlation test result suggests that there is significant and negative relationship between EVA and LDR.

4.2.7   Hypothesis 7: Identify the Relationship between SVA and EVA

H_{07}:   There is a negative relationship between SVA and EVA.

H_{A7}:   There is a positive relationship between SVA and EVA.

Exhibit 4-15   Pearson Correlation between SVA and EVA

Variables	Mean	S.D	1	2	Inferences
1. SVA	2,647,983.57	5,636,121.18	-	-	-

| 2. EVA | (8,837,963.65) | 1,287,978.43 | .173 | - | Accept H_{07} |

Result and Inference

Exhibit 4-15 shows the means, standard deviations, and correlations between SVA and EVA. The outcomes reveal that SVA is positively related to EVA with a coefficient of $r = .173$, at $p > 0.05$. In sum, the Pearson correlation test result suggest that there is weak positive and no significant relationship between SVA and EVA.

4.2.8 Hypothesis 8: Identify the Relationship between SVA and Profitability

H_{08}:   There is a negative relationship between SVA and Profitability.

H_{A8}:   There is a positive relationship between SVA and Profitability.

Exhibit 4-16   Pearson Correlation between SVA and Profitability

Variables	Mean	S.D	1	2	3	4	5	6	7	Inferences
1. SVA	2647983.57	5636121.18	-	-	-	-	-	-	-	-
2. ROA	1.02	0.12	-.283	-	-	-	-	-	-	Accept H_{08}
3. ROS	23.06	4.62	.033	.818*	-	-	-	-	-	Accept H_{08}
4. ROE	13.63	1.06	-.591	.921*	.652	-	-	-	-	Accept H_{08}
5. ROI	3.09	0.24	.211	-.241	-.638	-.249	-	-	-	Accept H_{08}
6. ROCE	11.76	0.81	-.019	.425	.074	.239	.442	-	-	Accept H_{08}
7. SG	6.37	6.32	-.321	-.465	-.406	-.137	-.110	-.855*	-	Accept H_{08}

Note: (1) *. Correlation is significant at the 0.05 level (1-tailed).

Result and Inference

Exhibit 4-16 illustrates that the means, standard deviation (S.D) and correlations between SVA and profitability (ROA, ROS, ROE, ROI, ROCE, and SG) (see Chapter 3 Subsection 3.1.1). This implies that SVA is positively related to ROI with coefficient of $r = .211$ and ROS ($r = .033$), at $p > 0.05$ respectively. The outcomes

also reveal that there were weak positive and no significant related to SVA. Moreover, the outcomes also shows that SVA are negativelyrelatedto ROA (r = -.283), ROE (r = -.591), ROCE (r = .019) and SG (-.321), at p > 0.05. This is indicating that there were no significant and negative related to SVA. In sum, the outcome of the correlation reveal that there is no significant relationship between SVA and Profitability.

4.2.9 Hypothesis 9: Identify the Relationship between SVA and Liquidity

H_{09}:   There is a negative relationship between SVA and Liquidity.

H_{A9}:   There is a positive relationship between SVA and Liquidity.

Exhibit 4-17   Pearson Correlation between SVA and Liquidity

Variables	Mean	S.D	1	2	3	4	5	6	7	8	Inferences
1. SVA	2,647,983.57	5,636,121.18	-	-	-	-	-	-	-	-	-
2. WCR	1.08	0.00	.412	-	-	-	-	-	-	-	Accept H_{09}
3. CR	1.60	0.24	.156	-.654	-	-	-	-	-	-	Accept H_{09}
4. CAR	0.95	0.01	.673	.538	-.478	-	-	-	-	-	Accept H_{09}
5. QR	1.60	0.24	.156	-.654	1.000**	-.478	-	-	-	-	Accept H_{09}
6. CDR	2.58	0.57	-.102	-.406	.814*	-.609	.814*	-	-	-	Accept H_{09}
7. STLDR	9.87	0.61	-.478	.415	-.751	.184	-.751	-.288	-	-	Accept H_{09}
8. OPCF	0.62	0.68	.124	-.696	.695	-.001	.695	.517	-.339	-	Accept H_{09}

Notes: (1) *. Correlation is significant at the 0.05 level (1-tailed).

(2) **. Correlation is significant at the 0.01 level (1-tailed).

Result and Inference

Exhibit 4-17 illustrates that the means, standard deviations, and correlation between SVA and Liquidity (WCR, CR, CR, CAR, QR, CDR, STLDR, and OPCF) (see Chapter 3 Subsection 3.1.2). This is implies that the SVA are positively related to CAR (r = .673), WCR (r = .412), CR and QR with coefficient of (r = .156), at p > 0.05.

This is indicating that there were weak positive and no significant related to SVA. The outcomes also reveal that the SVA were negatively related to STLDR with coefficient of $r = -.478$ and $r = -.102$ for CDR, at $p > 0.05$. This is implies that there were no significant relationship between SVA and Liquidity.

4.2.10 Hypothesis 10: Identify the Relationship between SVA and Risk and Solvency.

H_{010}: There is a negative relationship between SVA and Risk and Solvency.

H_{A10}: There is a positive relationship between SVA and Risk and Solvency.

Exhibit 4-18   Pearson Correlation between SVA and Risk,and Solvency

Variables	Mean	S.D	1	2	3	4	5	6	Inferences
1. SVA	2647983.57	5636121.17	-	-	-	-	-	-	-
2. DER	12.20	0.63	-.507	-	-	-	-	-	Accept H_{010}
3. DTAR	.9222	0.00	-.541	.945**	-	-	-	-	Accept H_{010}
4. ETAR	0.08	0.00	.541	-.945**	-1.000**	-	-	-	Accept H_{010}
5. EM	42.63	4.16	-.195	.316	.354	-.354	-	-	Accept H_{010}
6. LDR	0.71	0.04	.156	-.720	-.663	.663	.390	-	Accept H_{010}

Note: (1) **. Correlation is significant at the 0.01 level (1-tailed).

Result and Inference

Exhibit 4-18 illustrates that the means, standard deviation and correlation between SVA and Risk and Solvency (DER, DTAR, ETAR, EM and LDR) (see Chapter 3 Subsection 3.1.3) of the Banking Sectors in Malaysia. The outcomes implies that SVA is positively related to ETAR with coefficient of $r = .541$ and $r = .156$ for LDR, at $p > 0.05$, thus indicating that there were no significant and weak positive relationship to SVA. In addition, EVA are negatively related to DER ($r = -.507$), DTAR ($r = -.541$) and EM ($r = -.195$), at $p > 0.05$, thus indicating that there are no

significant and negative relationship to SVA. In sum, the outcomes reveal that there are no significant relationship between SVA and Risk and Solvency. Consequently, the growth of banking sectors in earnings is not enough to create value, unless returns are above the cost of capital. Moreover, EVA works best as a supplement to other measures when one is evaluating shares and that EVA sometimes works when other measures fail.

4.2.11 Hypothesis 11: Identify the Relationship between MVA and EVA

H_{011}: There is a negative relationship between MVA and EVA.

H_{A11}: There is a positive relationship between MVA and EVA.

Exhibit 4-19 Pearson Correlation between MVA and EVA

Variables	Mean	S.D	1	2	Inferences
1. MVA	21,458,090.06	8,432,450.80	-	-	-
2. EVA	(8,837,963.65)	1,287,978.43	-.791	-	Accept H_{011}

Result and Inference

Exhibit 4-19 illustrates that the means, standard deviations and correlations between Market Value Added (MVA) and EVA. The outcomes of the correlations suggest that there is a negative correlation between MVA and EVA with coefficient of $r = -.791$, at $p > .05$, thus indicating that there is no significant related to MVA. In sum, the Pearson correlation test result suggests that there is no significant and negative relationship between MVA and EVA.

4.2.12 Hypothesis 12: Identify the Relationship between MVA and Profitability

H_{012}: There is a negative relationship between MVA and Profitability.

H_{A12}: There is a positive relationship between MVA and Profitability.

Exhibit 4-20   Pearson Correlation between MVA and Profitability

Variables	Mean	S.D	1	2	3	4	5	6	7	Inferences
1. MVA	21458090.06	8432450.80	-	-	-	-	-	-	-	-
2. ROA	1.02	0.12	.470	-	-	-	-	-	-	Accept H_{012}
3. ROS	23.06	4.62	.866*	.818*	-	-	-	-	-	Reject H_{012}
4. ROE	13.63	1.06	.260	.921*	.652	-	-	-	-	Accept H_{012}
5. ROI	3.09	0.24	-.620	-.241	-.638	-.249	-	-	-	Accept H_{012}
6. ROCE	11.76	0.81	-.249	.425	.074	.239	.442	-	-	Accept H_{012}
7. SG	6.37	6.32	-.222	-.465	-.406	-.137	-.110	-.855*	-	Accept H_{012}

Note: (1) *. Correlation is significant at the 0.05 level (1-tailed).

Result and Inference

Exhibit 4-20 illustrates that the means, standard deviations, and correlations that was existing between MVA and profitability (ROA, ROS, ROE, ROI, ROCE, and SG) (see Chapter 3 Subsection 3.1.1). Furthermore, this is implies that the MVA is positivelyrelated toROS with $r = 0.866$, at $p < 0.05$, thus indicating that the relationship significant at 5% level. Besides, the outcomes also identified the MVA were positivelyrelated to ROA ($r = .470$) and ROE ($r = .260$), at $p > 0.05$ respectively, thus indicating that there were no significant relationship between MVA and ROA; MVA and ROE. From the Exhibit 4.20, MVA were negatively related to ROI ($r = .620$), ROCE ($r = -.249$) and SG ($r = -.222$), at $p > 0.05$ respectively, thus representing that there are no significant relationship to MVA. Overall, the Pearson correlation test result suggests that there is significant and strong positive relationship between MVA and ROS.

4.2.13 Hypothesis 13: Identify the Relationship between MVA and Liquidity

H_{013}:   There is a negative relationship between MVA and Liquidity.

H_{A13}:   There is a positive relationship between MVA and Liquidity.

Exhibit 4-21 Pearson Correlation between MVA and Liquidity

Variables	Mean	S.D	1	2	3	4	5	6	7	8	Inferences
1. MVA	21,458,090.06	8,432,450.80	-	-	-	-	-	-	-	-	-
2. WCR	1.08	0.00	.527	-	-	-	-	-	-	-	Accept H_{013}
3. CR	1.60	0.24	-.719	-.654	-	-	-	-	-	-	Accept H_{013}
4. CAR	0.95	0.01	.835*	.538	-.478	-	-	-	-	-	Reject H_{013}
5. QR	1.60	0.24	-.719	-.654	1.000**	-.478	-	-	-	-	Accept H_{013}
6. CDR	2.58	0.57	-.936**	-.406	.814*	-.609	.814*	-	-	-	Reject H_{013}
7. STLDR	9.87	0.61	.184	.415	-.751	.184	-.751	-.288	-	-	Accept H_{013}
8. OPCF	0.62	0.68	-.383	-.696	.695	-.001	.695	.517	-.339	-	Accept H_{013}

Notes: (1)*. Correlation is significant at the 0.05 level (1-tailed).

(2)**. Correlation is significant at the 0.01 level (1-tailed).

Result and Inference

Exhibit 4-21 shows that the banking Sectors in Malaysia to identify the means, standard deviations and correlations that was existing between MVA and Liquidity (WCR, CR, CR, CAR, QR, CDR, STLDR and OPCF) (see Chapter 3 Subsection 3.1.2) for the period 2007-2011. This is implies that the positive correlation between MVA and CAR with coefficient of r = 0.835, at p < 0.05. Moreover, this is indicating that there are significant and positive relationship between MVA and CAR. Besides, the outcomes also reveal that WCR (r = .527) and STLDR (r = .184)are weak positive and no significant related to MVA at p > 0.05. From Exhibit 4-21, MVA in Banking Sectors Malaysia is negatively related to CDR with coefficient of r = -.936, at p < 0.05, thus indicating that the relationship significant at 5% level. Besides, the outcomes also reveal that CR and QR with coefficient of r = -.719 respectively and OPCF (r = -.383) are negatively and no significant related to MVA at p > 0.05. In sum, the Pearson correlation test result suggests that there is significant and strong positive relationship between MVA and CAR while negative relationship between MVA and CDR.

4.2.14 Hypothesis 14: Identify the Relationship between MVA and Risk and Solvency.

H_{014}: There is a negative relationship between MVA and Risk and Solvency.

H_{A14}: There is a positive relationship between MVA and Risk and Solvency.

Exhibit 4-22   Pearson Correlation between MVA and Riskand Solvency

Variables	Mean	S.D	1	2	3	4	5	6	Inferences
1 MVA	21,458,090.06	8,432,450.80	-	-	-	-	-	-	-
2. DER	12.20	0.63	-.573	-	-	-	-	-	Accept H_{014}
3. DTAR	.9222	0.00	-.624	.945**	-	-	-	-	Accept H_{014}
4. ETAR	0.08	0.00	.624	-.945**	-1.000**	-	-	-	Accept H_{014}
5. EM	42.63	4.16	.497	.316	.354	-.354	-	-	Accept H_{014}
6. LDR	0.71	0.04	.877*	-.720	-.663	-1.000	.258	-	Reject H_{014}

Notes: (1) *. Correlation is significant at the 0.05 level (1-tailed).

(2) **. Correlation is significant at the 0.01 level (1-tailed).

Result and Inference

Exhibit 4-22 illustrates that the Malaysia Banking Sectors to identify the means, standard deviations and correlation that was existing between MVA and Risk and Solvency (DER, DTAR, ETAR, EM, and LDR) (see Chapter 3 Subsection 3.1.3). This implies that MVA is moderate positive related toLDR with coefficient of r = .877, at p < 0.05, thus indicating that the relationship is significant at 5% level. In addition, MVA also positively related to ETAR (r = .624) and EM (r = .497). Besides, the outcomes also reveal that the DER (r = -.573) and DTAR (r = -.624), at p >.05, thus representing there are no significant relationship to MVA. Overall, the outcomes of the correlation test result suggests there is significant and strong positive relationship between MVA and LDR.

4.2.15 Hypothesis 15: Identify the Relationship between SR and EVA

H_{015}:   There is a negative relationship between SR and EVA.

H_{A15}:   There is a positive relationship between SR and EVA.

Exhibit 4-23   Pearson Correlation between SR and EVA

Variables	Mean	S.D	1	2	Inferences
1. SR	0.07	.37	-	-	-
2. EVA	(8,837,963.65)	1,287,978.43	.089	-	Accept H_{015}

Result and Inference

Exhibit 4-23 illustrates that the Malaysia Banking Sectors for the period of 2007-2011 to identify the means, standard deviations and correlation between Shareholder Return (SR) and EVA. The outcomes reveal that EVA with coefficient of $r = .089$, at $p > 0.05$. Although it has positive relationship between the two variables. Its magnitude of .089, however, shows that the relationship is very weak. The outcomes also reveal that there is no significant linear relationship between SR and EVA.

4.2.16 Hypothesis 16: Identify the Relationship between SR and Profitability.

H_{016}:   There is a negative relationship between SR and Profitability.

H_{A16}:   There is a positive relationship between SR and Profitability.

Exhibit 4-24   Pearson Correlation between SR and Profitability

Variables	Mean	S.D	1	2	3	4	5	6	7	Inferences
1. SR	0.07	0.37	-	-	-	-	-	-	-	-
2. ROA	1.02	0.12	-.491	-	-	-	-	-	-	Accept H_{016}
3. ROS	23.06	4.62	-.044	.818*	-	-	-	-	-	Accept H_{016}
4. ROE	13.63	1.06	-.736	.921*	.652	-	-	-	-	Accept H_{016}

5. ROI	3.09	0.24	.004	-.241	-.638	-.249	-	-	-	Accept H$_{016}$
6. ROCE	11.76	0.81	-.292	.425	.074	.239	.442	-	-	Accept H$_{016}$
7. SG	6.37	6.32	-.090	-.465	-.406	-.137	-.110	-.855*	-	Accept H$_{016}$

Note: (1) *. Correlation is significant at the 0.05 level (1-tailed).

Result and Inference

The Exhibit 4-24 illustrates the means, standard deviations and correlations between SR and Profitability (ROA, ROS, ROE, ROI, ROCE, and SG) (see Chapter 3 Subsection 3.1.1). The result shows the correlation coefficient between SR and ROI is $r = .004$, at $p > 0.05$. It has a positive sign, which is indicate a positive relationship between two variables. It magnitude of .004, however, shows that the relationship is very weak, almost zero and no significant linear relationship between SR and ROI. In addition, the outcomes shows negatively and no significant relationship for ROA ($r = -.491$), ROS ($r = -.044$), ROE ($r = -.292$) and SG ($r = -.09$), at $p > .05$ respectively. In sum, the Pearson correlation test result suggests that there is no significant linear relationship between SR and Profitability.

4.2.17 Hypothesis 17: Identify the Relationship between SR and Liquidity

H$_{017}$:   There is a negative relationship between SR and Liquidity.

H$_{A17}$:   There is a positive relationship between SR and Liquidity.

Exhibit 4-25   Pearson Correlation between SR and Liquidity

Variables	Mean	S.D	1	2	3	4	5	6	7	8	Inferences
1. SR	0.07	0.37	-	-	-	-	-	-	-	-	-
2. WCR	1.08	0.00	.182	-	-	-	-	-	-	-	Accept H$_{017}$
3. CR	1.60	0.24	.222	-.654	-	-	-	-	-	-	Accept H$_{017}$
4. CAR	0.95	0.01	.734	.538	-.478	-	-	-	-	-	Accept H$_{017}$

Variables	Mean	S.D	1	2	3	4	5	6	7	8	Inferences
5. QR	1.60	0.24	.222	-.654	1.000**	-.478	-	-	-	-	Accept H_{017}
6. CDR	2.58	0.57	-.096	-.406	.814*	-.609	.814*	-	-	-	Accept H_{017}
7. STLDR	9.87	0.61	-.456	.415	-.751	.184	-.751	-.288	-	-	Accept H_{017}
8. OPCF	0.62	0.68	.403	-.696	.695	-.001	.695	.517	-.339	-	Accept H_{017}

Notes: (1) *. Correlation is significant at the 0.05 level (1-tailed).

(2) **. Correlation is significant at the 0.01 level (1-tailed).

Result and Inference

The Exhibit 4-25 illustrates that the means, standard deviations, and correlation between SR and Liquidity (WCR, CR, CR, CAR, QR, CDR, STLDR, and OPCF) (see Chapter 3 Subsection 3.1.2). The outcomes reveal that SR are positively and no significant related to CAR (r = .734), CR and QR with coefficient of r = .222 respectively, OPCF (r = .403) and r = .182 for WCR, at p > .05 respectively. Besides, the results shows the STLDR (r = -.456) and CDR (r = -.096) are negatively and no significantly related to SR at P > .05. Generally, the outcomes of the Pearson correlation indicate that there is no significant linear relationship between SR and Liquidity.

4.2.18 Hypothesis 18: Identify the Relationship between SR and Risk and Solvency

H_{018}: There is a negative relationship between SR and Risk and Solvency.

H_{A18}: There is a positive relationship between SR and Risk and Solvency.

Exhibit 4-26 Pearson Correlation between SR and Risk and Solvency

Variables	Mean	S.D	1	2	3	4	5	6	Inferences
1 SR	0.07	0.37	-	-	-	-	-	-	-
2. DER	12.20	0.63	-.245	-	-	-	-	-	Accept H_{018}
3. DTAR	0.92	0.00	-.271	.945**	-	-	-	-	Accept H_{018}
4. ETAR	0.08	0.00	.271	-.945**	-1.000**	-	-	-	Accept H_{018}

5. EM	42.63	4.16	.084	.316	.354	-.354	-	-	Accept H_{018}
6. LDR	0.71	0.04	.076	-.720	-.663	.663	.390	-	Accept H_{018}

Note: (1) **. Correlation is significant at the 0.01 level (1-tailed).

Result and Inference

The Exhibit 4-26 illustrates the means, standard deviations, and correlation that was existing between MVA and Risk and Solvency (DER, DTAR, ETAR, EM, and LDR) (see Chapter 3 Subsection 3.1.3).The results of the correlation indicate that SR are positively and no significant related to ETAR ($r = .271$), EM ($r = .084$) and LDR ($r = .076$), at $p > .05$ respectively. This is also implies that the DER ($r = -.245$) and DTAR ($r = -.271$) are negatively and no significant related to SR at $p > .05$. In sum, the Pearson correlation result suggests that there is no significant linear relationship between SR and Risk and Solvency.

4.2.19 Hypothesis 19: Identify the Relationship between SVC and NOPAT

H_{019}:   There is a negative relationship between SVC and NOPAT.

H_{A19}:   There is a positive relationship between SVC and NOPAT.

Exhibit 4-27   Pearson Correlation between SVC and NOPAT

Variables	Mean	S.D	1	2	Inferences
1. SVC	(2,119,244.18)	5,101,903.83	-	-	-
2. NOPAT	4,873,624.58	7,690,253.23	.295	-	Accept H_{019}

Result and Inference

Exhibit 4.27 illustrates the means, standard deviations, and correlations between Sharcholder Value Creation and Net Operating Profit after Tax (NOPAT). This is implies that the SVC is positive relation to NOPAT with coefficient of $r = .295$, at $p > .05$, thus indicating that there is no significant linear relationship between SVC and NOPAT.

Chapter 5: Conclusion and Recommendation

5.0 Introduction

In this chapter, we will discuss the summary of the study on the financial performance of banking sectors in Malaysia. Subsequently, it follow by policy application and lastly is the limitation of this study.

5.1 Summary of the Study

This paper measured the Financial Performance of Malaysia Banking Sectors including Affin Bank Berhad, Alliance Financial Group Berhad, AMMB Holdings Berhad, CIMB Group Holdings Berhad, Hong Leong Bank Berhad, Malayan Banking Berhad, Public Bank Berhad and RHB Bank Berhad over the period 2007 to 2011. The result indicate that the overall bank performance in term of Financial Ratios (Profitability, Liquidity, Risk and Solvency), Economic Value Added (EVA) and Shareholder Value Added (SVC). For the Profitability Performance, the average ROA, ROS, ROE, ROI, ROCE, and SG during the period were 1.02%, 23.06%, 13.63%,3.09%, 11.76% and 24.73% respectively. The Liquidity Performance of Banking Sectors in Malaysia during the period in various measures such as the average WCR, CR, CAR, QR, CDR, LDR AND OPCF were1.085, 1.605, 0.955, 1.605, 2.580, 9.866 and 0.623 respectively. On the other hands, the Risk and Solvency performance of Malaysia Banking Sectors during the period in various measures such as the average DER, DTAR, ETAR, EM and LDR were 12.200, 0.922, 0.078, 42.63 and 0.71 respectively.

The Economic Value Added (EVA) that used in this paper that explained in the Chapter 3 and it has been categorized into three steps, namely calculating the

Malaysia Banking Sectors' profit, determining the assets base, and determining the WACC. EVA is the best practical periodic performance measure to capturing or evaluating the true financial profit of the corporate performance. EVA also defined as the performance measure most directly linked to the creation of the corporate's shareholder wealth over the period(Stern, Stewart, & Chew, 1991).EVAfigures have also been widely used by the corporate in order to provide published rankings of corporate performance such as UK, Australia, Canada Brazil, Germany, Mexico, Turkey and France as well(Stern Stewart & Co, 2013). EVA provide the result the emphasizes efficiency and wise management as factors to produce corporate wealth and give managers a clear picture of what improvement were made to the corporate. Besides, EVA also has some inherent limitation as well. To calculating the true EVA become challenge, because the conventional accounting system that produces time-barred. Besides, the result that provide by the EVA values that do not provide for fair comparability.Consequently, EVA is used in this research to evaluate the Malaysia Baking Sectors Performance for the period from 2007 to 2011. This is because to evaluate the true financial profit and provide the Malaysia's Banking Sectors shareholder wealth. The WACC's mean over the period 2007 to 2011 for Affin Bank Berhad was 7.96%, for Alliance Financial Group Berhad was 8.15%, for AMMB Holdings Berhad and CIMB Group Holdings Berhad was 8.16%, for Hong Leong Bank Berhad was 7.78%, for Malayan Banking Berhad was 8.05%, for Public Bank Berhad was 7.69% and for RHB Bank Berhad was 7.88%. Besides, the outcomes suggests that the EVA or Economic Profit for Banking Sectors' in Malaysia are destroyed the shareholder value. The EVA's mean was -RM 2,637,443,000for Affin Bank Berhad, -RM 2,095,627,000for Alliance Financial Group Berhad;-RM6,204,796,000for AMMB Holdings Berhad,-RM15,239,118,000for CIMB Group

Holdings Berhad,-RM5,910,022,000for Hong Leong Bank Berhad, -RM 22,166,849,000for Malayan Banking Berhad,-RM12,951,113,000for Public Bank Berhad, and -RM3,498,737,000for RHB Bank Berhad.

Moreover, the EVA adjustments are essential to both the accuracy and identify of the EVA metric, while an unadjusted EVA analysis is just using accounting data that does not necessarily reflect the current financial performance of the company (Investopedia, 2013). Subsequently, the outcomes of the study for (Anderson, Bey, & Weaver, 2005) are compared the results with those calculated by the originators of the EVA metric, (Stern Stewart & Co, 2013). The outcomes of the study suggests that the two figures for each company were over 90% similar and providing that for the most part, adjustments could be minimal for ease of use and shows accurate results. From the Chapter 4, the EVA adjustments outcomes suggests that the mean for banking sectors is slightly better than EVA unadjusted. Then, the mean for Affin Bank was - RM 1,831,877,00, for Alliance was -RM 1,549,958,000, for AMMB was –RM 4,234,997,000, for CIMB was –RM 10,273,284,000, for Hong Leong Bank was –RM 4,362,787,000, for May Bank was -RM 17,251,424,000, for Public Bank was –RM 8,942,829,000 and for RHB Bank was –RM 1,410,167,000.Through this study, the outcomes of showed that the EVA adjustment or Economic Profit for Banking Sectors' in Malaysia are destroyed the shareholder value.

In this research, we also analyzed Shareholder Value Creation (SVC) for the Malaysia Banking Sectors for the period from 2007 to 2011. Firstly, define the increase of the Market Value Added (MVA), the Shareholder Value Added (SVA), the Shareholder Return (SR), and finally required return to equity. The Malaysia Banking Sectors' mean MVA increased RM14, 514,602,000 from RM15,313,928,000

in 2007 to RM29,828,530,000 in 2011. In addition, the SVA's mean for Malaysia Banking Sectors declined from RM4, 044,971,000 in 2007 to −RM575, 771,000 in 2011. Besides, the SR's mean for Banking Sectors declined from 26.24% in 2007 to 1.29% in 2011. Moreover, the SVC's mean for Malaysia Banking Sector increased from RM634, 450,000 in 2007 to RM 3,168,001,000 in 2009 and declined to −RM 7,292,260,000 in 2011.

According to (Biddle, 1998), the paper concluded that EVA measure may be an effective tool for some corporate performance including internal decision making, corporate performance measurement, and incentive compensation. However, it does not dominate earnings in its association with stock market return. According to (Chen & Dodd, 1997), the paper concluded that no single EVA measure was able to account for more than 26 percent of the variation in stock return. Therefore, (Biddle, 1998) and (Chen & Dodd, 1997) found that earnings outperform EVA and residual income in the US market. Besides, the results of the present research do not support the claims of (Stern, Stewart, & Chew, 1991) and the EVA is the best performance measure the corporate. The objective of this study is used to examine or evaluate the relative between EVA and Financial Ratios for the Banking Sectors in Malaysia from 2007 to 2011. From the Chapter 4, the outcomes of the correlations suggest that EVA are positively and significantly related to ROI while negatively and significantly related to ROS. In addition, the outcomes also reveal that EVA are positively and significantly to CDR, CR, and QR. Moreover, the Pearson correlation results suggests that EVA is negatively and significantly related to LDR. The evaluation of EVA adopters in order to provide interesting results to measure the banks performance and more years in the sample would be appreciated too. Besides, another important suggestion for further research is to examine the corporate

performance measures in explaining stock returns due to explore the value relevance of other factors.

According to (Uyemura, Kantor, & Petit, 1996), the paper examine the relationship between EVA and MVA in the financial institutions shows that a strong relation between EVA and MVA. According to (Lehn & Makhij, 1997), the paper examine that the EVA is superior to accounting profits as a measure of shareholder value creation and this correlation was slightly better than with financial ratios performance. Furthermore, (Milunovich & Tsuei, 1996) concluded that EVA is the best appropriate measure for measuring the shareholder wealth based on financial ratios, it provides exact values how much really the shareholder wealth over the period by considering cost of capital like cost of equity, cost of debt, and cost of retained earnings. In addition, the objective of this research is to examine the relation between MVA and Financial Ratio and the relation between MVA and EVA for the Banking Sectors in Malaysia from 2007 to 2011. From the Chapter 4, the Pearson correlation outcomes suggests that MVA are positively and significantly related to ROS and CAR while negatively and significantly related to CDR.

Moreover, this research also tests the relation between NOPAT and Shareholder Value Added (SVC) to identify whether the banking sector create value for their shareholder. This research shows that SVC is negatively and no significantrelatedto NOPAT.

5.1   Policy Application

Economic Value Added (EVA) is a proprietary residual income model to use to measure the corporate shareholder wealth over the period, developed by Stern Stewart & Co. In 1991 (Stern, Stewart, & Chew, 1991), defined EVA equals Net Operating

Profit after Tax (NOPAT) subtract Weighted Average Cost of Capital (WACC). In other words, it defined as residual return that subtracts the cost of invested capital from NOPAT. There are a few action that can take by those investors or firms to improve the value created by using EVA and they can take the following actions.

- They can increase the corporate or firm's Operating Income or Revenue from assets in place by reducing costs and increasing their firm revenues.

- Wealth maximization and minimize operating expenses needed to generate a given amount of revenue.

- They can reduce the corporate's cost of capital by changing the financing mix.

- They can reduce the amount of capital and invest additional capital in opportunities that will earn more in existing project, without affect the revenue of the corporate, by reducing the working capital investment and selling unutilized assets.

- Corporate produce the same goods and services by using less capital.

5.2   Limitation

Furthermore, there are some limitations in the methodology that have been chosen to evaluate or measure the Malaysia Banking Sectors for the five year period from 200 to 2011 by using Financial Ratios, EVA and SVC. One of the major limitations of this research is time constraint. This is because there is a need more time to harmonize some adjustments that are required to be incorporated in calculation of NOPAT. Adjusted NOPAT are unique and debatable aspect of EVA. Besides, Stern Stewart does not fully disclose the adjustment (to protect its trademark), this making the research of using the metric more difficult in analysis.

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Appendix

Appendix 1   Profitability Performance

ROA	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	0.73%	1.00%	0.89%	0.91%	0.89%	4.42%	0.88%	0.10%
ALLIANCE	0.41%	1.37%	0.72%	0.95%	1.13%	4.58%	0.92%	0.37%
AMMB	-0.16%	0.97%	0.98%	1.08%	1.29%	4.16%	0.83%	0.57%
CIMB	1.59%	0.97%	1.27%	1.37%	1.36%	6.56%	1.31%	0.22%
HONG LEONG BANK	0.87%	0.96%	1.14%	1.17%	0.78%	4.92%	0.98%	0.17%
MAYBANK	1.27%	1.12%	0.24%	1.18%	0.59%	4.40%	0.88%	0.45%
PUBLIC BANK	1.26%	1.34%	1.18%	1.37%	1.41%	6.56%	1.31%	0.09%
RHB BANK	0.80%	1.09%	1.12%	1.19%	1.09%	5.29%	1.06%	0.15%
Total	6.77%	8.82%	7.54%	9.22%	8.54%			
Mean	0.85%	1.10%	0.94%	1.15%	1.07%			
S.D	0.55%	0.17%	0.33%	0.17%	0.29%			

ROS	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	15.80%	22.73%	23.69%	25.22%	24.50%	111.94%	22.39%	3.80%
ALLIANCE	7.35%	23.97%	13.99%	27.55%	34.00%	106.86%	21.37%	10.67%
AMMB	-2.34%	13.53%	13.92%	15.27%	19.56%	59.94%	11.99%	8.36%
CIMB	31.58%	20.96%	28.91%	33.04%	32.13%	146.62%	29.32%	4.92%
HONG LEONG BANK	21.63%	24.21%	30.87%	38.70%	34.87%	150.28%	30.06%	7.14%
MAYBANK	21.43%	18.59%	4.27%	21.38%	20.80%	86.47%	17.29%	7.37%
PUBLIC BANK	23.04%	24.98%	26.26%	28.08%	27.63%	129.99%	26.00%	2.05%
RHB BANK	16.73%	23.20%	30.21%	31.17%	28.89%	130.20%	26.04%	6.05%
Total	135.22%	172.17%	172.12%	220.41%	222.38%			
Mean	16.90%	21.52%	21.52%	27.55%	27.80%			
S.D	10.41%	3.82%	9.69%	7.19%	5.81%			

ROE

ROE	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	9.26%	12.23%	10.71%	11.51%	12.22%	55.93%	11.19%	1.25%
ALLIANCE	8.77%	14.53%	8.18%	10.07%	12.05%	53.60%	10.72%	2.60%
AMMB	-1.80%	11.31%	11.35%	10.11%	13.49%	44.46%	8.89%	6.10%
CIMB	18.38%	11.42%	14.98%	15.88%	15.71%	76.37%	15.27%	2.51%
HONG LEONG BANK	11.67%	12.82%	14.06%	13.89%	13.95%	66.39%	13.28%	1.03%
MAYBANK	16.94%	15.55%	3.02%	14.24%	8.02%	57.77%	11.55%	5.86%
PUBLIC BANK	20.74%	24.26%	21.99%	23.39%	23.37%	113.75%	22.75%	1.39%
RHB BANK	16.35%	15.20%	15.17%	15.57%	14.77%	77.06%	15.41%	0.60%
Total	100.31%	117.32%	99.46%	114.66%	113.58%			
Mean	12.54%	14.67%	12.43%	14.33%	14.20%			
S.D	7.24%	4.21%	5.59%	4.31%	4.38%			

ROI

ROI	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	2.96%	3.08%	3.15%	2.75%	2.36%	14.30%	2.86%	0.32%
ALLIANCE	3.50%	3.68%	3.32%	3.36%	3.13%	16.99%	3.40%	0.21%
AMMB	3.84%	4.03%	3.26%	3.71%	3.62%	18.46%	3.69%	0.29%
CIMB	4.93%	3.74%	4.45%	4.38%	4.04%	21.54%	4.31%	0.45%
HONG LEONG BANK	2.48%	2.61%	2.64%	2.43%	1.75%	11.91%	2.38%	0.36%
MAYBANK	3.45%	3.58%	3.39%	3.82%	1.73%	15.97%	3.19%	0.83%
PUBLIC BANK	2.93%	2.93%	2.82%	3.02%	2.97%	14.67%	2.93%	0.07%
RHB BANK								0.15%
Total	25.99%	25.75%	24.96%	25.46%	21.30%			
Mean	3.25%	3.22%	3.12%	3.18%	2.66%			
S.D	0.92%	0.65%	0.72%	0.79%	0.91%			

ROCE	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	3.59%	9.99%	11.80%	9.95%	8.68%	44.01%	8.80%	3.12%
ALLIANCE	15.90%	19.80%	19.33%	15.89%	16.94%	87.86%	17.57%	1.88%
AMMB	8.79%	10.93%	12.86%	14.83%	15.64%	63.05%	12.61%	2.81%
CIMB	14.18%	11.36%	12.61%	12.19%	11.39%	61.73%	12.35%	1.16%
HONG LEONG BANK	14.01%	14.95%	20.06%	16.72%	8.26%	74.00%	14.80%	4.32%
MAYBANK	6.17%	6.27%	5.70%	6.53%	5.10%	29.77%	5.95%	0.56%
PUBLIC BANK	19.48%	23.89%	14.07%	15.96%	17.57%	90.97%	18.19%	3.76%
RHB BANK	4.48%	3.09%	2.72%	4.51%	4.02%	18.82%	3.76%	0.82%
Total	86.60%	100.28%	99.15%	96.58%	87.60%			
Mean	10.83%	12.54%	12.39%	12.07%	10.95%			
S.D	5.86%	6.83%	5.96%	4.65%	5.30%			

SG	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	14.13%	-0.96%	-7.98%	12.73%	18.77%	36.69%	7.34%	11.28%
ALLIANCE	12.32%	8.55%	3.17%	-33.12%	9.96%	0.88%	0.18%	18.91%
AMMB	12.85%	9.01%	5.31%	8.21%	4.13%	39.51%	7.90%	3.42%
CIMB	14.20%	3.94%	9.90%	5.97%	13.54%	47.55%	9.51%	4.53%
HONG LEONG BANK	19.94%	6.98%	-4.35%	-12.90%	27.50%	37.17%	7.43%	16.67%
MAYBANK	19.01%	6.42%	8.87%	5.54%	-30.54%	9.30%	1.86%	18.89%
PUBLIC BANK	21.85%	9.86%	-7.47%	13.59%	15.59%	53.42%	10.68%	11.04%
RHB BANK	8.82%	-0.67%	-12.13%	16.41%	17.89%	30.32%	6.06%	12.56%
Total	123.12%	43.13%	-4.68%	16.43%	76.84%			
Mean	15.39%	5.39%	-0.59%	2.05%	9.61%			
S.D	4.43%	4.24%	8.43%	16.82%	17.59%			

Appendix 2   Liquidity Performance

WCR	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	1.09	1.09	1.09	1.09	1.08	5.44	1.09	0.0045
ALLIANCE	1.08	1.10	1.10	1.11	1.10	5.49	1.10	0.0110
AMMB	1.08	1.10	1.10	1.11	1.11	5.50	1.10	0.0122
CIMB	1.10	1.09	1.10	1.09	1.09	5.47	1.09	0.0055
HONG LEONG BANK	1.07	1.07	1.08	1.08	1.05	5.35	1.07	0.0122
MAYBANK	1.08	1.08	1.09	1.09	1.09	5.43	1.09	0.0055
PUBLIC BANK	1.06	1.06	1.06	1.06	1.07	5.31	1.06	0.0045
RHB BANK	1.07	1.08	1.08	1.08	1.08	5.39	1.08	0.0045
Total	8.63	8.67	8.70	8.71	8.67			
Mean	1.08	1.08	1.09	1.09	1.08			
S.D	0.01	0.01	0.01	0.02	0.02			

CR	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	5.50	1.39	1.34	1.36	1.33	10.92	2.18	1.8538
ALLIANCE	1.22	1.17	1.17	1.23	1.20	5.99	1.20	0.0277
AMMB	1.66	1.47	1.27	1.27	1.24	6.91	1.38	0.1805
CIMB	1.44	1.39	1.46	1.48	1.46	7.23	1.45	0.0344
HONG LEONG BANK	1.19	1.18	1.12	1.14	1.22	5.85	1.17	0.0400
MAYBANK	2.06	2.10	2.22	2.18	1.44	10.00	2.00	0.3194
PUBLIC BANK	1.14	1.10	1.22	1.20	1.16	5.82	1.16	0.0477
RHB BANK	1.67	3.00	3.37	1.75	1.67	11.46	2.29	0.8263
Total	15.88	12.80	13.17	11.61	10.72			
Mean	1.99	1.60	1.65	1.45	1.34			
S.D	1.45	0.65	0.78	0.35	0.17			

CAR	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	0.96	0.96	0.98	0.99	0.97	4.86	0.97	0.0130
ALLIANCE	0.95	0.95	0.97	0.97	0.98	4.82	0.96	0.0134
AMMB	0.94	0.93	0.95	0.92	0.95	4.69	0.94	0.0130
CIMB	0.94	0.93	0.94	0.95	0.94	4.70	0.94	0.0071
HONG LEONG BANK	0.98	0.97	0.97	0.97	0.96	4.85	0.97	0.0071
MAYBANK	0.91	0.90	0.90	0.90	0.95	4.56	0.91	0.0217
PUBLIC BANK	0.97	0.97	0.98	0.98	0.96	4.86	0.97	0.0084
RHB BANK	0.96	0.96	0.98	0.98	0.96	4.84	0.97	0.0110
Total	7.61	7.57	7.67	7.66	7.67			
Mean	0.95	0.95	0.96	0.96	0.96			
S.D	0.02	0.02	0.03	0.03	0.01			

QR	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	5.50	1.39	1.34	1.36	1.33	10.92	2.18	1.8538
ALLIANCE	1.22	1.17	1.17	1.23	1.20	5.99	1.20	0.0277
AMMB	1.66	1.47	1.27	1.27	1.24	6.91	1.38	0.1805
CIMB	1.44	1.39	1.46	1.48	1.46	7.23	1.45	0.0344
HONG LEONG BANK	1.19	1.18	1.12	1.14	1.22	5.85	1.17	0.0400
MAYBANK	2.06	2.10	2.22	2.18	1.44	10.00	2.00	0.3194
PUBLIC BANK	1.14	1.10	1.22	1.20	1.16	5.82	1.16	0.0477
RHB BANK	1.67	3.00	3.37	1.75	1.67	11.46	2.29	0.8263
Total	15.88	12.80	13.17	11.61	10.72			
Mean	1.99	1.60	1.65	1.45	1.34			
S.D	1.45	0.65	0.78	0.35	0.17			

CDR	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	1.88	1.75	1.22	1.31	1.31	7.47	1.49	0.2989
ALLIANCE	8.59	3.97	4.20	1.56	0.47	18.79	3.76	3.1317
AMMB	0.61	1.55	2.76	2.69	3.16	10.77	2.15	1.0506
CIMB	2.37	3.43	2.79	2.08	2.67	13.34	2.67	0.5075
HONG LEONG BANK	3.13	3.49	7.63	4.05	2.85	21.15	4.23	1.9528
MAYBANK	1.27	1.13	0.82	1.23	1.34	5.79	1.16	0.2036
PUBLIC BANK	3.41	6.55	1.92	1.50	1.05	14.43	2.89	2.2318
RHB BANK	3.05	1.99	2.41	1.69	2.30	11.44	2.29	0.5104
Total	24.31	23.86	23.75	16.11	15.15			
Mean	3.04	2.98	2.97	2.01	1.89			
S.D	2.44	1.78	2.15	0.95	0.98			

STLDR	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	3.83	5.11	4.38	3.93	3.94	21.19	4.24	0.5317
ALLIANCE	27.65	10.76	15.74	9.03	11.18	74.36	14.87	7.5614
AMMB	2.73	7.39	9.28	14.93	16.24	50.57	10.11	5.5534
CIMB	7.44	16.49	14.04	12.16	14.18	64.31	12.86	3.3977
HONG LEONG BANK	6.19	5.42	14.47	9.74	7.66	43.48	8.70	3.6233
MAYBANK	4.77	6.71	6.45	8.84	7.51	34.28	6.86	1.4918
PUBLIC BANK	9.52	21.18	5.98	7.22	11.06	54.96	10.99	6.0273
RHB BANK	9.49	8.90	10.57	10.62	11.89	51.47	10.29	1.1532
Total	71.62	81.96	80.91	76.47	83.66			
Mean	8.95	10.25	10.11	9.56	10.46			
S.D	7.95	5.74	4.32	3.27	3.95			

OPCF	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	1.93	(1.28)	0.78	2.07	1.56	5.06	1.01	1.3756
ALLIANCE	3.15	(0.90)	0.93	(1.79)	1.12	2.51	0.50	1.9233
AMMB	0.31	(0.43)	3.52	(1.04)	0.25	2.61	0.52	1.7644
CIMB	1.78	(0.27)	0.14	0.07	0.86	2.58	0.52	0.8176
HONG LEONG BANK	0.33	5.24	(0.64)	(0.94)	1.17	5.16	1.03	2.4952
MAYBANK	0.73	(0.54)	(0.71)	0.57	0.49	0.54	0.11	0.6774
PUBLIC BANK	2.76	1.31	1.93	(0.82)	(2.11)	3.07	0.61	2.0185
RHB BANK	1.02	(1.65)	1.92	(0.15)	2.26	3.40	0.68	1.6021
Total	12.01	1.48	7.87	(2.03)	5.60			
Mean	1.50	0.19	0.98	(0.25)	0.70			
S.D	1.08	2.22	1.44	1.19	1.30			

Appendix 3   Risk and Solvency Performance

DER	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	11.71	11.18	11.00	11.70	12.68	58.27	11.65	0.654
ALLIANCE	12.56	9.67	10.20	9.44	9.75	51.62	10.32	1.280
AMMB	12.19	10.47	10.36	8.80	9.24	51.06	10.21	1.317
CIMB	9.85	10.26	9.60	10.08	10.18	49.97	9.99	0.269
HONG LEONG BANK	14.33	14.09	12.75	12.19	18.48	71.84	14.37	2.467
MAYBANK	11.92	12.39	11.06	10.75	11.54	57.66	11.53	0.656
PUBLIC BANK	16.45	18.18	17.53	15.54	15.03	82.73	16.55	1.319
RHB BANK	14.81	12.90	12.55	12.04	12.54	64.84	12.97	1.074
Total	103.82	99.14	95.05	90.54	99.44			
Mean	12.98	12.39	11.88	11.32	12.43			
S.D	2.09	2.77	2.53	2.10	3.09			

DTAR	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	0.92	0.92	0.92	0.92	0.93	4.61	0.92	0.0045
ALLIANCE	0.93	0.91	0.91	0.90	0.91	4.56	0.91	0.0110
AMMB	0.92	0.91	0.91	0.90	0.90	4.54	0.91	0.0084
CIMB	0.91	0.91	0.91	0.91	0.91	4.55	0.91	0.0022
HONG LEONG BANK	0.93	0.93	0.93	0.92	0.95	4.66	0.93	0.0110
MAYBANK	0.92	0.93	0.92	0.91	0.92	4.60	0.92	0.0071
PUBLIC BANK	0.94	0.95	0.95	0.94	0.94	4.72	0.94	0.0055
RHB BANK	0.94	0.93	0.93	0.92	0.93	4.65	0.93	0.0071
Total	7.41	7.39	7.38	7.32	7.39			
Mean	0.93	0.92	0.92	0.92	0.92			
S.D	0.01	0.01	0.01	0.01	0.02			

ETAR	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	0.08	0.08	0.08	0.08	0.07	0.39	0.08	0.0045
ALLIANCE	0.07	0.09	0.09	0.10	0.09	0.44	0.09	0.0110
AMMB	0.08	0.09	0.09	0.10	0.10	0.46	0.09	0.0084
CIMB	0.09	0.09	0.09	0.09	0.09	0.45	0.09	0.0022
HONG LEONG BANK	0.07	0.07	0.07	0.08	0.05	0.34	0.07	0.0110
MAYBANK	0.08	0.07	0.08	0.09	0.08	0.40	0.08	0.0071
PUBLIC BANK	0.06	0.05	0.05	0.06	0.06	0.28	0.06	0.0055
RHB BANK	0.06	0.07	0.07	0.08	0.07	0.35	0.07	0.0071
Total	0.59	0.61	0.62	0.68	0.61			
Mean	0.074	0.076	0.078	0.085	0.076			
S.D	0.01	0.01	0.01	0.01	0.02			

EM	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	22.17	22.94	24.73	29.23	34.22	133.29	26.66	5.0369
ALLIANCE	21.68	17.88	20.58	20.45	23.30	103.89	20.78	1.9824
AMMB	29.01	30.55	33.01	32.01	35.91	160.49	32.10	2.6126
CIMB	54.19	57.78	67.95	36.24	40.39	256.55	51.31	12.9749
HONG LEONG BANK	45.20	49.02	50.19	53.61	92.03	290.05	58.01	19.2535
MAYBANK	65.99	55.13	43.90	47.57	59.11	271.70	54.34	8.8590
PUBLIC BANK	49.37	55.54	61.48	64.08	70.62	301.09	60.22	8.1282
RHB BANK	48.45	28.61	31.97	36.00	43.09	188.12	37.62	8.1077
Total	336.06	317.45	333.81	319.19	398.67			
Mean	42.01	39.68	41.73	39.90	49.83			
S.D	16.06	16.33	17.16	14.22	22.60			

LDR	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	0.59	0.65	0.69	0.69	0.67	3.29	0.66	0.0415
ALLIANCE	0.66	0.67	0.70	0.79	0.71	3.53	0.71	0.0513
AMMB	0.77	0.81	0.80	0.88	0.88	4.14	0.83	0.0497
CIMB	0.67	0.72	0.75	0.74	0.77	3.65	0.73	0.0381
HONG LEONG BANK	0.50	0.49	0.49	0.51	0.64	2.63	0.53	0.0643
MAYBANK	0.71	0.76	0.76	0.78	0.76	3.77	0.75	0.0261
PUBLIC BANK	0.66	0.69	0.70	0.77	0.79	3.61	0.72	0.0554
RHB BANK	0.67	0.76	0.76	0.81	0.76	3.76	0.75	0.0507
Total	5.23	5.55	5.65	5.97	5.98			
Mean	0.65	0.69	0.71	0.75	0.75			
S.D	0.0802	0.0978	0.0953	0.1099	0.0748			

Appendix 4   Malaysia Banking Sectors – Economic Value Added (EVA)

	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	(2,237,672.91)	(2,363,318.83)	(2,380,035.44)	(2,975,283.60)	(3,230,907.83)	(13,187,218.62)	(2,637,443.72)	438,051.26
ALLIANCE	(1,837,686.09)	(1,855,315.07)	(2,182,361.80)	(2,263,008.79)	(2,539,764.66)	(10,478,136.40)	(2,095,627.28)	234,214.71
AMMB	(6,228,447.12)	(5,760,411.45)	(5,548,568.15)	(6,812,739.78)	(6,673,816.33)	(31,023,982.82)	(6,204,796.56)	551,871.29
CIMB	(10,922,874.21)	(14,485,301.48)	(14,900,124.04)	(17,667,056.09)	(18,220,234.97)	(76,195,590.79)	(15,239,118.16)	2,919,548.70
HLB	(4,903,294.52)	(5,128,250.61)	(4,906,975.94)	(5,580,551.80)	(9,031,037.52)	(29,550,110.39)	(5,910,022.08)	1,766,356.18
MAYBANK	(16,794,792.00)	(18,228,214.16)	(22,626,291.52)	(22,685,524.51)	(30,499,425.66)	(110,834,247.85)	(22,166,849.57)	5,345,179.75
PUBLIC BANK	(10,883,460.04)	(12,335,623.38)	(12,837,794.90)	(14,199,730.93)	(14,498,960.10)	(64,755,569.35)	(12,951,113.87)	1,468,139.52
RHB BANK	(6,359,448.05)	(6,255,059.58)	(971,547.29)	(1,311,189.26)	(2,596,445.57)	(17,493,689.76)	(3,498,737.95)	2,654,727.91
Total	(60,167,674.94)	(66,411,494.55)	(66,353,699.08)	(73,495,084.76)	(87,090,592.64)			
Mean	(7,520,959.37)	(8,301,436.82)	(8,294,212.39)	(9,186,885.60)	(10,886,324.08)			
S.D	5,056,367.75	5,983,107.93	7,696,532.31	7,986,131.16	9,805,753.51			

Note: (1) Currency (RM' 000)

EVA Adjustment	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	(1,388,455.91)	(1,571,510.83)	(1,774,924.44)	(2,214,435.60)	(2,210,060.83)	(9,159,387.62)	(1,831,877.52)	373,172.38
ALLIANCE	(1,288,148.09)	(1,275,840.07)	(1,593,743.80)	(1,785,469.79)	(1,806,588.66)	(7,749,790.40)	(1,549,958.08)	258,325.07
AMMB	(4,233,645.12)	(3,607,290.45)	(3,531,514.15)	(5,084,500.78)	(4,718,038.33)	(21,174,988.82)	(4,234,997.76)	678,949.75
CIMB	(6,131,239.21)	(9,555,474.48)	(10,429,260.04)	(13,035,475.09)	(12,214,973.97)	(51,366,422.79)	(10,273,284.56)	2,697,034.19
HLB	(3,208,257.52)	(3,443,304.61)	(3,329,303.94)	(4,410,343.80)	(7,422,725.52)	(21,813,935.39)	(4,362,787.08)	1,775,665.99
MAYBANK	(11,071,620.00)	(12,187,005.16)	(16,975,934.52)	(18,501,177.51)	(27,521,384.66)	(86,257,121.85)	(17,251,424.37)	6,537,357.76
PBBANK	(6,675,253.04)	(7,773,227.38)	(9,521,185.90)	(10,683,619.93)	(10,060,861.10)	(44,714,147.35)	(8,942,829.47)	1,667,686.59
RHB BANK	(3,918,931.05)	(4,062,200.58)	520,937.71	511,522.74	(102,168.57)	(7,050,839.76)	(1,410,167.95)	2,369,604.18
Total	(37,915,549.94)	(43,475,853.55)	(46,634,929.08)	(55,203,499.76)	(66,056,801.64)			
Mean	(4,739,443.74)	(5,434,481.69)	(5,829,366.14)	(6,900,437.47)	(8,257,100.20)			
S.D	3,211,476.61	3,954,243.65	5,919,342.77	6,536,547.58	8,847,362.87			

Appendix 5 Malaysia Banking Sectors – Economic Value Added (EVA) Adjustments

Note (1) Currency (RM '000)

Appendix 6   Malaysia Banking Sectors – WACC

	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	7.93%	8.39%	7.74%	8.16%	7.57%	39.79%	7.96%	0.32%
ALLIANCE	7.96%	8.55%	7.83%	8.53%	7.89%	40.77%	8.15%	0.36%
AMMB	8.21%	8.43%	7.56%	8.61%	7.98%	40.80%	8.16%	0.41%
CIMB	8.19%	8.46%	7.93%	8.38%	7.83%	40.78%	8.16%	0.27%
HONG LEONG BANK	8.06%	7.86%	7.60%	8.17%	7.23%	38.91%	7.78%	0.38%
MAYBANK	8.19%	8.28%	7.79%	8.28%	7.69%	40.23%	8.05%	0.28%
PUBLIC BANK	7.87%	7.92%	7.25%	7.93%	7.46%	38.43%	7.69%	0.31%
RHB BANK	8.01%	8.27%	7.39%	8.18%	7.56%	39.42%	7.88%	0.39%
Total	64.42%	66.17%	61.09%	66.23%	61.23%			
Mean	8.05%	8.27%	7.64%	8.28%	7.65%			
S.D	0.13%	0.25%	0.23%	0.22%	0.25%			

Appendix 7   Malaysia Banking Sectors – Market Value Added (MVA)

	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	3,727,748.15	2,187,713.20	3,626,998.20	4,447,390.65	4,432,997.80	18,422,848.00	3,684,569.60	920,298.68
ALLIANCE	3,750,423.60	2,817,552.92	4,195,367.26	4,706,242.24	6,115,018.70	21,584,604.72	4,316,920.94	1,221,528.31
AMMB	8,096,147.00	6,725,735.90	13,614,850.00	21,189,720.55	17,934,400.75	67,560,854.20	13,512,170.84	6,202,830.87
CIMB	18,557,995.50	10,465,878.15	22,673,937.72	63,178,587.50	55,299,846.00	170,176,244.87	34,035,248.97	23,588,436.13
HLB	10,033,679.45	8,058,545.70	12,862,529.91	14,536,984.40	17,223,166.30	62,714,905.76	12,542,981.15	3,619,014.01
MAYBANK	30,262,059.73	21,057,164.62	45,778,324.28	60,162,855.50	65,546,369.46	222,806,773.59	44,561,354.72	18,987,992.75
PUBLIC BANK	36,675,954.84	29,541,029.06	39,910,763.80	45,985,676.52	47,257,169.88	199,370,594.10	39,874,118.82	7,226,045.25
RHB BANK	11,407,418.10	12,940,531.50	17,585,850.50	28,933,701.20	24,819,275.80	95,686,777.10	19,137,355.42	7,563,272.03
Total	122,511,426.36	93,794,151.06	160,248,621.67	243,141,158.56	238,628,244.69			
Mean	15,313,928.30	11,724,268.88	20,031,077.71	30,392,644.82	29,828,530.59			

| S.D | 12,267,839.55 | 9,383,123.68 | 15,508,090.40 | 23,529,610.25 | 23,179,520.79 |

Note (1) Currency (RM '000)

Appendix 8   Malaysia Banking Sectors – Shareholder Return (SR)

	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	0.34	(0.67)	0.43	0.21	0.04	0.35	0.07	0.44
ALLIANCE	0.23	(0.67)	0.35	0.13	0.25	0.29	0.06	0.41
AMMB	0.19	(0.53)	0.52	0.30	(0.16)	0.32	0.06	0.41
CIMB	0.35	(0.82)	0.58	0.28	(0.12)	0.26	0.05	0.55
HONG LEONG BANK	0.15	(0.21)	0.39	0.13	0.17	0.64	0.13	0.22
MAYBANK	0.01	(0.70)	0.35	0.25	0.01	(0.08)	(0.02)	0.41
PUBLIC BANK	0.34	(0.18)	0.30	0.16	0.06	0.68	0.14	0.21
RHB BANK	0.49	(0.50)	0.26	0.40	(0.16)	0.50	0.10	0.42
Total	2.10	(4.27)	3.17	1.86	0.10			
Mean	26.24%	-53.38%	39.68%	23.25%	1.29%			
S.D	0.15	0.23	0.11	0.09	0.15			

Appendix 9   Malaysia Banking Sectors – Shareholder Value Added (SVA)

	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	607,225.02	(1,935,550.29)	758,164.40	(29,069.49)	(830,237.36)	(1,429,467.72)	(285,893.54)	1,114,826.66
ALLIANCE	166,966.91	(2,483,816.44)	538,302.44	(483,089.22)	152,213.29	(2,109,423.02)	(421,884.60)	1,209,710.97
AMMB	(206,666.15)	(4,968,575.11)	4,356,752.35	1,420,232.82	(6,826,375.97)	(6,224,632.05)	(1,244,926.41)	4,598,314.96
CIMB	2,995,886.97	(10,813,035.02)	7,941,273.18	3,237,156.81	(18,724,052.16)	(15,362,770.21)	(3,072,554.04)	11,211,905.02
HLB	(636,742.48)	(3,087,741.52)	2,134,812.92	(1,348,256.97)	(893,066.18)	(3,830,994.23)	(766,198.85)	1,882,622.88
MAYBANK	(6,010,278.22)	(19,266,235.83)	5,438,681.52	1,550,078.68	(13,824,886.17)	(32,112,640.02)	(6,422,528.00)	10,297,772.04
PBBANK	4,987,070.32	(11,335,225.68)	2,995,121.70	(3,060,039.85)	(8,054,924.05)	(14,467,997.56)	(2,893,599.51)	6,976,926.62
RHB BANK	3,172,137.92	(9,272,096.15)	1,180,906.45	5,023,968.53	(9,336,759.08)	(9,231,842.32)	(1,846,368.46)	6,942,598.82
Total	5,075,600.30	(63,162,276.03)	25,344,014.96	6,310,981.31	(58,338,087.68)			
Mean	634,450.04	(7,895,284.50)	3,168,001.87	788,872.66	(7,292,260.96)			

| S.D | 3.330.736.72 | 5.952.443.96 | 2.594.548.78 | 2.579.494.68 | 6.723.810.12 |

Appendix 10 Malaysia Banking Sectors – NOPAT

	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	232,452.00	331,312.00	317,752.00	381,237.00	440,003.00	1,702,756.00	340,551.20	77,195.53
ALLIANCE	107,363.00	380,095.00	228,888.00	301,500.00	409,151.00	1,426,997.00	285,399.40	121,892.82
AMMB	(128,897.00)	810,819.00	878,254.00	1,042,608.00	1,391,150.00	3,993,934.00	798,786.80	565,110.60
CIMB	2,914,175.00	2,010,546.00	3,047,067.00	3,689,920.00	4,074,326.00	15,736,034.00	3,147,206.80	792,214.81
HONG LEONG BANK	619,449.00	741,861.00	904,625.00	987,975.00	1,134,928.00	4,388,838.00	877,767.60	202,606.49
MAYBANK	3,252,871.00	3,002,340.00	750,714.00	3,968,450.00	2,682,099.00	13,656,474.00	2,731,294.80	1,204,282.02
PUBLIC BANK	2,201,786.00	2,622,660.00	2,551,540.00	3,099,077.00	3,524,024.00	13,999,087.00	2,799,817.40	515,921.38
RHB BANK	753,547.00	1,038,153.00	1,187,836.00	1,426,554.00	1,558,869.00	5,964,959.00	1,192,991.80	318,406.50
Total	9,952,746.00	10,937,786.00	9,866,676.00	14,897,321.00	15,214,550.00			
Mean	1,244,093.25	1,367,223.25	1,233,334.50	1,862,165.13	1,901,818.75			
S.D	1,340,204.06	1,036,482.90	1,024,250.26	1,490,998.61	1,377,972.41			

Appendix 11 Malaysia Banking Sectors – NOPAT Adjustments

	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	1,081,669.00	1,123,120.00	922,863.00	1,142,085.00	1,460,850.00	5,730,587.00	1,146,117.40	195,957.82
ALLIANCE	656,901.00	959,570.00	817,506.00	779,039.00	942,327.00	4,155,343.00	831,068.60	124,615.83
AMMB	1,865,905.00	2,963,940.00	2,895,308.00	2,770,847.00	3,346,928.00	13,842,928.00	2,768,585.60	548,529.68
CIMB	7,705,810.00	6,940,373.00	7,517,931.00	8,321,501.00	10,079,587.00	40,565,202.00	8,113,040.40	1,204,771.97
HLB	2,314,486.00	2,426,807.00	2,482,297.00	2,158,183.00	2,743,240.00	12,125,013.00	2,425,002.60	216,776.13
MAYBANK	8,976,043	9,043,549	6,401,071	8,152,797	5,660,140	38,233,600.00	7,646,720.00	1,538,870.23
PBBANK	6,409,993.00	7,185,056.00	5,868,149.00	6,615,188.00	7,962,123.00	34,040,509.00	6,808,101.80	798,917.55
RHB BANK	3,194,064.00	3,231,012.00	2,680,321.00	3,249,266.00	4,053,146.00	16,407,809.00	3,281,561.80	491,957.02

Total	32,204,871.00	33,873,427.00	29,585,446.00	33,188,906.00	36,248,341.00
Mean	4,025,608.88	4,234,178.38	3,698,180.75	4,148,613.25	4,531,042.63
S.D	3,207,906.97	3,057,762.90	2,556,911.14	3,084,352.01	3,184,005.37

Note: (1) Currency (RM '000)

Appendix 12 Malaysia Banking Sectors – Net Income

	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	944,389	1,015,641	1,120,542	1,156,121	1,160,632	5,397,325.00	1,079,465.00	95,486.35
ALLIANCE	923,716	1,017,489	1,058,122	1,064,519	1,128,716	5,192,562.00	1,038,512.40	75,527.75
AMMB	3,029,295	3,351,717	2,927,405	3,577,037	3,912,978	16,798,432.00	3,359,686.40	402,946.05
CIMB	9,011,509	7,740,512	10,669,523	11,810,705	12,122,029	51,354,278.00	10,270,855.60	1,867,184.20
HONG LEONG BANK	1,768,190	2,018,340	2,098,972	2,056,929	2,542,457	10,484,888.00	2,096,977.60	280,332.36
MAYBANK	8,853,588	9,630,252	10,519,017	12,871,652	7,835,014	49,709,523.00	9,941,904.60	1,912,918.38
PUBLIC BANK	5,111,287	5,739,256	6,124,968	6,838,500	7,408,570	31,222,581.00	6,244,516.20	902,998.62
RHB BANK	1,794,558	1,992,612	2,049,250	2,374,807	2,432,475	10,643,702.00	2,128,740.40	268,947.50
Total	31,436,532.00	32,505,819.00	36,567,799.00	41,750,270.00	38,542,871.00			
Mean	3,929,566.50	4,063,227.38	4,570,974.88	5,218,783.75	4,817,858.88			
S.D	3,369,088.71	3,270,273.51	4,042,687.01	4,768,757.02	3,924,962.48			

Appendix 13 Malaysia Banking Sectors – Cash Flow Growth

	2007	2008	2009	2010	2011	Total	Mean	S.D
AFFIN BANK	(49.87)	(171.03)	(167.17)	174.43	(24.22)	(237.86)	(47.57)	140.87
ALLIANCE	145.87	(131.63)	(207.07)	(293.82)	(166.48)	(653.13)	(130.63)	165.99
AMMB	11.73	(252.07)	(822.40)	(136.20)	(126.22)	(1,325.17)	(265.03)	325.30
CIMB	189.48	(113.02)	(173.38)	(43.30)	1,094.29	954.07	190.81	523.46
HONG LEONG BANK	(89.85)	1,720.55	(112.71)	44.41	(252.73)	1,309.66	261.93	822.17
MAYBANK	(51.40)	(181.05)	42.62	(197.25)	(47.11)	(434.20)	(86.84)	100.82
PUBLIC BANK	17.14	(46.69)	57.25	(147.53)	178.83	59.00	11.80	121.24
RHB BANK	(181.50)	(278.85)	(220.07)	(108.93)	(1,663.36)	(2,452.70)	(490.54)	658.52
Total	(8.41)	546.20	(1,602.92)	(708.19)	(1,007.02)			
Mean	(1.05)	68.27	(200.37)	(88.52)	(125.88)			

| S.D | 121.74 | 671.74 | 273.15 | 145.90 | 754.02 |

Appendix 14 The Summary of the Financial Ratios, EVA, and SVC for the Banking Sectors in Malaysia from 2007-2011

Malaysia Banking Sectors		2007	2008	2009	2010	2011	MEAN	S.D
PROFITABILITY	ROA	0.85%	1.10%	0.94%	1.15%	1.07%	1.02%	0.0013
	ROS	16.90%	21.52%	21.52%	27.55%	27.80%	23.06%	0.0462
	ROE	12.54%	14.67%	12.43%	14.33%	14.20%	13.63%	0.0106
	ROI	3.25%	3.22%	3.12%	3.18%	2.66%	3.09%	0.0024
	ROCE	10.83%	12.54%	12.39%	12.07%	10.95%	11.76%	0.0081
	SG	24.63%	24.75%	24.63%	24.63%	25.00%	24.73%	0.0016
LIQUIDITY	WCR	1.079	1.0838	1.0875	1.0888	1.0838	1.0800	0.0039
	CR	1.9850	1.6000	1.6463	1.4513	1.3400	1.6000	0.2449
	CAR	0.9513	0.9463	0.9588	0.9575	0.9588	0.9500	0.0056
	QR	1.9850	1.6000	1.6462	1.4513	1.3400	1.6000	0.2449
	CDR	3.0388	2.9825	2.9688	2.0138	1.8938	2.5800	0.5734
	STLDR	8.9525	10.2450	10.1137	9.5588	10.458	9.8700	0.6091
	OPCF	1.5012	0.18500	0.9838	-0.2558	0.7000	0.6200	0.6834
RISK & SOLVENCY	DER	12.98	12.39	11.88	11.32	12.43	12.20	0.6275
	DTAR	0.926	0.924	0.922	0.915	0.924	0.922	0.0042
	ETAR	0.074	0.076	0.078	0.085	0.076	0.078	0.0042
	EM	42.01	39.68	41.73	39.90	49.83	42.63	4.1609
	LDR	0.65	0.69	0.71	0.75	0.75	0.71	0.0392
EVA	EVA	(7,520,959.37)	(8,301,436.82)	(8,294,212.39)	(9,186,885.60)	(10,886,324.08)	(8,837,963.65)	1,287,978.43
	NOPAT	1,244,093.25	1,367,223.25	1,233,334.50	1,862,165.13	1,901,818.75	1,521,726.98	333,350.4152
	WACC	0.0805	0.0827	0.0764	0.0828	0.0765	0.08	0.0032
	ΔEVA	-	0.0706	(0.0538)	0.1620	0.2618	0.09	0.1264
	ΔNOPAT	-	(0.49)	(0.03)	0.71	0.13	0.06	0.4329
	ΔWACC	-	0.03	(0.08)	0.08	(0.08)	(0.01)	0.0691
	Adjusted NOPAT	4,025,608.88	4,234,178.38	3,698,180.75	4,148,613.25	4,531,042.63	4,127,524.78	303,878.89
	EVA Adjustment	(4,739,443.74)	(5,434,481.69)	(5,829,366.14)	(6,900,437.47)	(8,257,100.20)	(6,232,165.85)	1,376,018.99

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SVC / OAS	**MVA**	15,313,928.30	11,724,268.88	20,031,077.71	30,392,644.82	29,828,530.59	21,458,090.06	8,432,450.8023
	SR	0.2624	(0.5338)	0.3968	0.2325	0.0129	0.07	0.3667
	SVA	4,044,971.72	(5,445,721.00)	7,567,315.46	7,649,123.04	(575,771.36)	2,647,983.57	5,636,121.1776
	SVC	634,450.04	(7,895,284.50)	3,168,001.87	788,872.66	(7,292,260.96)	(2,119,244.18)	5,101,903.8273
GDP (%)		6.3	4.8	-1.5	7.2	5.1	4.38	3.42
NET INCOME		3,929,566.50	4,063,227.38	4,570,974.88	5,218,783.75	4,817,858.88	4,520,082.28	533,120.5285
CASH FLOW GROWTH (%)		(1.05)	68.27	(200.37)	(88.52)	(125.88)	(69.51)	105.2770

Note: (1) Currency (RM'000)