



UNIVERSITI PUTRA MALAYSIA

**FACTORS AFFECTING THE INCREASED SHARE OF EMPLOYMENT
IN THE SERVICES SECTOR**

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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 Master of Science**

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fulfilment of the requirements for the degree of Master of Science

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Malaysian services sector is one of the rigorously growing sectors in terms of output and resource use. This sector has contributed more than two-third of total gross domestic product and absorbed more than half of total labour force. This sector is also less affected by the various economic instability such as economic recession. Our study is carried out in order to understand and to find out what are the factors that help the sustenance of this sector through the various economic disturbances with high employment.

This study utilise time series data over 31 years beginning from 1970-2000. The services sector that are included in this study are electricity, gas and water services subsector, commercial services subsector, transportation, storage and communication services subsector and public services subsector. Since the main focus of this study is employment, therefore the major variables are the employment in agricultural, manufacturing and services sector.

This study employs recent time series techniques such as cointegration analysis and error correction mechanism which enable to test the existence of the relationships among the factors.

The results of the study show that the services sector is still one of the most rapidly growing sectors in response to new emerging industries such as the information and communication technology (ICT) and tourism (i.e. ecotourism and agrotourism). Government intervention also plays an important role to promote the growth of the services sector by providing various infrastructures for the commercial, transportation, storage and communication and public sectors (i.e. education, community services and health services). To conclude, the services sector in Malaysia is dependent on manufacturing, vice versa.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi sebahagian keperluan untuk Ijazah Master Sains

**FAKTOR-FAKTOR YANG MEMPENGARUHI PENINGKATAN
GUNATENAGA DI DALAM SEKTOR PERKHIDMATAN**

Oleh

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Pada masa kini, sektor perkhidmatan di Malaysia adalah sebuah sektor yang sedang berkembang pesat. Sektor perkhidmatan ini telah menyumbang lebih daripada dua pertiga jumlah keluaran dalam negara kasar dan menyerap lebih daripada separuh jumlah tenaga buruh bekerja di dalam sektor. Selain daripada itu, sektor ini juga tidak dipengaruhi oleh pelbagai keadaan ekonomi seperti kemelesetan ekonomi. Kajian ini dilakukan untuk memahami faktor sebenar yang menyebabkan sektor ini mampu bertahan dalam berbagai keadaan ekonomi dengan mengekalkan jumlah tenaga buruh yang ramai.

Kajian ini menggunakan data siri masa meliputi jangkamasa 31 tahun bermula 1970 - 2000. Manakala sektor perkhidmatan yang dikaji adalah mengikut klasifikasi oleh Jabatan Statistik Malaysia iaitu sektor elektrik, gas dan air, sektor perdagangan, sektor pengangkutan, penyimpanan dan komunikasi dan sektor awam. Memandangkan

kajian ini adalah berkenaan gunatenaga maka pembolehubah utamanya adalah gunatenaga dalam sektor pertanian, sektor perkilangan dan sektor perkhidmatan.

Kajian ini menggunakan kaedah terkini bagi analisis siri masa iaitu analisis ko-integrasi dan mekanisma pembetulan ralat bagi menganalisis perkaitan hubungan di antara faktor-faktor yang di kaji.

Kajian ini mendapati bahawa sektor perkhidmatan akan terus berkembang pesat dengan wujudnya beberapa industri baru seperti teknologi maklumat dan komunikasi (ICT) serta industri pelancongan (ekopelancongan dan agropelancongan). Campurtangan kerajaan dalam menyediakan pelbagai infrastruktur kemudahan turut menyumbang kepada pertumbuhan sektor perkhidmatan seperti sektor perdagangan, sektor pengangkutan, penyimpanan dan komunikasi dan sektor awam (iaitu pendidikan, khidmat komuniti dan perkhidmatan kesihatan). Sebagai kesimpulan, pertumbuhan sektor perkidmatan di Malaysia saling memerlukan sektor perkilangan dan sektor perkilangan juga saling bergantung kepada sektor perkhidmatan.

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TABLE OF CONTENTS

	Page
ABSTRACT	ii
ABSTRAK	iv
ACKNOWLEDGEMENTS	vi
APPROVAL SHEETS	vii
DECLARATION FORM	ix
LIST OF TABLES	xii
LIST OF FIGURES	xiii
 CHAPTER	
 I INTRODUCTION	
Economic Structure	1
Labour Force	3
Labour Force Growth	4
Employment Pattern and Change	5
Worldwide Employment Pattern	13
Problem Statement	14
Objectives of the Study	16
Importance of the Study	17
 II THE SERVICES SECTOR	
Electricity, Gas and Water Services Subsector	20
Commerce Services Subsector	21
Transportation, Storage and Communication Services Subsector	24
Public Services Subsector	28
 III LITERATURE REVIEW	
Definition	31
Services Sector Studies	33
 IV METHODOLOGY	
Background of Study Area	42
Source of Data	43
Method of Analysis	44
Test of Stationarity	45
Cointegration Analysis and Error Correction Mechanism	47
Diagnostic Checking	51
The Model	51
Limitations of the Study	55
 V RESULT AND DISCUSSIONS	
Unit Root Analysis	57
Cointegration Analysis	59
Electricity, Gas and Water Services Subsector	60



	Commerce Services Subsector	65
	Transportation, Storage and Communication Services Subsector	70
	Public Services Subsector	75
VI	CONCLUSIONS AND RECOMMENDATIONS	
	Conclusion	80
	Industrialization	81
	Demographic Factors	83
	Policy Implications	86
	Recommendations	90
	BIBLIOGRAPHY	93
	APPENDIX	97
	BIODATA OF THE AUTHOR	103



LIST OF TABLES

Table	Page
1.1 Gross Domestic Product by Sector (RM million in 1978 prices)	2
1.2 Labour Force Profile, 1990-2000	5
1.3 Employment Estimates of the Agriculture Sector 1970-2000	6
1.4 Employment Estimates of the Manufacturing Sector 1970-2000	7
1.5 Employment Estimates of the Services Sector 1970-2000	10
1.6 Employment by Sector and Ethnic Group('000)	11
1.7 Employment Distribution by Gender	12
2.1 The Electricity Supply System	20
2.2 Selected Business Services in Peninsular Malaysia 1988-1998	23
2.3 Federal Government Expenditure (RM million)	25
2.4 Federal Government Allocation Other Services 1991-2000 (RM million)	30
2.5 Selected Personal Services	30
5.1 Augmented Dickey-Fuller (ADF) Unit Root Test	59
5.2 Cointegration Results of Johansen Procedure Electricity, Gas and Water Services Subsector Sample Period: 1970-2000 (31 observations)	60
5.3 Vector Error Correction Estimates of Electricity, Gas and Water Services Subsector	61
5.4 Variance Decomposition Electricity, Gas and Water	62
5.5 Cointegration Results of Johansen Procedure For Commerce Services Subsector Sample Period: 1970-2000 (31 observations)	65
5.6 Vector Error Correction Estimates Commerce Services Subsector	66
5.7 Variance Decomposition Commerce Services Subsector	67



5.8	Cointegration Results of Johansen Procedure For Transportation, Storage and Communication Services Subsector Sample Period: 1970-2000 (31 observations)	70
5.9	Vector Error Correction Estimates of Transportation, Storage and Communication Services Subsector	71
5.10	Variance Decomposition Transportation, Storage and Communication Services Subsector	73
5.11	Selected Transportation, Communication and Storage	75
5.12	Cointegration Results of Johansen Procedure Public Services Subsector Sample Period: 1970-2000 (31 observations)	76
5.13	Vector Error Correction Estimates of Public Services Subsector	77
5.14	Variance Decomposition Public Services Subsector	78
6.1	Conclusion	82



LIST OF FIGURES

Figure		Page
1.1	Some Mutual Interactions Among Manufacturing and Services Activities	19
5.1	Impulse Response to One S.D. Innovations for Electricity, Gas and Water Services Subsector	63
5.2	Impulse Response to One S.D. Innovations for Commerce Services Subsector	68
5.3	Impulse Response to One S.D. Innovations Transportation, Storage and Communication Services Subsector	74
5.4	Impulse Response to One S.D. Innovations Public Services Subsector	79

CHAPTER I

INTRODUCTION

Economic Structure

The Malaysian economy has been greatly transformed by the New Economic Policy (NEP), beginning 1970 to 1990. The objectives are to eradicate poverty and to restructure the Malaysian society by raising income levels and to increase employment opportunities for all Malaysians. The results of the policy objectives can be seen when the Malaysian economy which was primarily dependent on a few commodities has achieved the status of a manufacturing-based economy in three decades. Given the long run sustainable growth in gross domestic product (GDP) of around seventh percent per capita and the gross national product (GNP) of 4.4 percent in (real terms) over the two decades, the economy has also undergone a rapid structural transformation (Sivalingam, 1988, Abu Bakar and Tahm, 1991, Salih, Mei and Tan, 1991, and Pramanik, 1994) that took place through the inauguration of the Pioneer Industrial Policy (PIP) in 1958 (Pramanik, 1994).

With such structural transformation, the declining role of the agricultural sector is evident as shown by the declining share of this sector in GDP. As shown in Table 1.1, the agricultural sector GDP declined by RM14,566 million from 1970-2000. However, the declining share of agricultural sector GDP was then primarily compensated by the increase in the share of the manufacturing and services sectors' GDP. In contrast to the services and manufacturing sectors, the GDP of the

**Table 1.1 Gross Domestic Product by Sector
(RM million in 1978 prices)**

Sector	1970	1980	1990	2000
Agriculture, forestry and fishing	6,254	10,190	14,829	20,820
Manufacturing	2,995	8,742	21,381	58,010
Services¹	7,796	17,834	33,465	70,720

Note:

¹ includes electricity, gas and water; transportation, storage and communication; wholesale, retail trade, hotel and restaurant; finance, real estate and business services; government services and other services.

Source: http://www.epu.jpm.my/Bi/dev_plan/opp2/bab323.htm

agriculture, forestry and fishing sectors increased but at a decreasing rate. The increasing value of GDP of agriculture, forestry and fishing sectors may be due to innovation, modernization and expansion of services subsectors such as the financial, transportation and telecommunication within the sector.

The GDP share of the manufacturing sector increased by 94.84 percent from RM2,995 in 1970 to RM58,010 in 2000. This dynamic growth in the sector's share to GDP was resulted from the broader based development of manufacturing activities and the expansion of the transportation will strengthen the role of this sector (Malaysia, 2004).

The services sector's share of GDP increased by 88.98 percent from RM7,796 in 1970 to RM70,720 in the year 2000. The sectoral share in 2000 showed that the GDP of the services sector was almost twice as much as the 1990 GDP and it contributed the largest amount to the total GDP (see Table 1.1). With the rapid growth of the economy, this sector was expected to expand rapidly in terms of its potential

contribution to GDP growth and employment generation. As indicated in Table 1.1, the services sector showed an increasing trend throughout the 15 years since the NEP and has the largest share of GDP in the country. The services sector comprised of business activities which have better potential in the future and the government of Malaysia has expected by year 2020 that this sector will contribute about to 65 percent of total GDP (Berita Harian, January 12, 1996). Henceforth, it is expected that the future of the Malaysian economy will be more dependent on its services sector as the greatest contributor toward GDP and employment opportunities.

Labour Force

Labour is one of the crucial factors of production in any economic system. Labour is also the only factor of production which is both producer and consumer. For example, in the business services subsector such as legal, engineering and accounting services, the labour involved in these kinds of services, are themselves producers by selling their services, and at the same time they are also consumers of other goods and services.

The Department of Statistics, Malaysia defined the labour force as those who are engaged in economic activities and working in the production of goods and services including those who are actively looking for work and who are at least able to work, and those who are within the range of 15 years and 64 years old. Labour can be categorized into two groups: employed and unemployed. The employed group includes persons who are actually working (at least one hour for pay) during the

reference period, as well as those who have jobs but are temporarily laid off on account of sickness, strike and bad weather, but would return to work in due course, plus those who have worked less than 30 hours. The employed group is then classified according to employment status. This refers to the status of an individual with respect to his employment, that is whether he is an employer, own account worker, or unpaid family worker and employees. The unemployed group includes all persons who are not working and not actively looking for work during the reference period. The outside labour force includes those persons who are not classified as employed or unemployed. They are housewives, students, disabled persons and those who are not interested in looking for jobs and also persons below the age of 15 and above 65 years old.

Labour Force Growth

The size of the Malaysian labour force in 1970 was 3.68 million and a decade later (in 1980) it increased to 5.38 million. By year 1990 the labour force grew to 7 million and in year 2000 it has grown to more than 9 million. Table 1.2 shows the rising labour force brought about by the natural growth of population and subsequently the ability to create employment by the non-agricultural sector. This growth of labour force also resulted from the increase in the working-age population (from 58.8 percent to 60.8 percent) as expected in the labour force participation rate from 66 percent to 68 percent as shown in Table 1.2. Besides that there are additional labour force being displaced by the declining importance of the agricultural sector (Pramanik, 1994). Migration has also caused changes in the employment pattern especially in services sector. This is reflected by the movement of labour from agricultural to the

Table 1.2 Labour Force Profile, 1990 – 2000

	1990		2000	
	('000)	(%)	('000)	(%)
Population	18,010.2		22,660.6	
Age Group				
0-14	6,752.0	37.5	7,890.1	34.8
15-64	10,589.7	58.8	13,773.5	60.8
65+	668.5	3.7	996.9	4.4
Labour Force	7,046.5		9,364.5	
Labour Force Participation Rate		66.0		68.0

Source: http://www.epu.jpm.my/Bi/dev_plan/opp2/bab608.htm

manufacturing and services sectors. Zarembka (1972) noted that labour moves from low-wage towards high-wage area, where many of these areas are located in the urban area, in the manufacturing as well as the service industries.

Employment Pattern and Change

The Malaysian economic activities can be divided into three main sectors namely, agriculture, manufacturing and services. In 1970s the agricultural sector predominates as far as labour force absorption is concerned. However, the trend in the percentage distribution of the labour force by the three sectors indicates that changes have taken place in the economy. The declining percentage of employment in the agriculture is accompanied by the rise in the employment in the manufacturing and services sector. For instance, in 1980 labour force share in the services sector was persistently higher than the manufacturing sector and it supersedes the agricultural sector. Evidently, employment pattern in Malaysia had changed over the

period of 1970 to 2000. This was caused by the rapid rate of industrialization that had taken place in the 1990's, in conjunction with a gradual decline in the contribution of agricultural sector toward the economy, which had some implications for the structural shifts in the services sector (Pramanik, 1994).

This section will discuss the Malaysian employment situation during the past thirty years that is from 1970 to 2000. The structural transformation in the economy had quite an impact on the employment pattern in Malaysia. Table 1.3 shows that the agriculture sector's contribution towards total employment consecutively declined from 50.5 percent in 1970 to 39.7 percent in 1980, 26.0 percent in 1990 and 13.1 percent in 2000. The declining rate of employment in this sector is attributed to the less attractive working conditions and relatively low wages compared with the non-agricultural sectors. Further, the situation is worsened by the migration of the younger population from agriculture to other sectors for better earning prospect and living conditions.

Table 1.3 Employment Estimates of the Agriculture Sector 1970 - 2000

	1970	1980	1990	2000
Estimated Employment ('000)	1,714.6	1,910.9	1,738.0	1,187.7
Share of total Employment (%)	50.5	39.7	26.0	13.1
Average annual growth rate (%)	-	1.9	-1.7	-5.5

Source: Fourth, Fifth, Sixth and Seventh Malaysian Plan

On the other hand, the share of total employment in the manufacturing sector (see Table 1.4) increased by 4.4 percentage point from 11.4 percent in 1970 to 15.8 percent in 1980. Between 1980 to 1990, the growth had slightly decreased by 0.3 percent (from 4.4 to 4.1 percentage point) that is, from 15.8 percent to 19.9 percent (4.1 percentage point). This was due to the economic recession between 1985 to 1988. The following ten years (1990-2000), however, showed an increasing share of employment mainly due to the expansion of existing industries such as the export-oriented industry, like electrical and electronics, textile and garment, and wood-based products. In year 2000 employment in this sector further increased by 9.0 percentage point, which recorded the highest rate of employment over thirty years.

Table 1.4 Employment Estimates of the Manufacturing Sector 1970 - 2000

	1970	1980	1990	2000
Estimated Employment ('000)	386.5	755.1	1,333.0	2,616.3
Share of Total Employment (%)	11.4	15.8	19.9	28.9
Average annual growth rate (%)	-	7.6	5.5	5.0

Source: Fourth, Fifth, Sixth and Seventh Malaysian Plan.

Increase in employment and economic activities of the manufacturing sector have however, indirectly contributed to the increase in employment of the services sector, such as transportation, storage and financial sectors. This is shown by the continued increase in the share of total employment of the services sector from 31.5 percent in 1970 to 36.3 percent in 1980. Despite of the heavy economic recession during the period of 1980 to 1990, the share of the total employment in this sector still increased

by 10.5 percentage point from 36.3 percent in 1980 to 47.2 percent in 1990. In year 2000 the sector's share of employment increased further to 48.3 per cent (see Table 1.5).

Within the services sector (see Table 1.5), employment in the wholesales, retail trades, hotels and restaurants subsectors had the largest share of the total employment. In the year 1970 there were 371,100 persons which account for 10.7 percent of the total employment, compared to 1,218.0 thousand persons 18.2 percent in year 1990. The number of persons involved in this sector increased further to 1469.6 thousand but was only 16.2 percent in year 2000. On the other hand, the employment in finance, insurance, real estate sectors and business services subsectors, such as legal, accounting and engineering services subsector is relatively small. It accounted for about 31.5 thousand persons (0.9 percent share of the total employment) in 1970 but increased up to 479.0 thousand persons (5.3 percent share of total employment) in 2000. This was caused by strong domestic demand for services arising from rapid economic growth and standard of living, plus the continuing effort to promote Malaysia as a tourist destination and offshore banking center.

Based on Table 1.5, employment in the transportation, storage and communications subsectors grew from 115.1 thousand persons (3.4 percent of total employment) in 1970 to 193.2 thousand persons or 3.8 percent of the total employment in 1980. In 1990 the employment grew to 302.0 thousand or 4.5 percent of total employment. The sector continues to grow by an average of 5.1 percent in year 2000.

Government services contribution toward employment at first grew from 396.6 thousand persons (11.7 percent of the total employment) in 1970 to 850.0 thousand persons (12.7 percent of total employment) in 1990. Year 2000 saw the expansion of the health, medical, education and training services with the rising numbers of hospitals, public clinics, education and training institutes. Therefore, the employment level increased to 894.2 thousand persons, but with a smaller percentage point (i.e. 9.9 percent of total employment). This was due to the privatization exercises of some of the major government's department such as Pos Malaysia Berhad, Tenaga Nasional Berhad and Keretapi Tanah Melayu at that time.

The electricity, gas and water, which have the smallest share of the total employment. In 1970 these sectors had only 3.8 percent shares of total employment. It also showed an increasing pattern although at a smaller percentage which only increased from 3.8 percent of total employment in 1970 to 10.4 percent in 2000.

This is consistent with the historical economic development which shows a direct link¹ between the three sectors that is agricultural, manufacturing and services sectors (Emi, 1978, Gemmel, 1986 and Pramanik, 1994). The structural change in the employment pattern is accompanied by distinctive pattern in the relative proportions of ethnic groups and gender in each of the service sectors. Table 1.6 shows that the shares of Bumiputera in all services sector are increasing gradually over three decades

¹ Based on historical pattern of transformation, development proceeds in three stages, first agriculture predominates, then manufacturing sector and finally the services sector catches up.

Table 1.5 Employment Estimates of the Services Sector 1970 - 2000

Sector	Estimated Employment (' 000)				Average annual growth rate (%)		
	1970	1980	1990	2000	1970- 1980	1980- 1990	1990- 2000
Electricity, gas and water	26.5 (0.8)	49.5 (1.0)	47.0 (0.7)	84.0 (0.9)	6.5	4.3	4.0
Wholesale, retail trade, hotel and restaurant	371.1 (10.7)	648.5 (12.7)	1218.0 (18.2)	1469.6 (16.2)	5.7	4.8	2.1
Finance, insurance, real estates and business services	31.5 (0.9)	52.1 (1.0)	258.0 (3.9)	479.0 (5.3)	5.2	4.5	4.8
Transportation, Storage and communication	115.1 (3.4)	193.2 (3.8)	302.0 (4.5)	506.9 (5.6)	5.3	3.2	5.1
Government services	396.6 (11.7)	710.1 (13.9)	850.0 (12.7)	894.2 (9.9)	6.0	4.5	0.5
Other services	128.7 (3.8)	217.7 (4.3)	479.0 (7.2)	938.6 (10.4)	5.4	4.7	6.3
Total	1069.5 (31.5)	1871.1 (36.7)	3154.0 (47.2)	4372.3 (48.3)	4.2	10.5	1.1

Note: Figures in bracket is percentage share of total employment.

Source: Fourth and Seventh Malaysian Plan.