



UNIVERSITI PUTRA MALAYSIA

**ECONOMIES OF SCALE IN THE MALAYSIAN
INSURANCE INDUSTRY**

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**ECONOMIES OF SCALE IN THE MALAYSIAN
INSURANCE INDUSTRY**

By

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Khas buat ayah yang banyak mengilhamkan kejayaan dan emak yang telah banyak berkorban. Semoga Allah merestui kehidupan kita. Ameen.



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LIST OF ABBREVIATIONS

AMLA	Association of Malaysian Loss Adjusters
ASEAN	Association of South East Asian Nations
ASM	Actuarial Society of Malaysia
B-J-V	Blair, Jackson and Vogel
DGI	Director General of Insurance
ESS	Estimated Sums of Squares
FICO	Fire Insurance Companies Ordinance
F-J-W	Flanigan, Johnson and Weisbart
GIAM	General Insurance Association of Malaysia
H-S	Houston and Simon
IBAM	Insurance Brokers Association of Malaysia
IGSF	Insurance Guarantee Scheme Fund
ITCM	Insurance Training Centre of Malaysia
J-M	Johnston and Murphey
LACO	Life Assurance Companies Ordinance
LIAM	Life Insurance Associations of Malaysia
MES	Minimum Efficient Scale
MII	Malaysian Insurance Institute
MIB	Malaysian Insurance Bureau
MNRB	Malaysian National Reinsurance Berhad
NAMLIA	National Association of Malaysian Life Insurance Agents
RSS	Residual Sums of Squares



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The insurance industry in Malaysia contributes only a small percentage to the Gross National Product (GNP). Hence in the past not much attention was paid to this industry. The recession years of the mid-eighties have, however, forced the authorities to look at the industry rather closely. In fact, the government has made further intervention into the industry by placing it under the supervision of Bank Negara Malaysia (BNM). Since the takeover, the BNM has been active in revising the present insurance Act and has been issuing a number of guidelines to assist insurance companies to operate in an efficient manner. From the statistics reported in the Annual Report of the Director General of Insurance (DGI), there has been some improvements in both sectors. For example, the forfeiture and surrender rates for the life sector has decreased due to improvement in the insurers' services. In the general sector on the other hand, the commission and management expense rates



for the high premium bracket insurers (> RM 45 million) were able to be reduced even though for the low premium bracket insurers (< RM 20 million) it was still high.

The thesis analysed the operation of the insurance industry by examining their cost of operation. This is done by estimating the industry's cost function as well as estimating the minimum efficient scale (MES). The estimation of the cost function made use of the statistical cost function approach. In the analysis of the life sector, the lapse ratio, new policies and the dummy variable for ownership (foreign or local) have been shown to affect the average cost. The life sector also experienced economies of scale but the number of companies which were able to reach that MES level was still small compared to insurers which experienced economies of scale but failed to have the minimum scale of cost. Estimation results for the general insurance industry showed that the industry did experience the economies of scale. However, the level of the minimum efficient scale was not able to be determined. Results showed that in general foreign companies were doing better than the locals. The overall results for both sectors implied that the size of the local companies beside the internal problems faced by the sector e.g. high costs for the general, was a constraint for achieving the efficient scale of production. The BNM should continue supervising and regulating the industry so that the companies in the industry can perform to expectations.

Abstrak tesis yang dikemukakan kepada Senat Universiti Pertanian Malaysia sebagai memenuhi sebahagian daripada syarat-syarat untuk penganugerahan ijazah Master Sains

**SKEL EKONOMI DI DALAM INDUSTRI INSURANS
DI MALAYSIA**

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Industri insurans di Malaysia hanya menyumbangkan peratusan yang kecil sahaja kepada Keluaran Negara Kasar (KNK). Oleh kerana itu, industri ini kurang mendapat perhatian daripada mana-mana pihak pada masa yang lepas. Walau bagaimanapun, kemelesetan ekonomi yang berlaku dalam tahun-tahun lapan puluhan telah menyebabkan industri ini diberikan penumpuan yang lebih oleh pihak yang bertanggungjawab ke atasnya. Pihak kerajaan juga telah campurtangan apabila ia memerintahkan agar industri ini diletakkan di bawah penyeliaan Bank Negara Malaysia (BNM). Selepas daripada pengambilalihan kuasa ini, BNM telah menyemak semula Akta Insurans yang ada dan telah mengeluarkan beberapa garis panduan kepada syarikat-syarikat insurans supaya mereka dapat menjalankan perniagaan dengan lebih berkesan. Daripada perangkaan yang dilaporkan di dalam Laporan Tahunan Pengarah Insurans, terdapat beberapa perubahan selepas daripada pengambilalihan kuasa ini. Sebagai contohnya, kadar perampasan dan



penyerahan insurans di dalam industri insurans nyawa telah berkurangan disebabkan pembaikan di dalam kualiti servis yang diberikan oleh syarikat-syarikat insurans terbabit. Di dalam insurans umum pula, kadar komisen dan perbelanjaan pentadbiran bagi syarikat insurans yang mempunyai jumlah premium terbesar (> RM 45 juta) telah dapat dikurangkan. Walau bagaimanapun bagi syarikat insurans yang mempunyai jumlah premium yang rendah (> RM 20 juta) kadar komisen dan perbelanjaan pentadbiran masih tinggi.

Tesis ini cuba untuk menganalisis perjalanan industri insurans di Malaysia dengan menyelidiki kos operasi syarikat-syarikat insurans. Ini dapat dilakukan dengan mengkaji fungsi kos industri ini dan juga menganggarkan skel minimum bagi industri ini. Penganggaran fungsi kos ini menggunakan kaedah fungsi kos statistik. Dalam kajian sektor insurans nyawa, beberapa pembolehubah telah menunjukkan kesan yang positif kepada kos purata industri, ini termasuklah, polisi-polisi baru, kadar lelap dan dami bagi pemilikan (syarikat asing atau tempatan). Sektor insurans nyawa juga telah didapati mengalami skel ekonomi tetapi jumlah syarikat yang berjaya mencapai takat skel minimum masih kecil dibandingkan dengan syarikat yang gagal untuk berada di tahap skel minimum. Keputusan regresi bagi sektor umum juga menunjukkan ia mengalami skel ekonomi. Walau bagaimanapun, skel operasi yang minimum gagal untuk dikesan. Pada umumnya pula, syarikat-syarikat asing lebih berjaya daripada syarikat tempatan. Keseluruhannya, saiz syarikat dan masalah dalaman yang dihadapi oleh syarikat insurans,

misalnya masalah kos yang tinggi dalam industri umum, telah menghalang syarikat ini untuk berada di tingkat pengeluaran yang paling berkesan dengan kos yang paling minimum. BNM patut meneruskan usahanya untuk menyelia dan mengawal industri ini agar syarikat-syarikat yang ada dalam industri ini dapat memberikan prestasi yang lebih baik.

CHAPTER I

INTRODUCTION

The insurance industry is one component of the services sector which has been neglected for a long time due to its small contribution to the economy (Annual Report of Bank Negara Malaysia (BNM), 1989). By the end of 1989, insurance fund assets accounted for 8.5% of the Gross National Product (GNP). The percentage of the asset in the GNP was even lower in 1980 when it accounted for only 4.9%. Within the financial system, the insurance industry contributes only about 3.1% of the total assets of the financial system in 1988/1989 (Annual Report of Director General of Insurance (DGI), 1990).

Lack of information or persuasion can dampen consumption of a particular good. In the case of the Malaysian insurance market, very few insurance companies advertise their products. Actually, only major players in the industry are involved in advertisement and the message is exclusively directed towards a rather sophisticated group of potential clients. The lack of knowledge and understanding on the need of insurance as well as the absence of appropriate regulatory measures to encourage its use have also led to the minimal contribution of the insurance industry to the economy. For example, Malaysians are not required to have a life policy or a health insurance policy which might be compulsory for other countries e.g. United States. As a result, insurance has not been an important element to be included in the consumers' portfolio, and insurance is taken up by only 10% of the population (Shahrir, 1987).



Another reason can be attributed to the Malaysian population 61% of whom are Malays (New Straits Times, January 19, 1989). Due to religious reasons (Muslims are prohibited to take interest which is the main source of income to the conventional insurance companies), the Malays are somewhat averse to insurance coverage. Prior to 1985, that is before the Syarikat Takaful Malaysia started its operation (based on Islamic principles), the Malays did not pay much attention with regards to insurance coverage. However, the trend has changed when the Takaful Company was established. Increasing number of Malays have started to seek insurance coverage. Many public service departments staffed by a large number of Malays have also encouraged their staff to buy insurance. For example, the Inspector General of Police has called on all policemen to obtain insurance coverage as their nature of work is very risky. By July, 1989, about 28,870 policemen out of 74,000 have sought insurance coverage from Syarikat Takaful Malaysia (Berita Harian, July 9, 1989).

Despite its small contribution and rather unflattering performance in previous years, the government has, nevertheless, seen the need to activate the industry. Various forms of government efforts have been carried out which include the passing of various legislations for the purpose of regulating the industry. The most important legislation is granting the BNM the authority to supervise and control the insurance industry starting May, 1988. With this legislation, the Governor of the BNM is also the DGI and has the power to regulate the financial system as a whole.

Given the revived interests and importance of the industry, this thesis attempts to take a closer look at it. The insurance industry is picked

out of other service sectors to be studied here due to its high potential for growth. In addition, it can be one of the main impetus in Malaysian economic growth. As at the end of 1989, the industry together with manufacturing, finance, and real estate recorded an expansion of 7.9% of GNP. New sums insured in the life insurance have also increased even though in the general sector, the increase has been much less due to some structural problems such as excessive competition and the small size of many insurance firms. The assets of the insurance industry is also expected to grow further (Annual Report of BNM, 1990).

At present, relatively few studies have been done on the economic aspects of the Malaysian insurance industry as compared to other sectors in the economy. In a recent study (Nehen, 1989a), it was shown that the Malaysian general insurance sector experienced no economies of scale. However, this study was only part of a larger study that covered all ASEAN countries. Given a rather wide scope of the study, the author was not able to focus on one country only. Simple arithmetic was used to obtain the average cost of the general insurance sector.

Another study reported by Shahrir (1987) on the life insurance industry, looked at the impact of life insurance and the employees provident funds on personal savings in Malaysia. Life insurance was found to stimulate savings as the policyholders recognised greater responsibilities to their families.

Another work by Nehen (1989b) on the insurance industry in ASEAN countries also emphasised the regulations imposed on insurance companies (life and general) in each country. He indicated that overall,

the ASEAN countries have over-regulated their insurance industries and thus most of the companies were not able to perform to its potential. No other published studies has tackled the present issues and problems in the Malaysian insurance industry. This study is meant to highlight the situation in the industry and thus contributes to the literature on the Malaysian insurance industry.

Historical Background

Insurance industry in Malaysia was largely non-existent before the 19th century. Colonisation of Malaya by the British and increasing commercialisation of the economy had given rise to the growth of the industry. The earlier practices of insurance were based on the British system. The British held and managed almost all of the existing insurance companies. As domestic companies were 'obstructed' from entering the industry, primarily due to lack of expertise and knowledge on the insurance practices, the industry was then substantially dominated by foreign companies.

Since the early post-independent period (early 1960s), local companies have ventured into the market and tried to reduce the domination of foreign firms in the industry. The increase in the number domestic companies was realised throughout the years while the number of foreign companies gradually decreased. Table 1 shows the number of insurance companies in the late 1970s (foreign versus domestic companies). However, as they were mostly very new in the insurance business, a number of them were forced out of business due to capital deficiencies and lack of expertise.

Table 1
Number of Insurance Companies
(as at December, 1990)

Line of Business	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
LIFE												
Domestic	1	1	1	2	2	2	2	2	2	2	2	1
Foreign	6	4	4	3	3	2	2	2	0	0	0	2
GENERAL												
Domestic	25	28	30	35	36	37	39	39	38	37	37	35
Foreign	22	18	16	11	10	7	5	5	4	4	4	4
COMPOSITE												
Domestic	9	9	9	9	9	10	11	11	14	13	13	12
Foreign	4	4	4	4	4	4	3	3	3	3	3	3
REINSURANCE												
Domestic (General)	1	1	1	1	1	1	1	1	1	1	1	1
Foreign	0	0	0	0	0	0	0	0	0	0	0	0
Total	68	65	65	65	65	63	63	63	62	60	60	58

Source: Annual Report of DGI, various issues

Before 1961, legislations that governed the operation of insurance companies only affected certain states. All of these legislations were repealed with the enactment of two laws which later became effective in every state. The two laws were Life Assurance Companies Ordinance 1948 (LACO) and Fire Insurance Companies Ordinance 1948 (FICO). However, these laws were unable to stop the malpractices in the industry. For example, there was no provision for adequate supervision of premium charged by insurers. There was also no minimum capital requirement for companies to fulfill before they can start a business. As a result, during 1959-1960, the growth of the insurance industry had accelerated and local companies slowly tried to make their presence felt. Many life companies were also formed during this period and there was a strong tendency to take advantage of the legal loopholes.

The government later amended the LACO in April, 1961 and was later known as Life Assurance Act (LAA), 1961. One of the most important features of LAA was the requirement of a minimum paid-up capital of RM 1 million for a life insurance company. Since November, 1961, the life insurance companies had been prohibited from issuing policies which did not contain a minimum rate of premium. It was required that the Minister of Finance be informed of new businesses or new products offered by the Insurance companies. A year after the legislation came into effect, 38 companies were wound up in 1962 due to mismanagement and breach of law. The companies ignored the regulations which were spelled out in the Life Assurance Act, 1961. Thus most of them were not able to comply with the minimum requirement for paid-up capital.

To further strengthen the industry, the government introduced the Insurance Act, 1963 which since then has become the most important legislation. The insurance industry has been regulated according to the legislations and rules and it has been placed under the supervision of the DGI. This Act prescribed minimum capital requirement for all insurers, introduction of an asset ratio which required all insurers to invest prescribed amounts in authorised Malaysian assets over time and placement of statutory deposits with the Accountant-General for each type of insurance business (a summary of this Act is included in Appendix A). The Act was actually a part of the government's actions to remedy the industry and to help the local companies to penetrate the market. Initially, the Act covered Peninsular Malaysia only, but in 1965, it was extended to East Malaysia as well as Singapore. The Act, however, automatically ceased to be operational in Singapore when it seceded from Malaysia in August, 1965.

Few other amendments were made to the existing Insurance Act, 1963. The Insurance (Amendment) Act, 1975 was put into effect to provide further protection to policyholders to prevent more malpractices. These regulations have actually caused major changes in the structure of the industry.

In the Insurance (Prescribed Financial Institution) Regulations 1975, the DGI was given the power to inspect the books of any insurers or loss adjusters or agencies in Malaysia to detect any default. Therefore, the insurers, loss adjusters, and brokers have to follow all the requirements the preparation of their book-keeping. Their licenses could be suspended by the DGI if they failed to obey the requirements. The insurance