UNIVERSITI PUTRA MALAYSIA

MARKET STRUCTURE, PRODUCTIVITY AND PROFITABILITY PERFORMANCE OF MALAYSIAN GENERAL INSURERS

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MARKET STRUCTURE, PRODUCTIVITY AND PROFITABILITY PERFORMANCE OF MALAYSIAN GENERAL INSURERS

By

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Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor Of Philosophy

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November 2015

Chair : Assoc. Prof. Alias Bin Radam, PhD
Faculty : Economics and Management

The insurance industry in Malaysia has been increasingly competitive, especially following the economic crisis and financial liberalization process. In fact, most of the firms in the general insurance industry had suffered losses annually. Government intervention, through BNM, by introducing changes in policies and regulations, such as requirements on company solvency level, were targeted at increasing the confidence level among the insurance holders in the country. However, a large number of renowned insurance companies have taken action for sale or foreclosure due to financial difficulties or indebtedness of their companies. It is important that each company realizes that a high market share does not guarantee financial security or good performance. This paper empirically examines the relationship between market structure, productivity levels and profit performance of general insurance companies in Malaysia. In the analysis part of this study, a two structure model, represented by three main functions, that is, market share function, profitability function and productivity function, is used. This model is based on the theory of industrial organization (IO), formally known as Structure, Conduct and Performance (SCP) theory. Panel data for the 40 year period is used for determining the model estimation on market structure, productivity and profitability of general insurance firms, using Two Stage Least Square (2SLS) method. There are three main hypotheses, namely the SCP hypothesis, the Relative Market Power (RMP) hypothesis, and the Efficient-Structure (ES) hypothesis, were tested. The findings in model 1 show that general insurance firms' profit function has a positive and significant correlation with insurers' premium income and returns on investment. As for the profit function of the firm, it has a negative and significant relationship with market share, turnover of total assets and insurance prices. Market share has a positive and significant relationship with the level of productivity of the firm's management, market concentration ratio for the 10 largest firms and merger and acquisition activity. Conversely, other variables, such as labor productivity, returns on investment, price levels and deregulation have significant negative relationship. In terms of the productivity functions in model 2, there is a significant positive relationship between market share, productivity management, return on assets, agents' commission and fixed assets turnover with the general insurance firms' productivity functions. While the variable labor productivity and return on investment have significant negative correlation with the productivity of general insurance firm. The results of this study are in acceptance of SCP hypothesis on the role of market concentration ratio and market share of firms. In addition, the findings also support the ES hypothesis on the importance of management productivity and investment

efficiency of firms. Past emphasis has focused on policy implications on firms and consumers, but the policy implications of BNM's role are also important. Since BNM has assumed the regulation of the Malaysian insurance market since 1988, it has introduced several initiatives to ensure the smooth and efficient running of the insurance market. However, technological advances also important to bring the financial performance of general insurance firms better.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk Ijazah Doktor Falsafah

STRUKTUR PASARAN, PRODUKTIVITI DAN PRESTASI KEBERUNTUNGAN SYARIKAT INSURANS AM DI MALAYSIA

Oleh

MUSTAZAR BIN MANSUR

November 2015

Pengerusi : Prof. Madya Alias Bin Radam, PhD
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Pasaran insurans di Malaysia semakin kompetitif apabila berlaku krisis ekonomi dan liberalisasi kewangan di Malaysia. Hampir sebahagian besar jumlah firma dalam pasaran insurans am di Malaysia mengalami kerugian setiap tahun. Campurtangan kerajaan melalui BNM melalui perubahan dasar dan peraturan seperti elemen kesolvenan setiap syarikat amat penting bagi meningkatkan tahap keyakinan pemegang insurans di pasaran. Namun, masih terdapat syarikat insurans besar di pasaran terpaksa diambil tindakan untuk dijual atau diambil alih akibat masalah kewangan syarikat mereka. Maka, setiap syarikat perlu tahu bahawa penguasaan pasaran yang tinggi tidak menjamin keutuhan kewangan atau prestasi yang baik pada masa depan. Titik tolak dari permasalahan tersebut, kertas ini mengkaji secara empirik hubungan antara struktur pasaran, produktiviti firma dan keuntungan firma insurans am di Malaysia. Bahagian analisis kajian menggunakan model struktur yang diwakili oleh tiga fungsi utama iaitu fungsi syer pasaran, fungsi keuntungan dan fungsi produktiviti. Model ini dibentuk berasaskan teori organisasi industri iaitu *Structure, Conduct and Performance* (SCP). Data siri masa bagi tempoh 40 tahun digunakan dalam penganggaran model penentu keuntungan dan produktiviti firma insurans dengan menggunakan kaedah Kuasa Dua Terkecil Dua Peringkat (2SLS). Analisis kajian ini cuba menguji tiga hipotesis utama SCP iaitu hipotesis SCP, hipotesis *Relative Market Power* (RMP) dan hipotesis *Efficient-Structure* (ES). Dapatan kajian dalam model 1 menunjukkan fungsi keuntungan firma insurans am mempunyai hubungan yang positif dan signifikan dengan pendapatan premium dan pulangan atas pelaburan. Manakala, fungsi keuntungan firma mempunyai hubungan negative dan signifikan dengan syer pasaran, pusing ganti jumlah aset dan harga insurans. Fungsi syer pasaran pula mempunyai hubungan yang positif dan siginfikan dengan tingkat produktiviti pengurusan firma, nisbah penumpuan pasaran bagi 10 firma terbesar dan aktiviti pergabungan dan pengambilalihan. Sebaliknya, pembolehubah lain seperti produktiviti buruh, pulangan atas pelaburan, tingkat harga dan deregulasi mempunyai hubungan negatif yang signifikan. Bagi fungsi produktiviti dalam model 2 pula, terdapat hubungan positif yang signifikan antara syer pasaran, produktiviti pengurusan, pulangan atas aset, komisen agen dan pusing ganti aset tetap dengan fungsi produktiviti firma insurans am. Manakala pembolehubah produktiviti buruh dan pulangan atas pelaburan pula mempunyai hubungan negatif dan signifikan dengan fungsi produktiviti firma insurans am. Dapat disimpulkan keputusan kajian ini menerima hipotesis SCP tentang peranan nisbah penumpuan pasaran firma dan syer pasaran firma. Selain itu, kajian ini turut menerima hipotesis ES tentang kepentingan produktiviti pengurusan dan kecekapan pelaburan firma di pasaran ini.

Penekanan yang lalu telah memberi tumpuan kepada implikasi dasar mengenai firma dan pengguna, tetapi peranan BNM juga penting dalam sektor ini. Sejak BNM telah mengambil alih pengawalan pasaran insurans Malaysia sejak tahun 1988, ia telah memperkenalkan beberapa inisiatif bagi memastikan kelancaran dan kecekapan pasaran insurans. Namun, kemajuan teknologi juga penting untuk membawa prestasi kewangan firma insurans am yang lebih baik.

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Last, but not least, to my late father who has given me the care and confidence in pursuit of life.

I certify that a Thesis Examination Committee has met on 17 November 2015 to conduct the final examination of Mustazar bin Mansur on his thesis entitled "Market Structure, Productivity and Profitability Performance of Malaysian General Insurers" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Doctor of Philosophy.

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I hereby confirm that:

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This is to confirm that:

- ¶ the research conducted and the writing of this thesis was under our supervision;
- ¶ supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) are adhered to.

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2SLS	Two Stage Least Square
3SLS	Three Stage Least Square
ACC	Absolute Capital Cost
ADS	Advertising Intensity
AFAS	Agreement on Services
BNM	Bank Negara Malaysia
CCD	Convenience Consumer Good Dummy Variables
CDR	Cost Disadvantage Ratio
CMP	Capital Market Master Plan
COM	Commission Ratio
COR	Capital-Output Ratio
CR10	Concentration Ratio for 10 biggest insurance firm in the market.
CR4	Concentration Ratio for the four biggest insurance firms in the market.
CRF	Concentration Ratio
$DCAP_t$	Relationship between the Annual Percentage Change in Refinery Capacity
$DCAP_{t-1}$	Annual Percentage Change in Refinery Capacity in the Previous Year
$DCAPU_{t-1}$	Difference in the Refinery Capacity Utilization in the Previous Year
DEA	Data Envelop Analysis
DER	Deregulation
DET	Debt-Equity Ratio
DIF_t	Annual Percentage Change in Refinery Capacity
DQ_{t-1}	Annual Percentage of Sales in the Final Composite Product
DST	Advertising Intensity
EH	Efficiency hypothesis
EMP	Employee Insurance
ENG	Engineering Insurance
EOC	Economies of Scope
EOS	Economies of Scale
EP	Expense Preference hypothesis
EPU	Economic Planning Unit
ES	Efficiency Structure
ESS	Efficiency-Structure Hypothesis
ESX	X-Efficiency-Structure Hypothesis
FIRE	Fire Insurance
FOR	Extent of Foreign Ownership
FSMP	Financial Master Plan
FTA	Free Trade Agreement
GATS	General Agreement on Trade in Services
GDP	Gross Domestic Product
GNP	Gross Domestic Product
$HERF_t$	Herfindahl Index of Industrial Concentration
IFA	Independent Financial Advisers
ILR	Inverse Loss Ratio
IO	Industrial Organization
IRS	Increasing Returns to Scale
LIB	Liability Insurance
LKRB	Capital Requirement Entry Barrier
LPR	Labor Productivity Ratio
LTIS	Natural Log of Absolute Industry Size
M&A	First time Merger & Acquisition
M&A1	First time Merger & Acquisition
M&A2	Second time Merger & Acquisition
M&A3	Third time Merger & Acquisition
M&A4	Fourth time Merger & Acquisition
MAA	Malaysian Automotive Association
MAT	Marine & Transit Insurance
MED	Medical Insurance

$MESQ_t$	Minimum Efficient Scale Refinery to Market Size
MFN	National Preferred Service
MIS	Miscellaneous Insurance.
MKP_t	Percentage Markups of a Composite Final Product on the Total Production Cost
MOT	Motor Insurance
MPMIS	Malaysian Insurance Sector Master Plan
MPR	Management Productivity Ratio
MPR	Management Productivity Ratio
MSR	Market Share Ratio
NDRS	Non-Decreasing Returns to Scale
NRT	Number of Refineries in the Current Year
PMS	Price-Costs Margins
PRT	Profit Ratio
R&D	Research and Development
RMP	Relative Market Power
ROA	Return on Assets Ratio
ROI	Return on Investment Ratio
RTS	Return to Scale
SCP	Structure Conduct Performance
SUBQ	Extent of Suboptimal Capacity
TAT	Total Asset Turnover
TFP	Total Factor Productivity
U.K.	United Kingdom
U.S.	United State of America

CHAPTER 1

AN OVERVIEW OF THE MALAYSIAN GENERAL INSURANCE INDUSTRY

1.1 Historical Background

In 1967, the services sector in Malaysia contributed 45.85 per cent of the Gross Domestic Product (GDP) compared to agriculture and mining with 38.83 per cent and manufacturing, 11.22 percent (Economic Report, 1973). The contribution of the services sector increased to 55.4 per cent in 2015, while agriculture and mining sector decreased to 14.4 per cent and manufacturing sector increased to 24.8 per cent (Economic Report, 2015). Of the five subsectors the business and non-government services category of the services sector, finance, insurance, real estate and business services subsector has been the highest contributor to GDP since 2002, exceeding wholesale and retail trade, hotels and restaurants sub- sector (Economic Planning Unit Report, 2015).

The GDP contribution of the service sector in 2015 was RM485,803 million or 55.40 percent compared to the manufacturing sector with RM216,921 million or 24.80 percent of total GDP. The services sector achieved the highest average annual growth rate of 8.1 percent during the Ninth Malaysia Plan and this is expected to increase to 8.3 per cent per annum in the Tenth Malaysia Plan. Meanwhile, the manufacturing sector which is too dependent on global demand has been badly hit by the global recession. As a result the GDP contribution declined from 30.9 percent in 2006 to 26.7 percent in 2010 (Ninth Malaysia Plan, 2011). Premium income of insurance companies in 2013 was RM31,923.9 million, which accounted for 4.3 percent of total GDP.

To encourage more foreign and domestic investments, Malaysia liberalized 27 sub-services in the services sector. The Foreign Investment Committee (FIC) was abolished and the equity conditions imposed on non-strategic sectors were eliminated. The conventional and Islamic financial sectors were also subject to the liberalization process. The role of financial services as a key driver of economic growth is clearly shown through the mobilization of funds for investments in Malaysia. The gradual liberalization of the financial sector through the implementation of the Financial Master Plan (FSMP) and the Capital Market Master Plan (CMP) is expected to maintain the stability of the sector and improve the ability to compete in an increasingly globalized and liberalized market. Insurance funds, provident funds and pension funds in total contributed RM374, 114 million in 2005, which subsequently increased to RM548, 294 million in 2012 (Bank Negara Malaysia, 2010). In the Tenth Malaysia Plan, Malaysia aims to increase the services sector's GDP contribution to 61 percent in 2015 or RM44.6 billion in new investments over the period of the plan. To achieve this target, further liberalization of the sector is required. During the Tenth Malaysia Plan, this sector would continue to be

liberalized under the ASEAN Framework Agreement on Services (AFAS) and the Free Trade Agreement (FTA). In the AFAS, at least 70 percent ASEAN equity ownership level in all 128 sub-sectors is permitted by the year 2015 compared to only 63 sub-sectors involved in 2008 (Ninth Malaysia Plan, 2006 and Tenth Malaysia Plan, 2011).

The insurance industry achieved a growth rate of 11.1 percent of premium income a year due to strong demand and success of the insurance □F□R□P□S□D□Q□L□H□V□¶□□ □P□D□U□N□H□W□□ □S□H□Q□H□W□U□D□W□L□ bancassurance. Life insurance fund assets, general and composite, corporate securities and debt securities increased from 41.2 percent in 2001 to 49.9 percent in 2005 and 54.5 percent in 2010. In an effort to strengthen the financial position of insurance companies, Bank Negara Malaysia (BNM) increased the minimum statutory capital requirement of RM50 million to RM100 million in 2001. This is to encourage merger in the industry, where 16-merger activities, involving 29 companies, were present in the plan period (Ninth Malaysia Plan, 2006).

During the Ninth Malaysia Plan, from 2006 until 2010, the rate of employment growth was relatively slow, around 1.6 percent. There were 0.9 million jobs created in the market, especially in the services sector. Malaysia is still at a full employment level, given the unemployment rate of below 4 percent per annum. Total services sector employment in 2010 was the highest at 6,214 million people or 53.4 percent of total employment while the second highest sector was manufacturing, with 3,209 million people or 27.6 percent of total employment (Tenth Malaysia Plan, 2011).

The contribution to employment of the finance, insurance, real estate and business services sub sector in 1970 was 12.3 percent and it declined to 7.03 per cent in line with the globalization process in the world financial markets. This sub sector is expected to have tremendous growth prospects because of demographic changes, increased wealth, and greater awareness among consumers. According to the Tenth Malaysian Plan, the per capita income in Malaysia is expected to increase from RM19, 079 in 2005 to RM26,420 in 2010. As for the insurance companies, their financial position and reputation of the insurance company should be enhanced to face a more competitive and liberalized market (Tenth Malaysia Plan, 2011).

The central bank defines insurance as a risk transfer by an individual or an organization (known as the policyholder) to the insurance company. In return, the insurance company receives payment in the form of premiums. If policyholders incur losses, the insurance company would pay compensation for the loss or damage. Insurance is defined as an instrument which is used to reduce risks through a combination of a number of sufficient values to offset the individuals who are expected to be shared. In the process of this

insurance, and this uncertainty can be reduced if there is a loss it will be shared.

According to Bank Negara Malaysia (BNM), the insurance industry achieved significant growth in the 1990s. The total paid- up capital of insurance firms incorporated in Malaysia increased more than fivefold from RM0.6 billion as at end-1988 to RM3.4 billion as at end 1998 and RM7.7 billion in 2013. Assets of the insurance companies and premium income of the life insurance and general insurance sectors also increased from RM7 billion and RM2.1 billion in 1990 to RM38.7 billion and RM10.9 billion respectively, in 2000, which exceeds the average growth rate of the Gross National Product (GNP).

In 2012, the general insurance industry recorded a growth of 37% per year in terms of gross direct premiums to reach RM10,471.1 million, compared with an increase of 7.05% per year in 2002. The motor sector continued to dominate, and accounted for 48.1% of gross direct premiums of general insurance industry. In line with the increase in net premiums, net retention ratio increased to 90.3% from 89.3% in 2013. The overall claims ratio of the general insurance industry declined to 62.4% in 2013 (2012: 63.4%). Insurance firm's underwriting margin improved by 30.38% to RM855.4 million in 2012 compared to RM656.1 million in 2011. Combined with the write-back of provision for diminution in the value of corporate securities and debt, recovery of bad debts as well as the sale of assets and investments, the operating profits of general insurance industry grew significantly to RM767.4 million. Total assets of general insurance funds grew by 6.92% to reach RM22,743.0 million in 2012.

General insurance recorded a negative growth of 0.035% in terms of the total premium income earned, that is, RM86.63 million in 2012 (2011: RM86.66 billion). Total premiums for motor insurance rose by 47.96% to RM6.107 billion in 2012 (2002: RM3.15 billion) and non-motor insurance premium by 52.02%to RM6.63 billion in 2012 (2002: RM3.31 billion). Value of operating gains and underwriting gain or loss is determined by the premium income earned and net claims incurred each year. In the past 10 years between 2003 and 2012, the net claims incurred compared to premiums paid decreased from 61.8% (2003: RM3.534 billion) to 60.05% (2012: RM6.083 billion). Whereas, the number of net claims incurred for motor insurance increased from 66.13% (2003: RM2.142 billion) to 76.24% (2012: RM4.257 billion), which is one of the reasons a lot of general insurance firms suffer losses every year. BNM had to intervene so that each firm could reduce losses and survive and become competitive in an increasingly challenging market. The Division of Insurance, BNM recorded a lower total net investment income, that is, gains or losses from sales of investments and changes in fair value of portfolio investments, of RM36.5 million (2009: RM45.2 million). The lower revenue was mainly due to the disposal of certain investment assets worth RM85.0 million by the Division to the shareholders' fund during the year to repay the funds. The situation improved in the subsequent year when the

amount of gross premiums earned increased and the claims ratio was better. The General Insurance Division recorded an underwriting profit of RM13.8 million in 2010 compared to an underwriting loss of RM7.9 million in 2009. For the year 2019, the Division of General Insurance recorded a profit before tax of RM55.5 million, an increase of 48.0%, compared to a profit before tax of RM37.5 million in 2009.

For the financial year ended 31 December 2012, the BNM recorded a revenue of RM263 million, comprising RM214.3 million in premiums and RM48.7 million in investment income, compared to budgeted revenue of RM248.7 million. Operating expenses amounted to RM75.3 million, compared to RM95 million in the earlier budget, a positive difference of 21%. As a result, the corporation's net surplus for the year amounted to RM187.7 million.

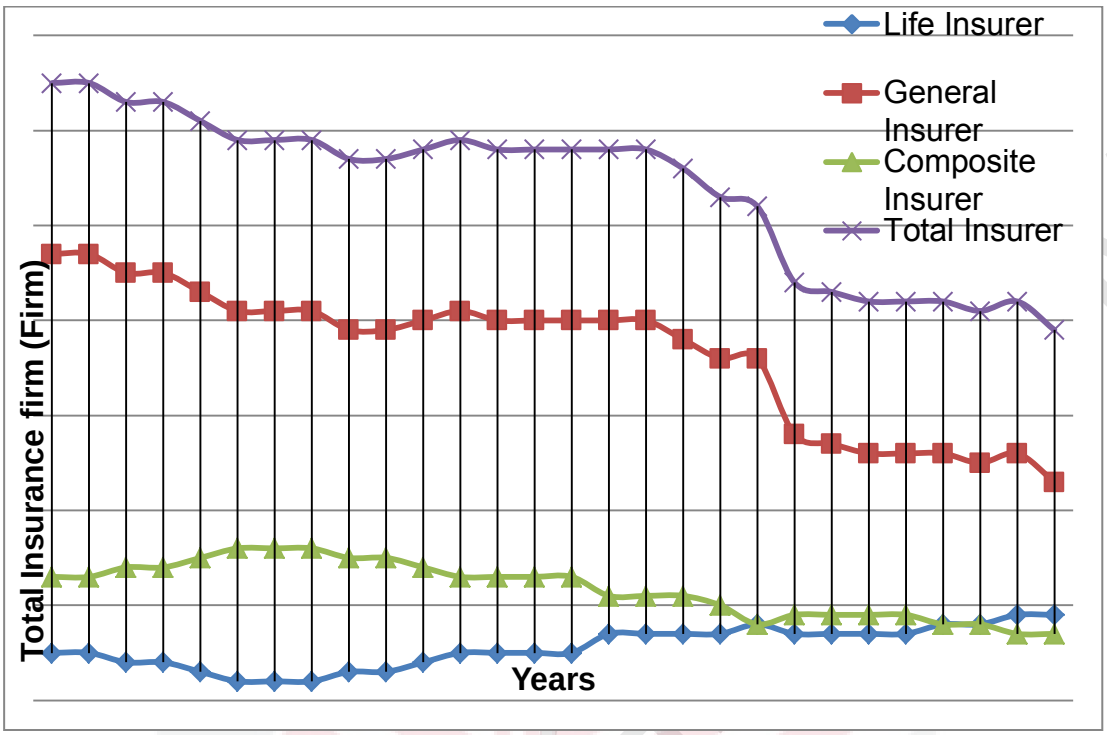
1.2 The Malaysian General Insurance Industry

(a) Market Structure

The insurance market is divided into two main business groups, the direct insurance and reinsurance professionals. Direct insurance groups could be classified into three types namely, companies that offer only general insurance, life insurance companies which offer only life insurance and companies that offer both general and life insurance known as composite insurance companies. The reinsurance occurs when multiple insurance companies share risk by purchasing insurance policies from other general insurance firms to limit the total loss the original general insurance firms would be too great of a burden for single insurance company to handle alone (Investopedia, 2015).

According to Figure 1.1 below, general insurance as a group had the highest number of companies. In 2010, 30 companies offered general insurance and six offered general reinsurance, which constitutes 78.26 per cent of the total number of companies in the insurance sector. However, the premium income generated from general insurance is RM10,111.8 million, which is 31.67 per cent of total premium income of RM31,923.9 million, compared to life insurance premium income of RM21,812.1 million or 68.33 per cent in 2010. The investment income generated from general insurance funds in 2010 was RM780.7 million compared to that of life insurance of RM5,435.0 million, or almost seven times larger than the investment income of general insurance.

Figure 1.1. Total Number of Insurance Companies in Malaysia from 1982 to 2010



Source: Calculated from BNM Insurance Annual Report (2000-2010)

Foreign insurance companies[1] have dominated the insurance sector in Malaysia since the era before independence. In the first quarter of the 20th century, most insurance companies in Malaysia were operating from Singapore. In 1930, the insurance companies that set up branches in Malaysia were controlled from Singapo□U□H□□ □D□Q□G□□ □W□K□H□□ □F□R□P□S were located in other countries, such as in the United Kingdom. The first local insurance company was established in 1955. In 1964, there were only six general insurance companies operating in Malaysia compared to 79 foreign insurance companies offering similar services. However, the number of foreign insurance companies started decreasing after the enforcement of the Insurance Act 1963 (amendment 1983). The number of foreign companies totaled eight in 1986, while the number of local general insurance companies increased to 51. The Insurance Act 1996 imposed a condition that all branches of foreign insurance companies (other than reinsurance company) operating in Malaysia should be incorporated before June 30, 1998 (Bank Negara Malaysia, 1996a).

[1] The list of foreign insurance company, refer on Table 6.7.

(b) Regulations and Government Institutions

The main objective of supervision is to ensure that insurance firms[2] manage the business properly and prudently in order to protect the interests of policyholders and maintain their confidence in the insurance industry. Insurance products are difficult to understand and therefore the insurance □F□R□P□S□D□Q□\□□ □P□X□V□W□□ □G□L□V□F□O□R□V□H□□ □F□O□H□D□U□ □3□R□O□L□F□\□K□R□O□G□H□U□¶□V□□ □I□X□Q□G□□ □L□V□□ □P□X□F□K□□ malpractice in the utilization of the fund would affect policyholders and consumer confidence as well.

There are four objectives for supervision of the insurance sector by government institutions. Firstly, it is to protect the interests of the public. To achieve this, the authorities should ensure that the insurance firm remains solvent and fulfills the obligations to policyholders. Secondly, it is to encourage justice and fair play by the insurance company, brokers, and adjusters. Thirdly, it is to foster a level of professional competency and honesty among insurance firms. Finally, it is to encourage the development of insurance firms who are active in the market (Bank Negara Malaysia, 1996).

Prior to 1963, insurance operations were governed by several state laws and two acts namely, the Insurance Companies Ordinance (Assurance) 1948 and Life and Fire Insurance Companies Ordinance 1948. However, both the ordinance had weaknesses and caused widespread bad practices among insurance firms. The problem prevailed because the ordinance did not provide adequate power of enforcement to the authorities when the insurance companies did not fulfill the minimum requirements in terms of solvency. This resulted in the insurance companies underwriting life insurance policies with the same premium, without taking into account the age and no evidence of □µ□L□Q□V□X□U□D□E□O□H□□ □L□Q□W□H□U□H□V□W□¶□□□□ □,□Q□□ □□□□□□ amended and insurance companies were required to have a minimum paid-up capital of RM1 million. In addition, policy formulation was prohibited unless a qualified actuary confirmed the premium rate policy. The new insurance company was to be established upon proof of business in accordance with sound insurance principles (Bank Negara Malaysia, 1996).

Bank Negara Malaysia (BNM) took over the role of supervision in 1988. This was to ensure an integrated approach in the control and supervision of financial institutions in view of the cross holdings and merger of interests between insurance companies and banks. Supervision of the insurance sector was undertaken by the Office of the Director General of Insurance, Treasury, Malaysia before being taken over by BNM. It was then that the Insurance Act 1963 was enacted. This act came into force on January 21, 1963 in Peninsular Malaysia and on January 1, 1965 in Sabah and Sarawak. This act

[2] Insurance firms include insurance companies, brokers and insurance agents (all parties are □N□Q□R□Z□Q□□□D□V□□□µ□O□L□F□H□Q□V□H□H□¶□□□H□Q□V□K□U□L□Q□H□G□□□L□Q□□□

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of Australia. The three purposes of this act are: first to create prudent management of the insurance industry, second to encourage the establishment of local insurance companies and thirdly to assist economic development through investment funds. Three amendments were made, that is, in 1975, 1978 and 1983 to the Insurance Act 1963 to meet the changing needs and demands of regulation and supervision. Minor amendments were also made to create legislations based on need and address issues that arise. The Malaysian Treasury administered this act until 1 April 1988, after which it came under the purview of BNM (Bank Negara Malaysia, 1996).

BNM also made some amendments to the laws, issued guidelines and used persuasion when weaknesses were detected in the implementation of this act. Amendments were made to Section 28 of the Insurance Act 1963 in March 1991. BNM tried to resolve the insolvency issue faced by Mercantile Insurance, the largest motor insurance company, by appointing two partners from accounting firms within a period of two years. This was aimed at taking control and operating the business to determine the true financial position and revive the company. In addition, BNM appointed three officials from the accounting firm and a lawyer as additional directors on the board of directors to evaluate the financial position and review the strategy and corporate plans of the company Pan Global Insurance. Measures taken to address the problems of the two general insurance companies were different. BNM was confident that the two companies would perform better under the new management and it also served as a stern warning to the other companies (Bank Negara Malaysia, 1991).

As mentioned earlier, BNM amended the laws whenever weaknesses were detected in the implementation of this act. BNM introduced the Insurance Act, 1996 to replace the 1963 Act taking into consideration the dynamic industry and the ongoing integration of financial products and services. The Insurance Act 1996 established standards and outlined public policy, while detailed requirements were set by the guidelines, circulars, and codes of best business practices from time to time when problems or issues arise. This act was gazette on 26 September 1996 and enforced on 1 January 1997. The scope of the act extended to the whole business, especially the increasing □Q□X□P□E□H□U□□ □R□I□□ □L□Q□V□X□U□D□Q□F□H□□ □F□Acts of□S□D□Q□L□H
this act are as follows.

First, to ensure that the insurance firm□¶□V□□□I□L□Q□D□Q□F□L□D□O□□□S□R□V□
be able to compete and sustain shareholder returns, the minimum capital requirement was set by BNM. The minimum capital requirement was fixed between RM20 million to RM100 million, depending on the type of insurance business. For reinsurance companies, the minimum capital requirement is RM20 million and the company should rank among the 100 best in the world and have a surplus to shareholders fund of US$100 million, while the liabilities of the branch should be supported by the head office assets. The

level of broker and adjuster capital requirements is higher despite the small capital needs of business. This is because the resource needs for training and recruitment of qualified personnel are very important for the insurance sector.

In section 46 of the Insurance Act 1996, BNM set the amount and solvency margins for each insurance company. This margin is derived from the surplus of assets over liabilities as absorber of unexpected changes in claims. The value of this margin was increased from RM5 million in 1963 to RM50 million in 1996. In section 58 of the Insurance Act 1996, BNM outlines the forms of admitted assets to support the solvency of insurance firms. With respect to the shareholders and management, BNM deliberately avoided those who are not honest, less competent, and less experienced to be appointed and also those with power in the industry. Approval must be obtained from the Minister of Finance to establish a new insurance company. Approval from BNM is required for appointment of brokers and adjusters. Section 70 stipulated that a □Z□U□L□W□W□H□Q□□□D□S□S□U□R□Y□D□O□□□I□U□R□P□□□%□1□0□□□W□F order to appoint directors, chief executives and managers in their respective insurance companies.

The preparation of financial reports and the appointment of auditors and actuaries are also monitored by BNM. The underlying objective is to monitor the financial position of insurance companies, brokers, and adjusters. Each insurance company must prepare the accounts in accordance with approved accounting standards of BNM. Insurance companies are also required to submit comprehensive information about the financial position and business performance on a quarterly and annual basis. Early warning systems are put in place to assist BNM to identify aspects that need detailed audit and therefore checked in the initial stages. In section 82, BNM increased the powers and responsibilities of the auditor of the compliance report of an insurance company. Power is given to the auditors to seek full disclosure of all information needed. Auditors appointed by the insurance company must obtain approval from BNM. In section 92, BNM has the authority to verify the financial reports of insurance companies before being presented in the annual general meeting. This is done to avoid billing of dividend declarations to shareholders that might affect the interests of policyholders. There are other new provisions, such as each insurance company must comply with the □µ□D□S□S□R□L□Q□W□H□G□□ □D□F□W□X□D□U□\□¶□□ □H□□□□□□K□□ □\□H□D financial condition of insurance companies and they are authorized to obtain all information considered necessary.

Given strong competition in the market, insurance companies tend to make creative and misleading sales. Therefore, BNM has to supervise the forms used, policy proposals, brochures and sales illustrations of insurance companies. In terms of business practices, section 142 authorizes BNM to determine the code of good practices for actuaries to decide on the premium rates. Insurance companies are required to keep forms, brochures, and sales illustrations in BNM for a period of 30 days from the date of offer of the

policies. Section 145 states that insurance companies must revise the premium rate or premium rate justification. The act also encourages the settlement of claims to be fast. To expedite the settlement of claims, policyholders could provide a nominee to BNM to pay the claim without the order of the Probate (Letters of Administration or Distribution Order). Section 161 provides for insurance companies to pay a compound interest of not less than four per cent per annum on the amount of life insurance or death benefits. Meanwhile section 31 states the licensee must manage without the delivery of business exclusively in other organizations. Otherwise his license would be revoked. The licensee is also prevented from doing other businesses except with approval from BNM.

Under this act, the amount of the fine is increased to commensurate with the offense. The maximum fine was increased to RM10 million or a maximum prison term of 10 years or both. For non-specific offenses, the maximum fine is RM500,000 or imprisonment for 6 months or both. However, for a continuing offense, a fine of RM10,000 is imposed or jail for 2 days or both for each day of the offense. Section 206 states that the damages for the offense incurred are payable by a director, controller, officer, and partner or individual, unless they are able to proof that the offense was committed without their knowledge.

The last aspect of this act is concerning local incorporation of the insurance company. All branches of foreign insurance companies (other than reinsurance company) operating in Malaysia were to be incorporated before 30 June 1998. This is to increase direct and permanent financial commitment towards the development of the country (Bank Negara Malaysia, 1996).

(c) General Agreement on Trade in Services (GATS)

In July 1995, Malaysia signed the GATS, that is, the international interim agreement on the liberalization of world trade in financial services for 10 years. This follows from the Uruguay Round world trade pact in Marrakesh in April 1994 and the World Trade Organization (WTO) was to take over the implementation of the General Agreement on Trade and Tariffs. GATS reached an agreement on the finance part of the framework of multilateral rules for the first time and the liberalization of financial services proceeded gradually. GATS obligations are of two types namely, general and specific obligations. As for the general obligations, three things had to be implemented. The first is trade without discrimination, where the National Preferred Service (MFN) requires each member state to be treated equally without imposing any conditions (removal of restrictions). Unequal treatment or practices that deviate from the MFN are subject to negotiation. The second is the transparency of information, for example, the requirement to provide adequate information during implementation of GATS. Finally, the order of the rules of State, that is, GATS does not restrict the power of the supervisor in

the body, though it stipulates that prudential regulations have to be reasonable and fair (Bank Negara Malaysia, 1995).

The specific obligations are the special offers made by member states on trade in services. It affects the supply of foreign services providers, such as by limiting the number or value of the entry of foreign suppliers. Undertakings are made to provide the same treatment to foreign and domestic insurance companies. Liberalization of services sector is allowed taking into account national objectives and the level of development of the sector (Bank Negara Malaysia, 1995). Malaysia has been urged to open up further its market and increase foreign equity in financial services. The main attraction of Malaysia is its rapidly growing economy and strategic position in the heart of Southeast Asia. However, foreign suppliers find that Malaysia offers scant opportunities for foreign suppliers to enter the market. However, 11 of the 61 insurance companies established in 1994 are foreign suppliers, eight of the insurance companies have more than 50 percent foreign equity, total foreign equity is 42 percent, seven companies controlled 73 percent of the life insurance market premiums and 52 percent of total assets are held by foreign companies. Progressive liberalization is necessary for domestic insurance companies to compete on equal terms in the growing market. The restrictions are repealed gradually. Among the offerings made by Malaysia are new opportunities for insurance companies to enter Malaysia, foreign equity participation in the insurance sector, the opening of foreign branches, expatriate employment, ancillary services, and activities in Labuan IOFC (Bank Negara Malaysia, 1995).

There are profound implications of GATS for the insurance market in terms of the pressure of foreign participation opportunities in the industry and encouraging insurance companies to adapt quickly. Competition increases productivity, efficiency, and innovation of insurance companies. The faster the liberalization process, the quicker the local insurance companies are able to face international competition. BNM also encourages insurance companies to have sufficient capital and good management practices. Insurance companies also have to raise capital, increase underwriting skills and technical expertise and review corporate strategies to successfully expand the size of the market in a highly competitive environment (Bank Negara Malaysia, 1995).

(d) □0□D□V□W□H□U□□□3□O□D□Q□□□I□R□U□□□0□D□O□D□\□V□L□D□¶□V□

The objective of the Master Plan is to foster the ability of domestic insurance companies to compete in an increasingly open and competitive environment. In addition, the Bank wants to ensure that customers obtain products and services that meet their requirements. Therefore, the Malaysian Insurance Sector Master Plan (MPMIS) aims to develop an insurance sector that is efficient, effective, and stable to support the real economy and socio-economic objectives. To achieve these objectives, there is a need to develop a group of insurance companies that are able to provide world class products

and services, taking into account international commitments on the liberalization of this sector. The three specific objectives of MPMIS are to improve the performance of insurance companies, to liberalize the industry gradually to allow innovation of quality products, and to manage the transition so as to reduce instability and meet customers' needs (Bank Negara Malaysia, 2000).

Among the specific recommendations by MPMIS are to enhance the capabilities and competitiveness of domestic insurance companies through several measures. These include the use of alternative channels of internet and *bancassurance* to improve efficiency and productivity of insurance firms. In addition, restrictions for outsourcing and expatriates would be eased to obtain the scale, skills, and technology. To increase the share of the life insurance market, the use of pension funds by policyholders is encouraged. BNM also relaxed restrictions on setting up branches to increase market penetration of insurance companies. Insurance companies are also allowed to distribute personal financial services products in order to increase the amount of local financial service providers in the market. Qualified insurance companies are also allowed to sell *takaful* products to promote the development of the *takaful* sector. BNM is also attempting to increase research and development (R&D) as well as attract talents by easing restrictions, especially allowing for flexible operating expenses. The final step to improve the capacity and competitiveness of domestic insurance companies is through price controls. This would encourage the development of underwriting skills and more sophisticated pricing techniques. More competitive prices are the result in value terms of a combination of incentives, specialization and the development of more efficient distribution channels (Bank Negara Malaysia, 2000).

Other specific recommendations of the MPMIS are to encourage merger and use of best practices. Among the steps taken by the Bank are to increase gradually the statutory minimum paid-□X□S□□ □F□D□S□L□W□D□O□□ □D□Q□G□□ □ proper' rule. This rule ensures that the minimum qualifications, performance incentives, and evaluation of directors and senior management executives of insurance companies are carried out. In addition, insurance companies are also required to upgrade the agency force to raise the standard of examinations and the introduction of additional eligibility requirements through continuing education programs. Bank Negara introduced a qualified IFA to enable financial services to provide independent advice. BNM further introduced the 'best advice' rules to ensure that intermediaries and agents remain with the company. The final step is use of best practices to strengthen unfair trade practice rules to enhance competition and more equitable market operations (Bank Negara Malaysia, 2000).

The MPMIS also endeavors to stimulate innovation and enable customers to obtain excellent services through the process of liberalization. BNM allows for a limited number of new insurance licenses in specific businesses to innovative insurance companies. To stimulate market innovations, the Bank permits non-financial institutions to acquire the insurance company directly. To encourage the participation of foreign companies, BNM offers additional licenses for foreign companies with insurance professionals and relaxed foreign equity limit for the entry of new players into the market. Through these specific recommendations the Bank hopes to build the capacity of domestic insurance companies and encourage mergers to increase innovation and best practices. With proper implementation, the market would be able to reach international standards and become more competitive and efficient in the future (Bank Negara Malaysia, 2000).

(e) Issue and Challenges

Since 1978, the general insurance industry in Malaysia has experienced transformation in the behaviour of firms due to mergers and acquisitions (M&A) and changes in ownership of the company (see Table 1.1). Each activity is regulated by the government so that it does not cause adverse effects on small firms or consumers in the market. The industry is being regulated by Bank Negara Malaysia (BNM) since 1988.

The close supervision by BNM through new rules and direct instructions reflects government intervention due to market failure[3]. BNM aims to raise the level of consumer confidence and the level of healthy competition in the market. Despite the industry being regulated by the Ministry of Finance and BNM since Independence, several companies in this industry are still experiencing losses, had to exit the market or close operations or are acquired as a result of external factors[4] beyond our control (see Tables 1.1 and 1.2).

[3] Market failure is one reason government intervention in the market. According to Nor Aini et al. (2000), the factors contributing to market failures is incomplete market information and lead to the user being exploited by the firm, the existence of negative externalities and problems of private monopolies in the market and the importance of the provision of public goods on the market.

[4] Refer to Mustazar et al. (2015).

Table 1.1. Number of General Insurance Firms, Number of Firms Experiencing Loss and Exit Market between 1970 and 1985

Year	Total Domestic Firms	Total Foreign Firms	Total Firms	Total Firms with Losses	Percentage Firms with Losses	Total Firms Exit Market
1970	7	72	79	24	30.38%	0
1971	8	72	80	33	41.25%	0
1972	12	70	82	46	56.10%	2
1973	12	70	82	41	50.00%	0
1974	15	65	80	31	38.75%	5
1975	17	65	82	47	57.32%	0
1976	21	58	79	41	51.90%	7
1977	24	44	68	39	57.35%	9
1978	31	33	64	47	73.44%	3
1979	31	31	62	26	41.94%	0
1980	35	28	63	29	46.03%	0
1981	37	23	60	31	51.67%	2
1982	40	22	62	32	51.61%	2
1983	43	20	63	32	50.79%	2
1984	45	17	62	33	53.23%	3
1985	49	10	59	38	64.41%	3

Source: Modified from BNM Annual Reports.

Table 1.1 and Table 1.2 indicate that during the 26 year period more than 40 per cent of the general insurance companies in Malaysia suffered losses annually. Since the taking over of the supervision of the insurance industry by BNM, M&A activity focused on foreign insurance companies being transferred to local insurance companies.

In 1990, 87.5 per cent of general insurance firms were owned by local companies compared to only 9 per cent in 1970. Although the market structure of the industry shows a higher rate of concentration, the rate of efficiency and performance of the industry during the period 1985 to 2012 was still in a state of fluctuation (Mustazar M., 2011).

Table 1.2. Number of * H Q H U D O , Q V X U D Q F H, Number of Firms Experiencing Loss and Exit Market from 1990 to 2012

Year	Total Domestic Firms	Total Foreign Firms	Total Firms	Total Firms with Losses	Percentage Firms with Losses	Total Firms Exit Market
1990	49	7	56	31	55.36%	2
1991	48	7	55	32	58.18%	0
1992	48	7	55	23	41.82%	0
1993	48	7	55	20	36.36%	0
1994	48	7	55	10	18.18%	0
1995	47	8	55	12	21.82%	1
1996	46	7	53	6	11.32%	1
1997	47	6	53	14	26.42%	0
1998	47	6	53	13	24.53%	0
1999	47	6	53	23	43.40%	0
2000	51	2	53	27	50.94%	0
2001	48	2	50	26	52.00%	0
2002	45	2	47	29	61.70%	0
2003	43	2	45	22	48.89%	0
2004	36	2	38	12	31.58%	0
2005	36	2	38	11	28.95%	0
2006	35	2	37	6	16.22%	0
2007	35	2	37	9	24.32%	0
2008	34	2	36	14	38.89%	1
2009	35	2	37	12	32.43%	1
2010	31	0	31	6	19.35%	1

Source: Modified from BNM Annual Reports.

Based on Table 1.1 and 1.2, each year more than 13 percent of the general insurance firms suffer losses. The market was facing difficulties for 20 years out of the 43 years analyzed, with more than 50 percent of firms experiencing losses, particularly during the years when Malaysia was hit by the economic crisis. Thus, market failure and the failure of these firms had to be curbed to maintain the solvency level of firms and increase consumer confidence in the general insurance services in Malaysia. Apart from interventions by BNM, the inherent features of the firm or the firm's behavior also play an important role in determining the strength of the firm in the long term. The profits of a general insurance firm in Malaysia are uncertain each year. This is because the claims arising each year are unpredictable (Mustazar M. & Rizaudin S., 2010).

Table 1.3. Factors That Caused Losses in Selected General Insurance Firms in 1972

General Insurance Company	Net Claims Incurred (%)	Agents Commission (%)	Expenses & Other Outgo (%)	Total[5] (%)
)LUVW *HQ				
-HUQHK				
0DOD\VLD $PHULFDQ				
0DOD\VLD 1DWLRQD				
0DOD\VLD				
0DOD\V-L2DS				
6RYHUHLJ *HQHUDO				
6WUDLWV				
Amsterdam London	368.16	14.76	3.87	386.79
American Home	90.16	74.27	23.00	187.43
Atlas Assurance	35.98	51.58	31.99	119.56
Hercules	59.95	-14.61	174.41	219.74
London Assurance	108.31	79.69	47.98	235.98
Taisho Marine & Fire	53.71	32.19	22.33	108.23

Source: Modified from BNM Annual Reports.

Table 1.3 indicates that some general insurance companies in Malaysia suffered losses despite favourable economic conditions. In 1972, one firm suffered a very high loss rate compared to the amount of premium income earned during the year. This was a Malaysian American firm, a general insurance firm established in Malaysia in 1972. The firm had to incur huge □O□R□V□V□H□V□□□L□Q□□□W□K□H□□□I□L□U□V□W□□□\□H□D□U□□□R□I□□ and management expenses. In that year the firm received a total of RM2,688 premium revenue b□X□W□□□V□S□H□Q□W□□□5□0□□□□□□□□□□□□□□□□□R□Q□□ on management expenses. This resulted in the firm experiencing a loss of RM32,242. However, in the following year the firm began to earn a profit of □5□0□□□□□□□□□□□□□□□□□□□□□□ □V□S□H□Q□G□L□Q□J□□ □R□Q□O□\□□ □5□0 RM228,066 on management expenses during the year.

Other new firms that experienced losses were Jerneh, Malaysia National, Malaysia Pacific and Sovereign General. Malaysia Pacific and Sovereign □*□H□Q□H□U□D□O□□ □L□Q□F□X□U□U□H□G□□ ons and management □G□X□H□□ □F□R□V□W□V□□□□□+□R□Z□H□Y□H□U□□□□□0□D□O□D□\□V□L□D□□□1□D□W □D□J□H□Q□W□V□¶□□ □F□R□P□P□L□V□V□L□R□Q□V□□ □F□R□P□S□D□U□H□G

[5] Firms experience losses when value exceeds 100%.

expenses. Analysis of the current year's data shows that almost all firms incorporated in Malaysia suffered losses but not due to higher net claims □L□Q□F□X□U□U□H□G□□□□□-□H□U□Q□H□K□¶□V□□□O□R□V□V□H□V□□□Z□H□ year.

However, the losses are not only applicable to new firms, but also to existing firms in the market. For example, three general insurance firms that have been around since 1963, all incorporated in Malaysia (known as Malaya), namely Malaysian Co-operative Insurance Society, United Insurance and United Malayan Insurance suffered losses almost every year since their existence in the market. Firms established outside Malaysia were also not exempt from suffering losses. For example, Amsterdam London established in Holland, suffered losses due to higher net claims incurred. The situation was the same with Taisho Marine & Fire from Japan. In contrast, Hercules from India allocated a higher percentage of its operating expenses to cover the losses in 1972. This is because the firm had opened a branch in Malaysia in that year. For the subsequent two years the firm incurred losses until the firm had to exit the market in 1975.

Meanwhile, foreign firms such as American Home (from U.S.) and London Assurance (from U.K.) suffered losses due to two factors: the amount of □D□J□H□Q□W□V□¶□□□F□R□P□P□L□V□V□L□R□Q□V□□□D□Q□G□□□K□L□J□K□ concluded that most foreign firms or firms established outside of Malaysia suffered losses not due to higher operating expenses, but due to higher net claims incurred. The situation is different with the problems faced by general insurance firms established in Malaysia and this could be associated with the level of efficiency or productivity of the firms. Apart from internal factors such as efficiency, integrity and financial strength of the firm, the source of each of these losses might be attributed to other external factors such as the economic situation of a country, the level of financial literacy of the people or the capability or the purchasing power of consumers in the market. As could be observed from Table 1.1 above, several firms exited the market during the period 1976 to 1978, compared to the years before or after that. Moreover, the proportion of firms that suffered losses is high, from 50 per cent to 73 per cent.

Table 1.4. Factors That Caused Losses in Selected General Insurance Firms in 1975

General Insurance Company	Net Claims Incurred (%)	Agents Commission (%)	Expenses & Other Outgo (%)	Total[6] (%)
□)□L□U□V□W□	□□□□□□	□□□□□□	□□□□□□	□□□□□□
□-□H□U□Q□H□	□□□□□□	□□□□□□	□□□□□□	□□□□□□
□/□R□Q□G□R□ □3□D□F□L□I□L	□□□□□□	□□□□□□	□□□□□□	□□□□□□
□0□D□O□D□\□K	□□□□□□	□□□□□□	□□□□□□	□□□□□□
□0□D□O□D□\□V □1□D□W□L□R□	□□□□□□	□□□□□□	□□□□□□	□□□□□□
□0□D□O□D□□2□V	□□□□□□	□□□□□□	□□□□□□	□□□□□□
□0□□□1□□□5□□	□□□□□□	□□□□□□	□□□□□□	□□□□□□
□3□D□F□L□I□L	□□□□□□	□□□□□□	□□□□□□	□□□□□□
□6□D□I□H□W□V	□□□□□□	□□□□□□	□□□□□□	□□□□□□
□7□D□O□D□V□	□□□□□	□□□□□□	□□□□□□	□□□□□□
Tokio Marine & Fire	82.74	38.45	19.53	140.72
□8□,[7]6□&	87.20	28.94	12.76	128.89
□1□H□Z□□□+□I	75.75	47.02	7.93	130.70
□&□K□L□Q□D□ □8□Q□G□H□U□	18.80	36.08	57.81	112.68

Source: Modified from BNM Annual Reports.

Table 1.4 reflects the situation where several firms suffered losses when the Malaysian economy experienced a recession. The majority of local firms suffered losses due to high percentage of net claims incurred. According to BNM (2000), a country's economic downturn would increase the cost of fraud claims and charges in the market. Indirectly, the number of general insurance firms that incur losses during the year would increase. The same situation also applies to foreign firms such as Tokio Marine & Fire, UISC and New Hamphire. Meanwhile, a small part of the losses of some firms such as M.N.R.B., Talasco and China Underwriters was also due to other factors. The M.N.R.B. experienced losses due to the high percentage of net claims □L□Q□F□X□U□U□H□G□□□D□Q□G□□□W□K□H□□□K□L□J□K□□□F□R□V□W□□□ provisions for commission and management expenses. China Underwriters also incurred high management costs, causing the firm a loss of 12.68% or more from that in 1975.

[6] Firms experience losses when value exceeds 100%.
[7] Union Insurance Society of Canton

Table 1.5. Factors Attributed to Profits/Losses in Selected General Insurance Firms in 1976

General Insurance Company	Net Claims Incurred (%)	Agents Commission (%)	Expenses & Other Outgo (%)	Total[8] (%)
Capital	276.62	47.23	2387.25	2711.10
East West	58.76	21.84	16.19	96.79
First General	68.53	16.71	27.23	112.47
Guardian Royal	70.37	16.13	14.95	101.46
Jerneh	55.08	19.88	23.78	98.74
London & Pacific	55.91	21.40	25.66	102.97
Malaysia British	46.95	30.13	20.11	97.18
Malaysia National	39.83	29.94	26.99	96.75
Malaysia Pacific	53.13	14.80	27.65	95.59
Malaysian American	32.63	15.72	1.63	49.98
Malaysia Co-Op	53.88	25.38	21.23	100.50
Sovereign General	29.13	12.96	146.61	188.70
Talasco	51.13	38.47	44.64	134.24

Source: Modified from BNM Annual Reports.

However, Table 1.5 demonstrates that economic downturn is not a factor that prevents the general insurance firms from making profits. Among the firms that made gains were East West, Jerneh, Malaysia British, Malaysia National and Malaysia Pacific, and Malaysian American. However, Capital suffered huge losses in 1976. This is due to the large percentage of management costs and slightly higher net claims incurred. This situation is similar to the losses suffered by British American in 1972 where high provisions were made for management costs due to purchase of fixed assets during the first year of operations.

[8] Firms experience losses when value exceeds 100%.

Table 1.6. Factors That Caused Losses in Selected General Insurance Firms in 2000

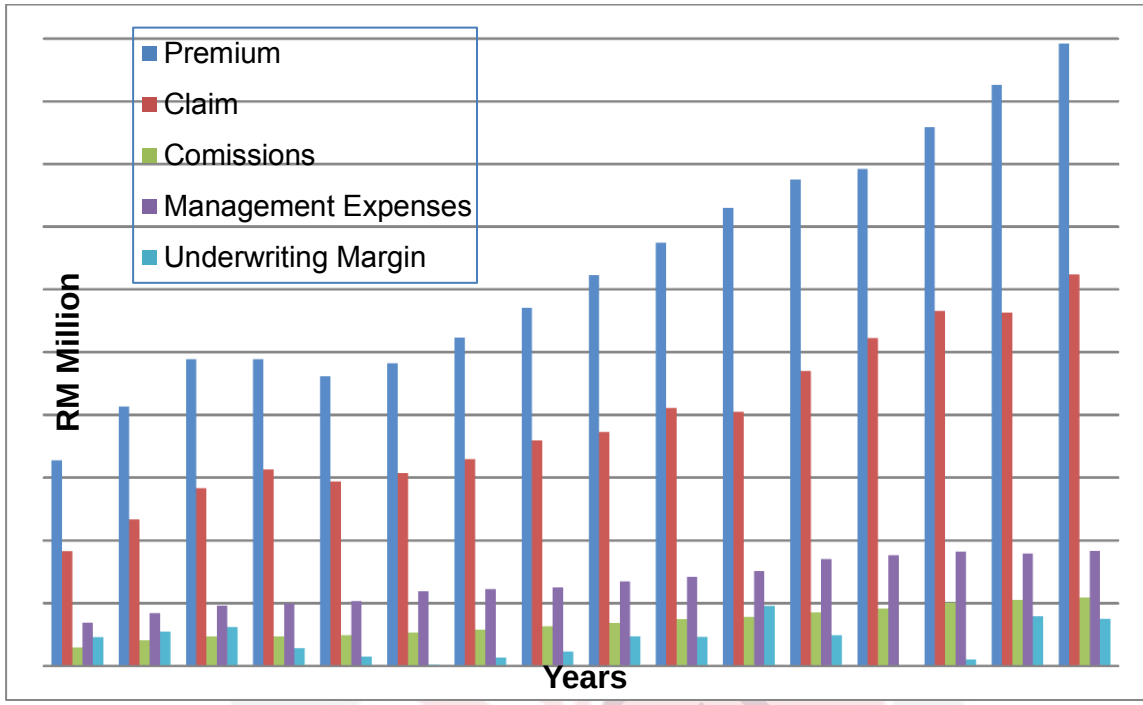
General Insurance Company	Net Claims Incurred (%)	Agents Commission (%)	Expenses & Other Outgo (%)	Total[9] (%)
$ P D Q D K * H Q H U D O[10]				
$ U D E 0 D O D \ V L D[11]				
0 % $[12]				
0 %) , Q V X U				
0 D O D \ V L D 1 D W L R Q D[13]				
0 8 , & R Q W L				
1 X V D Q W D U[14]				
3 D Q J O R E D[15]				
3 D U D P R X Q[16]				
7 H Q D J D[17]				
7 R N L R 0 D U[18]		-		
= X U L F K		-		

Source: Modified from BNM Annual Reports.

Table 1.6 shows that the general insurance market began to reflect the effects of the financial crisis in Malaysia in 1997. This is because over 50% of the □I□L□U□P□V□¶□□□O□R□V□V□H□V□□□Z□H□U□H□□□L□Q□□□W□K□H□□□\□H□ BNM's role in regulating this market has failed to address the issue or there are other internal and external factors that contribute to this problem?

[9] Firms experience losses when value exceeds 100%.
[10] Original name of firm is PNI in 1998 (M&A activity).
[11] Original name of firm is Arab Malaysian Eagle in 1990 (M&A activity).
[12] Original name of firm is Malaysia British in 1988 (M&A activity).
[13] Original name of firm is MNI in 1977 (M&A activity).
[14] Original name of firm is Norwich Winterthur in 1993 (M&A activity).
[15] Original name of firm is Global in 1988 (M&A activity).
[16] Original name of firm is Nanyang in 1994 (M&A activity).
[17] Original name of firm is Provincial in 1991(M&A activity).
[18] Original name of firm is Wings on Fire & Marine in 2000 (M&A activity)

Figure 1.2. The Insurance Firms' Underwriting Experience in the Malaysian General Insurance Market from 1995 to 2010



Source: Calculated from BNM Insurance Annual Report (1980-2010)

Figure 1.2 indicates that each insurance firm allocated on average 12 percent of total premium income earned each year for commission expenses. According to BNM (1992b), higher investment income earned by an insurance firm could accommodate deferment, reduce premium rates and improve distribution of dividends. In addition, net investment returns is one of the productivity indicators used by the BNM (1993a) for the general insurance firm in the market. The figure above shows that even though premium income earned increased each year, the amount of firms underwriting profits each year remained uncertain.

This is due to an increase in management expenses in the previous year or the receipt of outstanding insurance claims. Therefore, efficiency in handling claims and the insurance firm□¶s□W solvency level is very important. In addition, efficiency in the management of insurance firms to control management costs is also important to increase the underwriting profits each year. According to the theory of industrial organization, higher levels of concentration imply greater profitability for firms in the market (Bajtelsmit and Bouzouita, 1998a). Further, based on the traditional Structure Conduct Performance (SCP) paradigm,[19] high market concentration is expected to reduce the cost of collusion (Evanoff and Fortier, 1988) and encourage collusion among firms (Bajtelsmit and Bouzouita, 1998a; Choi and Weiss, 2005; Brewer and Jackson, 2006; and Eling and Luhnen, 2010a). Collusion activities cause firms

[19] Introduced and popularized by Mason (1939), Bain (1951) and Stigler (1964).

to behave as monopolies (Brewer and Jackson, 2006) or exercise oligopoly pricing in the market (Bajtelsmit and Bouzouita, 1998a). These firms put high prices that are less favorable (Berger, 1995) and harmful (Erlangung, 2008; and Weiss and Choi, 2008) to consumers. Undoubtedly, higher prices allow firms to earn more than normal profits (Evanoff and Fortier, 1988; Samad, 2007; Eling and Luhnen 2010a).

The Relative Market Power (RMP)[20] hypothesis states that firms capable of product differentiation would capture a larger market share and are able to exercise market power in pricing of these products (Berger, 1995). Thus, firms with market power charge higher prices than their competitors, and obtain higher profits (Berger, 1995; Weiss and Choi, 2008; Eling and Luhnen 2010a). Based on the SCP relationship, market concentrations which reflect the market structure, is positively related to the performance or profits of firms. In addition, a positive relationship also exists between the prices charged based on changes in market structure and performance achieved by the firms.

The question is whether consumers in the insurance market are willing to buy products that are highly priced if there are other firms that offer lower prices for similar products? If the insurance products were homogeneous, all insurance firms could charge the same price, as in the case of perfect competition (Bikker and Gorter, 2008). In Malaysia, the insurance products offered by each insurance firm have similar characteristics in terms of protection services. In fact, the provision of free gifts such as bags, umbrellas and other personal items were stopped on the instruction of BNM since 2009 (Bank Negara Malaysia, 2004). In the light of this, another more appropriate alternative hypothesis, the Efficiency Structure (ES) hypothesis, is tested in this market.

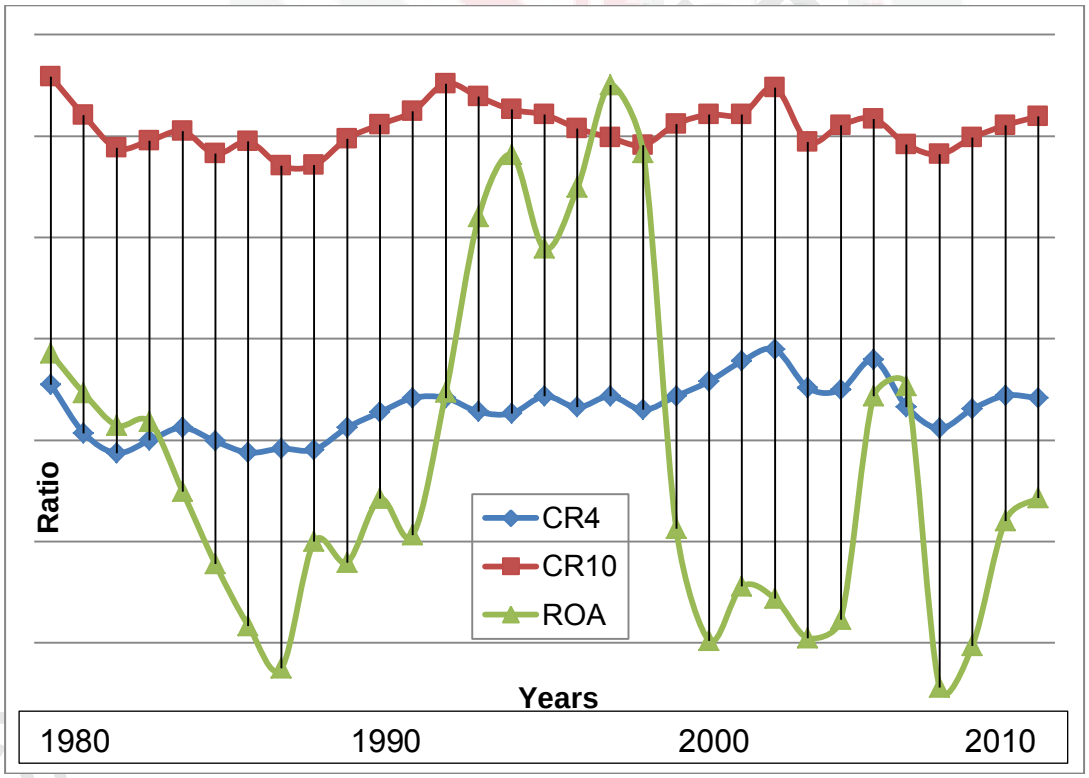
According to the ES[21] hypothesis, each firm earns profits and shows better performance due to its high efficiency level (Choi and Weiss, 2005; Fenn et al., 2006; Erlangung, 2008; Mueller and Raunig, 1999; Weiss and Choi, 2008; Shaffer, 2004; Brewer and Jackson, 2006; and Samad, 2007). When firms achieve high efficiency levels, they incur relatively low costs of production (Samad, 2007). Fenn et al. (2006) mentioned that firms would have lower costs if they achieve cost efficiencies, such as cost X-efficiency through superior management or production processes in manufacturing.
Cost savings by firms enable them to charge lower prices in order to capture larger market share and earn higher profits (Choi and Weiss, 2005; Fenn et al., 2006; Erlangung, 2008; Mueller and Raunig, 1999; Weiss and Choi, 2008; Shaffer, 2004; Brewer and Jackson, 2006; and Samad, 2007). In fact, this would increase the ratio of market concentration among these firms (Clarke et al., 1984; Choi and Weiss, 2005; and Weiss and Choi, 2008). The ES

[20] Popularized by Shepherd (1982), Rhoades (1985) and Berger & Hannan (1993).
[21] ES hypothesis was introduced by students working in the traditional Chicago school, such as Demsetz (1973, 1974) and Peltzman (1977).

K\SRWKHVLV VWLSXODWHV D QHJDWLYH UHODWLRQVKL
performance.

According to traditional SCP hypothesis, an increase in market concentration would increase the profit performance of firms (Bain, 1951; Stigler, 1964; Berger, 1995; Choi and Weiss, 2005; Evanoff and Fortier, 1988; Bajtelsmit and Bouzouita, 1998a; Eling and Luhnen 2010a; Erlangung, 2008; Gamarra, 2008; Mueller and Raunig, 1999; Weiss and Choi, 2008; Shaffer, 2004; Brewer and Jackson, 2006; and Samad, 2007). This is shown in Figure 1.3 below by a positive correlation between market concentration ratio and the firm's performance through the return on assets (ROA) in the general insurance market in Malaysia. However, a negative correlation existed between the ROA and market concentration in the years 1990, 1992 to 1994, 1996 to 2000, 2006 and 2010.

Figure 1.3. Relationship between the Insurance Firms ¶ROA and the Market Concentration Ratio[22] in Malaysia from 1980 to 2010



Source: Calculated from BNM Insurance Annual Report (1980-2010)

□+□L□J□K□□□P□D□U□N□H□W□□□F□R□Q□F□H□Q□W□U□D□W□L□R□Q□□□H□C
prices and increase their profits (Bain, 1951; Stigler, 1964; Berger, 1995; Choi and Weiss, 2005; Evanoff and Fortier, 1988; and Bajtelsmit and Bouzouita, 1998a). However, the negative correlation in the years mentioned above might be due to other factors not included in the SCP hypothesis, such as

[22] The calculation for concentration ratio see page 139.

elements of efficiency or behavior of firms (apart from collusion) such as the □I□L□U□P□V□¶□□□S□U□L□F□L□Q□J□□□D□Q□G□□□0insurance firm□F□W□L□Y□ could maximize profits in two ways, namely through increased productivity or product price adjustment. However, the second method is very limited because in these markets there is relatively high freedom of entry and exit of firms resulting in small market power. In addition, regulatory compliance by the insurance firm to BNM regulations or Insurance Act 1996 also limits the coordination of prices or rates of insurance premiums (BNM, 1993a). Therefore, the first method or element of efficiency and productivity are more important things to improve profits of insurance firms.

Weiss and Choi (2008) argued that large firms with high levels of efficiency tend to exit the market when there are regulations in the market. This is because these firms exploit the advantages of their efficiency to avoid high price volatility in the market. In the U.S., the competition level in the insurance sector varies between the states because of regional differences or market regulations (Weiss and Choi, 2008). Similarly, competition among countries in Europe differs due to different regulations in certain countries (Erlangung, 2008). In Malaysia, the insurance sector is highly dependent on the level of regulations set forth by the Treasury, Malaysia (before 1988) or Bank Negara Malaysia (BNM). Thus, as the market conditions in Malaysia are different from those in the U.S. and Europe, the findings of the SCP by the previous researchers are not suitable to be used in the Malaysian context.

In 1995, Malaysia began the process of gradual liberalization of the financial sector, including the insurance sector, following the GATS agreement. Deregulation following the GATS or financial liberalization is expected to change the level of competition in the Malaysian insurance market. Erlangung (2008) stated that liberalization increases the level of competition in the market resulting in increased level of efficiency of the insurance firm[23]. However, the directive by BNM that all branches of foreign insurance firms operating in Malaysia should be incorporated before June 30, 1998 (BNM, 1996b) had caused different effects. The power of foreign insurance firms after the liberalization process or as a result of M&A activity is still limited. Does the process of liberalization in Malaysia have the same effect as in Europe? This question could be answered from a study of trends in market performance of firms before and after liberalization and the impact of changes in regulations by BNM in a particular year.

In Malaysia, the Competition Act was introduced in 2012. The implementation of this Act would affect efficiency and insurance pricing in the market. In fact, overly restrictive antitrust laws reduce efficiency of the marketplace and result in higher prices for consumers (Bajtelsmit and Bouzouita, 1998a). In the SCP

[23] By increasing firm size, partly as a consequence of M&A activities, firms have moved closer to their optimal size. Overall, market liberalization and subsequent market consolidation have led to positive changes in scale efficiency. (Erlangung, 2008)

and RMP hypotheses, the pricing behavior of firms in the market would negatively affect the consumers. In a market with a low level of competition, higher pricing would increase profits as the consumers have no choice. However, in a market with a high level of competition, the amount of profits would be reduced. This is because in a high competition market consumers respond to price increases (the elasticity of demand is more elastic) as they have a wide selection. However, firms would make higher profits through higher prices if they are able to dominate the market through well-differentiated products such as advertising, location and other advantages (Berger, 1995).

Table 1.7. General Insurance Premium Income Earned in Malaysia from W R 5 0 ¶

Year	MAT	ENG	FIRE	MED	MOT	LIB	EMP	MIS
2000	231,948	126,584	917,683	493,046	2,462,497	59,506	74,996	247,848
2001	219,386	140,707	945,656	509,969	2,648,333	69,466	79,838	238,085
2002	245,917	128,767	925,822	573,145	2,974,466	65,916	72,514	249,261
2003	260,404	157,632	1,012,462	625,007	3,240,232	98,413	79,340	276,328
2004	267,082	183,913	1,075,189	708,801	3,569,035	125,236	95,706	305,863
2005	329,374	247,679	1,096,213	796,026	3,813,991	131,878	105,459	317,798
2006	331,827	219,133	1,272,618	890,765	4,189,476	128,250	113,138	337,725
2007	358,831	193,527	1,252,659	989,780	4,347,576	155,045	123,605	353,200
2008	398,006	211,721	1,290,342	1,039,953	4,267,197	163,232	130,378	384,764
2009	422,419	219,392	1,377,968	1,221,462	4,584,584	180,384	143,017	417,319
2010	402,611	233,222	1,472,697	1,334,572	4,591,061	187,310	139,676	428,004

Source: Calculated from BNM Insurance Annual Report (2000-2010)

Note: MAT = Marine & Transit Insurance, ENG = Engineering Insurance, FIRE = Fire Insurance, MED = Medical Insurance, MOT = Motor Insurance, LIB = Liability Insurance, EMP = Employee Insurance, MIS = Miscellaneous Insurance.

According to BNM (1992b), excessive concentration on the portfolio with small profit margins could affect the level of solvency of a firm. This is because the underwriting profits earned by each firm is the excess of premiums after net of commission payments, expenses and claims, as well as the provision for reserves to cover the risks of outstanding claims. Thus, firms could increase profits by diversifying the portfolio risks among the eight types of general insurance (See Table 1.7).

Liberalization measures in 1995 resulted in a reduction in the number of local firms offering general insurance products. Thus, there was a shift towards perfect competition market structure. Before the liberalization process, there

was close supervision by the Treasury and Bank Negara Malaysia of the insurance market through the Insurance Act 1963, as shown in Table 1.8 above. The □S□X□U□S□R□V regulations is to ensure that the insurance firm manages the business efficiently and maintains stable financial position. In 1991, BNM took over the administration of Mercantile Insurance Ltd. and Pan Global Insurance Ltd which were insolvent (BNM, 1991b). Liberalization of the financial sector increased M&A activity in the market. The M&A activity increased the efficiency and financial position of firms and reduced unhealthy activities and excessive competition among insurance firms. For example, excessive competition cause the insurance firm to impose a lower premium rate than the rate allowed by the Insurance Act 1996 and the implementation of non-price competition activities would increase the unit cost of each firm (BNM, 1992b).

Table 1.8. Regulation Changes in Malaysian General Insurance Market

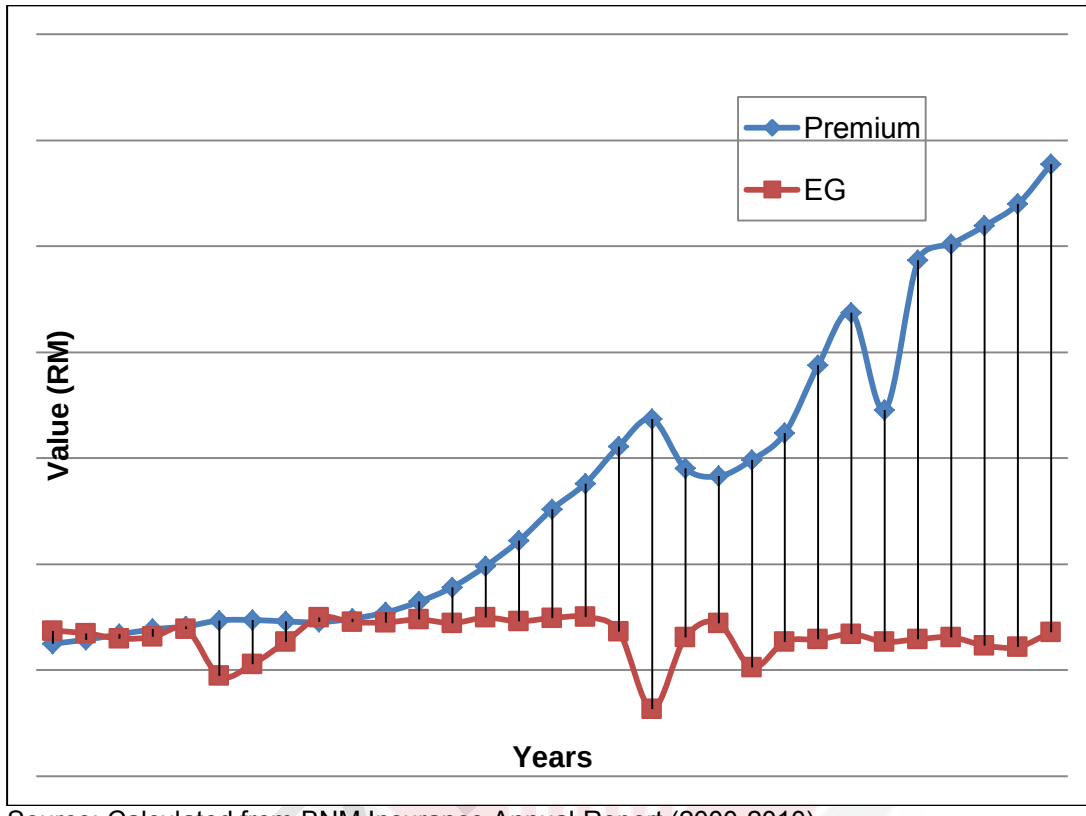
Regulation	Regulation Changes	Year
Solvency (BNM, 1990a)	Guarantee deposit of RM300,000	1963
	Surplus of assets over liabilities by RM1 million or 15% of net premiums.	1975
	Surplus of assets over liabilities by RM5 million or 20% of net premiums.	1983
Guidelines on Operating Costs (BNM, 1990b) (BNM, 1992b)	Total commissions and expenses related to the agent is limited to 27.4%.	1982
	Total commissions and expenses related to agent is limited; (a) Marine (15%) (b) Motor (10% - 15%) (c) Fire (15% - 47.5%)	1991
	Management expenses is limited to; (a) Gross Direct Premium (15%) (b) Reinsurance Premium (2.5% - 7.5%)	1991

Source: Modified from BNM Insurance Annual Report (1990-2010)

The purpose of setting a high solvency level by BNM is to ensure adequate provision of assets by each insurance firm to face the worst contingency. In other words, solvency is important for regulators to ensure that each insurance firm is able to pay the promised benefits or settle legal claims at all times (BNM, 1992c). A contingency arises when there is unhealthy insurance firm management, lack of control of expenditure, changes in outstanding insurance claims, drop in market value of assets, or failure of anticipated acceptance of reinsurance (BNM, 1992b). Changes in claims that are too high would reduce shareholders' fund in any one year. Therefore, the insurance firm must ensure that the total net premiums are sufficient to give a return on capital held. In Malaysia, there are nine factors that cause a lack of insurance firm solvency namely, uneconomical size of the operations, uncontrolled

business growth, excessive administrative costs, weak management, weak claims control, the practice of improper claims reserves, weak quality and asset management, the existence of fraudulent and illegal reinsurance practices (BNM, 1992c).

Figure 1.4. Relationship between Insurance Firm V ¶ 3 U H P L X P , Q F R P H Earned and Income Per capita in Malaysia from 1980 to 2010



Source: Calculated from BNM Insurance Annual Report (2000-2010)

Thus, each insurance firm □¶s solvency level is important and should be studied to see the effect on price changes and profits. The study takes into account the elements of solvency of each insurance firm to see the SCP relationship in the general insurance market in Malaysia. Figure 1.6 shows that the total premium is also influenced by external factors such as per capita income in Malaysia. However, the premium of a firm would be more consistent when the insurance firm is efficient in diversifying the products offered. This is because each type of general insurance products has different risks in the market.

1.3 Problem Statement

The Malaysian services sector showed tremendous growth in terms of its contribution towards the national income, far surpassing the target set in the Tenth Malaysia Plan. The increase was attributable to the banking and insurance sectors, and was effected through various monetary policies and aggressive monetary programs. The role of BNM has been to ensure that the

insurance sector remained competitive and resilient, as it is crucial for the welfare of policyholders as well as for the survival of the local general insurance firms.

Today, general insurance firms have to diversify their business modes according to market competition and consumer preferences for products. The surge in competition among the general insurance firms and other insurers in the industry as well as dynamic changes in technology have forced the firms to modify their products and services to gain the competitive advantage. However, the rising cost of living has resulted in policyholder preferences for low-cost insurance and full coverage insurance policies to reduce uncertainty risks in the event of an accident. Given the significant conflict of objectives among policyholders, the general insurance firms and regulators desire for competitiveness and productivity of the sector. However, in recent years several general insurance firms suffered losses. A firm's profit level depends on the financial factors and the productivity of firms each year (Choi & Weiss, 2008). The provisions for expenses for the cost of insurance agent□V□¶ commissions by the general insurance firms also affect the profitability of the firms. Each firm aims for high productivity of agency workers to attain higher levels of performance and competitiveness in the market.

Further, the price of insurance products is highly dependent on the investment returns of general insurance firms. General insurance firms that earn above-average returns are able to price their products more favorably than the others, while those that earn below-average returns might not be able to retain their customers in a competitive market (Black & Skipper, 2000). Apart from ROI, asset management firms owned by general insurance companies are also important to increase productivity and profitability each year. In this sector, the ownership of assets such as buildings and other large fixed assets could improve consumer confidence in the market. A firm that suffered significant losses would as a last step sell its assets to reduce liabilities and losses.

Despite the growing literature on studies in the Malaysian market structure, the phenomena of firm□¶□□behavior and effect of changes in the firm□¶□V competitiveness level on its performance have just begun to be given emphasis. The general insurance sector in Malaysia undertakes frequent M&A activity in the market to ensure their firms remain operational and competitive. Each M&A activity in this sector has various effects in terms of financial strength and reputation of change among firms. In addition to filling the existing gap in the Malaysian market structure literature this study is to the best of our knowledge, one of the few to be conducted using data from a developing country. M&A activity might reduce average costs in the long-term when the firm achieves economies of scale in internal management. Therefore, the management of an efficient and productive manpower would reduce operating costs of firms and further increase profitability each year.

Thus, in order to secure profitability and productivity, the return on investments and the return on assets must be taken into consideration in financial management decision making. Second, M&A activity among firms is also important to ensure the profitability of the general insurance firms each year. Thirdly, the firm□¶□V□ labor productivity, especially among insurance agents, should be taken into account in determining profits or losses of the firm.

1.4 Objectives of the Study

The general objective of this study is to estimate and analyze the direct relationship between the market structure of the general insurance industry in □0□D□O□D□\□V□L□D□□□D□Q□G□□□W□K□H□□□L□Q□T□e□r□e□f□o□r□e□,□t□h□i□s□X□D□O□□ study has three specific objectives as follows:

(a) To estimate and analyze the relationship between the market structure and performance of each insurance firm in the general insurance market, using 2SLS method for unbalanced panel data.

(b) To estimate and analyze the relationship between productivity and profitability of each insurance firm in the general insurance market, using 2SLS method for unbalanced panel data.

(c) To analyze the external determinants of the revenue of general insurance companies, using descriptive analysis method for selected general insurance firm.

1.5 Significance of the Study

Based on Figure 1.6, premium income increased by an average of 8 percent annually and accounted for 60 percent of total revenue of each insurance firm (Mustazar, 2011). This shows that the premium income is the main cash inflow to the insurance company underwriting profits, while investment income and capital interest determine the direction of flow of operating profits of general insurance companies. Several previous studies have shown the importance of premiums. Mohammad (2010) saw internal factors as the determinants of premiums. An appropriate method is to study the determinants of premium growth based on the type of premiums during the period of three major economic crises and the process of liberalization, deregulation, and changes in authority in the insurance market in Malaysia. It is hoped that these findings indicate the significant determinants under different conditions and times.

Performance and efficiency of insurance firms are also affected by the efficiency of a firm to generate higher returns by investing the financial assets (Diacon, 2001). As one of the non-banking financial institutions operating in competitive markets, the effectiveness of the investment management firm is

very important. Most previous studies did not consider this role in the determination of firm profitability, but focused mainly on the importance of operational efficiency (see Weiss and Choi, 2008). Thus, this study combines the efficiency of financial management and operational efficiency in the determination of firm profitability.

The liberalization process in the financial markets following the implementation of the GATS in Malaysia brought about changes and increased the level of competition in the market. Insurance products being long-term contracts require reputable insurance firms with strong financial standing (Yakob and Isa, 2008). Therefore, this study took into consideration these elements in determining the performance of each firm. Solvency and leverage of a firm are important to ensure that the insurance firm is financially capable in facing any contingencies (Report of Director of Insurance Bank, 1992). Leverage shows the financial impact of fixed costs such as interest and dividend expenses on the returns earned by the firm (Gitman, 2010). The higher the leverage, the lower the returns generated by each firm (Malik, 2000). Each insurance firm must ensure a high solvency level or achieve the standards set by the regulator in their country (Klumpes, 2007). This is important so that the probability of an insurance firm becoming bankrupt is low (Cummins and Weiss, 2000).

□3□U□H□Y□L□R□X□V□□ □V□W□X□G□L□H□V□□ □I□R□F□X□V□H□G□□ □R□Q□ separately and did not study the relationship of these variables using SCP paradigm, especially in the case of Malaysia. This study examines the relationship of each element of the SCP in the insurance sector in Malaysia for the past 40 years. It also studied specifically the general insurance and non-life general insurance businesses. This is taking into account the scenario and the number of different companies in both types of business.

To gain better perspective of the SCP of the general insurance sector in Malaysia, the study attempted to examine the important elements in each component of the SCP and study their relationship, as the revised SCP Paradigm. This paradigm reflects the traditional SCP relationship in which □S□H□U□I□R□U□P□D□Q□F□H□□ □G□H□S□H□Q□G□V□□ □R□Q□□ □I□L□U□P□¶□ on market structure, which in turn is based on the basic industry conditions and public policy. Public policy refers to the liberalization process. Meanwhile, the basic condition is the effect of market changes, for example changes in IT technology on supply and demand in the insurance market. Changes in supply are effected through pricing, underwriting, service, and distribution. In terms of demand, the impact of the Internet has increased knowledge and online purchases by the policyholders. In addition, there are large information asymmetries and high complexities in this market. Hence, customers tend to buy insurance from an insurance firm who has a strong financial position, is reputable and well known in the market (Gamarra, 2008).

Regulation in this sector is very important to promote healthy competition among insurance firms and protect the interests of all parties, including insurance companies, policyholders, and shareholders of the company. In the past no studies were conducted to look into the effectiveness and enforcement of the Insurance Act in Malaysia and the impact of liberalization on this sector. It was only done at the macro level by foreign researchers. The results of this study could be used as a guide and source of reference by the authorities when making changes in policies or regulations in the future.

Earlier studies discussed many controversies or differences in findings between the traditional hypotheses of structure-conduct-performance (SCP) and efficiency-structure hypothesis (ES). The findings were first criticized by economists at the Chicago school that emphasizes the importance of efficiency in determining the performance of firms in the market. This approach is contrary to the traditional SCP which emphasizes the role or influence of market concentration on firm's performance (Fenn et al., 2006). Therefore, SCP framework was revised by researchers such as Demsetz (1973).The SCP paradigm is more a theoretical framework used in recent studies in the banking sector and other financial institution in foreign countries. Therefore, this study could also enrich the knowledge of researchers in industrial organizations or economic research.

1.6 Scope of the Study

The general insurance sector is examined in two stages, at the macro and micro level. Preliminary analysis was made through a macro study to see the relationship between premium income and general insurance company's performance in Malaysia over the 40 year period from 1970 to 2010. Studies to estimate and analyze the determinants of growth in premium income (concentration market) and general insurance company's performance (profitability and efficiency) were done at the micro or firm level. The sample of the study comprised more than 30 general insurance companies and the study period was 40 years from 1970 until 2010. A shorter period was taken as most general insurance companies were established in 1970. The names of several companies had changed and M&A activity was undertaken by over 30 companies. Thus, the study uses only the current name of the company. The data used is secondary data from the Annual Insurance Report of Bank Negara Malaysia for the years 1988 to 2010 and the Malaysian Ministry of Finance for the years 1970 to 2010. Data obtained was in the form of income statement and balance sheet statements collected for each selected company. During this study, there were few changes in the presentation of financial statements to be adapted to the accounting standards of the BNM. Thus, the data involved was adapted to the needs of this study.

The data for the variables for the period 1970 to 2010 were derived from different sources. Vehicle registration data by type of capacity is obtained

from the Malaysian Automotive Association (MAA). Other data such as exports, GDP, inflation, interest rate, population and various macro data were obtained from the Economic Report, Economic Planning Unit (EPU) for each year of the study period.

1.7 Organization of the Study

In chapter 1, the study provides a comprehensive overview and history of the services and general insurance market in Malaysia from before independence until the era of liberalization. Next, some issues were dissected to see the research problems in this market. This is accompanied by a brief description of the objectives, contributions and research organizations.

Chapter 2 gives in detail a comprehensive view of the previous highlights to see the methodology, data, results and conclusions of each topic related to the subject of this study. The focus is on market research in general and studies that analyze the market structure and the relationship with the insurance company's performance. Most previous studies used the Data Envelop Analysis (DEA) as an indicator of efficiency in the insurance market. The simultaneous relationship test was used to look for the SCP framework in several markets.

Chapter 3 discusses in detail the theoretical framework for the elements and the relationship between structure and performance of general insurance that were done by previous researchers. There are a number of angles that could be explained by the theory of relationship and a description of each variable and is linked closely with the revised SCP framework. The content of this chapter touches on several things, such as solvency, underwriting profit, the impact of liberalization and the importance of economies of scale and efficiency of the market.

In Chapter 4 and 5, the study attempts to estimate and analyze the determinants of premium growth (market structure) and performance (productivity and profitability) of selected general insurance companies. This is based on the type of general insurance premiums, using 2SLS regression analysis of unbalanced panel data for Malaysia for the 40 year period. Next, this chapter exa□P□L□Q□H□V□□ □W□K□H□□ □U□H□O□D□W□L□R□Q□V□K□L□S conduct, and performance of each firm in the general insurance market in Malaysia, using the 2SLS method.

Chapter 6 shows the results of the descriptive analysis on premiums growth and performance of the general insurance market in Malaysia over the past 40 years. The market situation at the macro level and the effects as well as things such as elasticity of the premium, market concentration, cash flows

depending on the type of use, trends in underwriting profits and investment income are all analyzed.

Chapter 7, which is the last chapter, formulates the analysis, results or findings, and relates these conclusions with policy implications and recommendations and the constraints that must be overcome through further study and research in the future.

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