SERVICES SECTOR DEVELOPMENT IN MALAYSIA: EDUCATION AND HEALTH AS ALTERNATE SOURCES OF GROWTH

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INTRODUCTION

The services sector is a dominant feature of post-industrial economies accounting for between 60 and 70 per cent of employment and GDP. Growth in services is also recognised as an important aspect of economic development and is strongly associated with income growth and economic modernisation (Francois and Reinhert 1996). Malaysia's services sector currently accounts for about 57 per cent of GDP and about 58 per cent of employment, and the economy is poised to enter into the post-industrial phase of development. The natural transition towards a services-dominated economy is currently being reinforced by policy changes as part of the national strategy to diversify the sources of growth.

Several domestic and international developments in the new millennium have prompted policy makers to re-engineer the economy, focusing on the development of the services sector and services trade, and to chart a new sustainable growth path.

Sustaining growth following the 1997 financial crisis has not been easy, unlike the strong recovery experienced following the mid-1980s economic downturn, when deregulation and liberalisation of selected sectors contributed to a decade long high growth. The fairly successful crisis management in 1997/98 through riggit pegging and selective capital controls, and debt restructuring and recapitalisation of the banking system has introduced a certain degree of resilience into the economy. But the unduly high dependence on manufacturing exports and FDI enhances the vulnerability of the economy to the increasingly uncertain and competitive global environment. The FDI inflow into manufacturing has slowed down and seems unlikely to reach pre-crisis levels. The export of electrical and electronic goods that constitute about 70 per cent of manufacturing exports has slowed down as well. Malaysia has also been facing intense competition in manufacturing from regional economies, especially with the emergence of China as an economic powerhouse. The events of 11 September 2001 and the resurgence of religious extremism in the region have dampened investment climate, and there is a limit to public investment to sustain economic growth in the longer term.

The manufacturing sector currently accounts for about 30 per cent of GDP and has reached its optimum share in the economy, based on the growth experience of industrialised economies. The manufacturing sector may continue to expand in absolute terms, but increasing its relative share may not be easy. Latest figures reflect this trend, where the services sector has overtaken manufacturing in terms of new jobs created. It accounted for about 57 per cent of the jobs created in 2002. The principal source of growth for the next stage of development must come from the services sector.

The traditional view that services are important to an economy only when it reaches a relatively advanced stage of economic development is being challenged by more recent evidence that services are a prerequisite for economic development rather than just its final demand. Increasingly, experience in many developing economies shows that the adequate provision of services is undoubtedly a vital element in ensuring dynamic economic growth. The inadequate development of intermediate services – services that contribute to the production of other goods and services - could inhibit the growth of the other sectors. Recognising these constraints, the Second Industrial Master Plan (1996-2005) emphasised the importance of developing supporting services for manufacturing under its Manufacturing ++, or the cluster-based, industrial development strategy. The development of the services sector forms an integral component of the cluster-based industrial development strategy adopted since 1996.

The Malaysian experience also shows that the existence of a dynamic manufacturing base alongside a relatively weak services sector results in heavy reliance on imported services, and contributes to a huge outflow of foreign exchange.

The market potential for growth in commercial services in Malaysia has expanded with rising incomes and changing tastes. Likewise, the demand for services inputs over the last three decades has also risen with the increase in the level of maturity and sophistication of

Malaysia's manufacturing. The increase in the demand from the goods-producing sector for commercial services is partly fuelled by the trend to outsource their services rather than providing them in-house. Finally, the demand for services provided by the public sector, commonly termed non-commercial services, has expanded with rising population and higher standard of living.

These developments and the General Agreement on Trade and Service (GATS) that commenced in January 2000 have prompted policy makers to re-examine the role of services in national economic development and to prioritise the development of the services sector as the future engine of growth. Unlike manufacturing, the services sector consists of a whole range of sub-sectors, and the development of selected niche areas are prioritised to serve as the future engine of growth. Two such sectors include education and health care. The paper focuses on the growth and development of these two service sectors, in particular their export potential.

Section II provides an overview of the role and development of the services sector in the Malaysian economy. The remainder of the paper focuses on the development of the education and health care industries in Malaysia. The profile of each of the industries is introduced, and their export potential to diversify Malaysia's sources of growth is examined. The paper concludes with some policy implications for their development as future engines of growth.

SERVICES SECTOR DEVELOPMENT IN MALAYSIA

Before examining the contribution of the services sector to the economy and its performance, it is useful to define and classify the services sector.

Definition of the Services Sector

There has been little consensus on the definition and classification of services, both in academic literature and in national accounting. The inadequacies in the classification and definition of services contribute to poor data quality, continuity, and level of disaggregation. These definitional difficulties often contribute to an underestimation of the output of the services sector.

The problems arise due to the inherent nature of the services provided. Traditional definitions focus on the relative intangibility of service outputs, the close links between production and consumption or the relative labour intensity of services compared to the goods producing sector. For instance, many repair services cannot be delivered over a distance. However, with improvements in information technology, which enable services to be delivered over distance, traditional definitions pose problems. The use of ICT in the production and delivery of some services such as finance, transport and telecommunications makes services a highly capital and technology intensive industry, contrary to the traditional view of services as a labour-intensive industry.

There is also no common acceptance in the classification of services. They can vary from a narrow to a broad range of services. The narrow range includes all activities other than agriculture, forestry, hunting and fishing, mining and quarrying, manufacturing, construction, utilities and public administration and defence, while the broadest range includes utilities, public administration and defence and construction (Sieh, 2000). For empirical analysis, the paper adopts the broadest definition, that is, all economic activities other than agriculture, forestry, hunting and fishing, mining and quarrying, and manufacturing. The latter definition is also used by the 144 member nations that are involved in the GATS negotiations.

Service Sector Contribution to the Economy

The services sector contributed about 57 per cent to Malaysia's gross domestic product (GDP) in 2002, representing a 10 per cent increase since 1990 (Table 1). The services sector has expanded gradually over the years from 1975, with the exception of a marginal slide in the early 1980s, when it fell from about 49 per cent in 1975 to about 45 per cent in 1980 largely due to the slow growth in government services. The services sector share also fell in 1990, but this was largely attributed to the large-scale privatisation of public services.

TABLE 1
Malaysia: Contribution of Services to GDP, 1975-2002

	1975	1980	1985	1990	1995	2000	2002
Construction	3.8	4.6	4.8	3.6	4.5	3.3	3.2
Electricity, gas & water	2.1	1.4	1.7	1.9	2.3	3.9	4.0
Transport, storage & communications	6.2	5.7	6.4	6.9	7.4	8.1	8.2
Wholesale & retail trade, hotels & restaurants	12.8	12.1	12.1	11.1	12.3	14.7	14.1
Finance, insurance, real estate & business	8.5	8.3	8.9	9.8	10.8	12.4	13.2
Government services	12.7	10.3	12.2	10.6	9.5	6.9	6.7
Other services	2.8	2.3	2.3	2.1	2.1	7.6	7.2
Total services	48.7	44.7	48.3	46.1	48.8	57.0	56.6
Agriculture & mining	32.2	33.0	31.2	28.5	21.0	16.0	14.8
Manufacturing	16.4	19.6	19.7	26.9	33.1	32.3	28.5

Source: Ministry of Finance, *Economic Report*, various issues.

The leading sub sectors were wholesale and retail trade, and hotels and restaurants which accounted for about 14.0 per cent of GDP, and finance, insurance, real estate and business services which contributed approximately 13.0 per cent of GDP in 2002. With the exception of government services, all other sub sectors have expanded. The government services share of GDP has declined by almost 50 per cent since the mid-1980s, from 12.2 per cent in 1985 to 6.7 per cent in 2002. The downward trend is part of the national strategy to withdraw from direct participation in economic activities and to assume a more regulatory role, and to shift the engine of growth to the private sector. None the less, government services have expanded in absolute terms with the increase in population and standard of living, and modernisation of the services provided.

In terms of employment, services accounted for about 58 per cent of total employment in 2002 (Table 2). Services employment share has been on the rise since 1980, when it accounted for about 46 per cent of total employment. Other services, which include electricity, gas and water, wholesale and retail trade, and hotels and restaurants was the largest employer, and it accounted for about 28 per cent of total workforce in 2002. Employment in all sub sectors has been on the rise, with the exception of government services, whose employment share has declined from 13.3 per cent in 1980 to 10.4 per cent in 2002. As noted earlier, this is due to the downsizing of the public sector and to privatisation of several public agencies.

TABLE 2
Malaysia: Contribution of Services to Employment, 1975-2002

	1980	1985	1990	1995	2000	2002
Construction	5.6	7.6	6.3	8.9	8.1	8.0
Transport, storage & communications	3.9	4.3	4.5	5.0	5.0	5.2
Finance, insurance, real estate & business	2.9	3.5	3.9	4.7	5.5	6.2
Government services	13.3	14.6	12.7	10.8	10.6	10.4
Other services	20.3	22.6	26.1	25.5	27.6	28.4
Total services	46.0	52.7	53.5	54.8	56.8	58.2
Agriculture & mining	38.5	32.1	26.6	19.5	15.6	14.6
Manufacturing	15.5	15.2	19.9	25.7	27.6	27.1

Notes: Government services includes public administration, health, education and defence; other services includes electricity, gas and water, wholesale and retail trade, hotels and restaurants, and other services.
Source: Ministry of Finance, *Economic Report*, various issues.

The relatively high share of employment in the services sector reflects the presence of many labour-intensive industries in this sector as well as the relatively low level of technology in Malaysian services production (Sieh Mei-Ling 2000, p.6). This is especially true of the construction industry whose share in GDP was 3.2 per cent in 2000 in contrast to its employment share of 8.0 per cent.

Demand for Malaysian Services

The services sector plays a vital role in its linkage with the other sectors of the economy. In 1983, about 63 per cent of the total services produced in the country were consumed as final demand, while about 27 per cent was channelled into other sectors as intermediates, while only 7 per cent was exported (Table 3). In 1991, about 56.0 per cent was consumed as final demand, and 31.0 per cent was used in the production of other goods and services, while only about 9 per cent was exported. Thus, unlike agriculture and manufacturing, the services industry is a more domestic-oriented industry and the bulk of its services are consumed as final demand. As the economy matured, the consumption pattern of the services industry has diversified slightly, with a slight increase in intermediate demand. However, the export of services has not shown any improvement and in fact has declined from 10.1 per cent in 1987 to 8.5 per cent in 1991.

TABLE 3
Composition of Demand for Malaysian Production by Major Sector, 1978, 1987 and 1991
(Percent)

	Agriculture			Manufacturing			Services		
	1983	**1987**	**1991**	**1983**	**1987**	**1991**	**1983**	**1987**	**1991**
Intermediate demand	44.1	48.2	46.1	38.5	32.3	32.6	27.3	29.1	31.1
Private consumption	11.5	11.1	11.9	23.2	18.4	14.1	20.3	21.0	20.8
Government consumption	0.0	0.0	0.0	0.0	0.0	0.0	18.8	18.7	14.2
Gross capital formation	4.0	2.4	3.7	4.5	2.8	4.6	23.0	16.5	20.8
Exports	36.5	34.6	36.4	34.2	47.2	49.5	7.1	10.1	8.5
Imputed bank charges	0.0	0.0	0.0	0.0	0.0	0.0	3.2	4.6	4.4
Change in stocks	3.8	3.7	3.7	-0.4	-0.6	-0.9	0.3	0.0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Sieh Mei-Ling et al, 2000, p.9 for 1983 & 1987 figures. The 1991 figures are computed from Department of Statistics, *Malaysia: Input-Output Tables, 1991,* Kuala Lumpur.

Services Sector Development Policies

One can identify three distinct, but overlapping, phases in the development of the services sector in Malaysia. In the initial stage of development, the services sector was looked upon as a "non-productive" sector, whose growth and development was contingent upon the dynamism of the agriculture and manufacturing sectors, which remained the principal engines of growth. As such, little policy attention was placed on the development of commercial services, such as finance and banking, distributive trade and other business services. None the less, the development of non-commercial services, such as health, education and infrastructure was prioritised. The government invested heavily in the development of these sectors, and a great deal of attention was devoted to policies and institutions to ensure rapid growth and an equitable distribution of these services. The main objective in the development of the services sector in the initial phase was to support the growth and development of the agriculture and manufacturing sectors, and to provide basic needs such as education, health and utilities to the growing population in the urban and rural areas.

The second phase in the development of the services sector can be traced to the mid-1980s, when many of the services that were traditionally provided by the government were privatised. With privatisation, their production and delivery became more commercially driven. These include roads, rail, air and sea transport, telecommunications, power generation and distribution, water supply and sewerage and many others. The primary objective was to reduce the financial burden on the public sector, ensure adequate supply to meet rapidly increasing demand and to instil greater efficiency and quality in the services provided. Drastic policy and institutional changes were also made to the education and health industries. While the government is still largely engaged in the production and delivery of basic education and health care, the industries have been deregulated and privatised to allow for larger involvement of private enterprise. These changes have witnessed a rise in the number of private schools, colleges and universities, and hospitals and other health institutions.

Greater policy attention was also placed on the development of commercial services in the 1990s. The Second Industrial Master Plan (1996-2005) adopted a cluster-based industrial development strategy to sustain the dynamism of the manufacturing sector. The services sector is integral in the clustering process as it creates the national competitive advantage. The Second IMP recommended a wide range of incentives and programmes to develop the services sectors supporting the development of the manufacturing sector. Policies were also introduced to reorganise the financial and capital markets to meet rising competition following the liberalisation of the services sector under WTO.

The third phase in the development of the services sector began in the new millennium and was necessitated by a host of internal and external challenges, as explained earlier in the paper. The services sector is central to the national development strategy to re-engineer the economy focusing on domestic sources of growth. Unlike manufacturing, the services sector has traditionally been driven by domestic investment initiatives. The promotion of the tertiary sector as the next engine of growth also coincides with the liberalisation of the services sector under GATS, necessitating a more proactive approach in the development of trade in services.

The Ministry of International Trade and Industry (MITI) and the Malaysian Industrial Development Authority (MIDA) have both set up a Manufacturing Related Services Division to promote and facilitate the development of key manufacturing related and support services as new growth areas. Measures have also been taken to further enhance the competitiveness in export of services to take advantage of the liberalisation of the global services market under GATS. The Professional Services Development Centre has been established to build capacity and to disseminate international market information to the professional service providers. The National Professional Services Export Council has been set up under the trade agency—Malaysia External Trade Development Corporation (MATRADE)—to identify potential markets that professional service providers can explore, and to disseminate information on promotional programmes carried out by the government.

Trade in Services

Malaysia has traditionally been a net importer of services. Its role in services trade has been rather weak, leaving a perennial deficit in the services account of the balance of payments. The size of the deficit has also been on the rise, with the exception of a marginal decline in 1990, 1998 and 2001 (Table 4). In 1965, the deficit was RM341 million, but it rose to a whopping RM10.6 billion by 1985, and doubled to RM22.3 billion in 1998. Annual figures from 1999 are not comparable due to the new format adopted for the balance of payments reporting. Based on the new format, the deficit on the services account in 2001 was RM7.6 billion. The deficit in the balance of payments has declined following the introduction of several measures in the late 1990s to reduce the services deficit.

TABLE 4
Malaysia: Trade in Services, 1965-2002
(RM millions)

	1965	1970	1975	1980	1985	1990	1995	2001
Receipts	558	582	1,457	4,284	6,596	15,897	35,703	61,947
Freight & insurance	6	5	69	437	979	1,523	2,552	--
Other transportation	48	74	326	811	1,123	2,182	4,443	10,443
Travel and education	22	32	344	691	1,497	4,555	9,939	26,081
Investment income	170	235	364	1,608	1,456	4,500	6,259	7,018
Government transactions	262	129	151	193	248	242	319	473
Other services	50	107	203	544	1,293	2,895	12,191	17,932
Net Payments	899	1,444	3,167	10,097	17,192	25,620	54,744	95,936
Freight & insurance	168	309	690	2,218	2,711	5,360	11,580	--
Other transportation	64	95	228	867	1,151	2,207	3,697	21,795
Travel and education	102	137	449	1,576	2,889	3,923	5,796	9,933
Investment income	425	590	1,091	3,428	7,121	9,572	16,821	32,641
Government transactions	37	61	104	200	221	245	342	448
Other services	103	252	605	1,808	3,099	4,313	16,508	31,119
Payments	-341	-862	-1,710	-5,813	-10,596	-9,723	-19,041	-7,615
Freight & insurance	-162	-304	-621	-1,781	-1,732	-3,837	-9,028	--
Other transportation	-16	-21	98	-56	-28	-25	746	-11,352
Travel and education	-80	-105	-105	-885	-1,392	632	4,143	16,148
Investment income	-255	-355	-727	-1,820	-5,665	-5,072	-10,562	-25,623
Government transactions	225	68	47	-7	27	-3	-23	25
Other services	-53	-145	-402	-1,264	-1,806	-1,418	-4,317	-13,187

Source: Department of Statistics, *Annual Balance of Payments* and *Quarterly Balance of Payments*, various issues.

The deficit in the services account of the balance of payments has been large due to heavy import of shipping, freight and insurance services, the huge outflow of investment income from foreign direct investment, and debt servicing, royalties and consultancy fees paid abroad. Although the merchandise account had recorded surpluses during most of the period, they were insufficient to cover the deficit in the services account, resulting in deficit in the current account. The persistent deficit in the current account reached unsustainable levels in the early 1980s, when it reached a high of between 10 to 14 per cent of GNP. To address the growing balance of payment problems, a Council on Malaysian Invisible Trade was established in 1984 to recommend measures to reduce the services account deficit. However, until very recently, efforts to reduce its reliance on the import of services and to export Malaysian services have not been very successful. There are a few large service firms in Malaysia that could offer sophisticated services and compete internationally, but they are normally linked with foreign firms (Sieh Mei-Ling 1990). Many of the foreign linked firms provide accounting, legal and other business services to the local market. On the other hand, the local services firms are very small and fragmented with insignificant market shares.

The export of services as a percentage of total export of goods and services is only around 15 per cent. Malaysia's international competitiveness in trade in services remains weak, but several measures recently introduced have had some positive impact on the current account balance. These include the promotion of tourism as a source of foreign exchange earnings, the expansion of services supply in shipping, insurance, finance, education and health for import substitution as well as for export promotion.

The following examines recent developments in the education and health care industries in Malaysia and their export potential to diversify Malaysia's sources of growth.

EDUCATIONAL SERVICES

The scope of analysis in this section is confined to higher or tertiary education, as this area has been growing very rapidly following the liberalisation and deregulation of the education and training market since the late 1980s. There has been considerable import substitution of tertiary education as well as a small but rapidly expanding export market for higher education following greater private investment in the tertiary education industry.

Recent Developments in Higher Education

Several far-reaching educational reforms were introduced since the late 1980s that had far-reaching implications on the development of higher education in Malaysia. The scope of these reforms affected both the provision of higher education by the state and by the private sector. Essentially, there are two facets to these reforms: one—strict state control over the provision of higher education by public institutions was relaxed, and the responsibilities shifted to a corporate structure; and two—private universities, prohibited until now, were allowed to operate. Both changes allowed greater interaction of market forces and contributed to expansion in the local education and training market. The number of private institutions of higher learning increased from 291 in 1995 to 720 in 2002 (Table 5).

TABLE 5
Institutions of Higher Learning in Malaysia

	1995	1996	1997	1998	1999	2000	2001
Public							
Public university	9	9	10	11	12	12	14
International Islamic university	1	1	1	1	1	1	1
Public college	2	2	2	2	2	1	1
Private							
Private university	0	0	0	5	6	7	9
Private institution	280	354	497	577	591	632	691
Branch campus	0	0	0	1	1	3	4
Total	291	365	509	596	613	656	720

Source: Department of Higher Education, Ministry of Education.

Educational reforms were introduced since the late 1980s to encourage the private sector to play a more dynamic and expanded role in higher education to meet excess demand and to produce sufficient skilled workers for an economy that was experiencing severe labour and skill shortages. It was apparent that self-sufficiency in education was critical to the nation's drive to achieve developed nation status by the year 2020. It was within this context that regulatory reforms were introduced. However, the expanding higher education market began to attract overseas students, and given a small domestic market, Malaysia started to reposition itself as regional centre of excellence in tertiary education to benefit from economies of scale.

Initial policy changes to develop the tertiary education market included the relaxation of rules in issuing permits for the operation of private institutions of higher learning. In addition, a number of fiscal and financial incentives were granted in the 1995/95 national budget. These included:

- Tax exemption on import duty, sales tax and excise duty on educational materials and equipment to approved training institutions, but they require prior approval of the Ministry of Finance.
- Companies that establish technical and vocational training institutes are eligible for 100 per cent Investment Tax Allowance (ITA) for up to ten years.
- Tax deductions were given to companies that contributed cash, equipment and materials to government and semi-government technical institutes.
- Existing technical and vocational training institutions that incur expenses for upgrading and expansion were eligible for ITA.

Several amendments were made to existing legislation governing tertiary education and new ones were introduced.[1] These amendments provided for the corporatisation of public universities that allowed for greater autonomy and flexibility in finance and personnel management as well as in the management of academic affairs. The policy changes also allowed the establishment of private universities, including the establishment of local private universities, university colleges or the setting up of branch campuses of foreign universities. These private universities were allowed to use English as the medium of instruction. The National Accreditation Board was set up to ensure the quality of education was not compromised.

More recently the Ministry of Education launched the Strategic Plan for Private Higher Education, 2001-2010, charting the future direction of the development of private higher education. The main objective is to transform Malaysia into a regional centre of excellence for higher education.

These changes led to an unprecedented development of tertiary education in Malaysia. The number of public institutions of higher learning increased from 12 in 1995 to 16 in 2001,

1. These include the Education Act 1996, Private Higher Educational Institutions Act 1996, Universities and University Colleges (Amendment) Act 1996, National Accreditation Board Act 1996, National Higher Education Fund Board Act 1997, and National Council on Higher Education Act 1996.

while the number of private institutions more than doubled from 280 in 1995 to 704 in 2001 (Table 5). The public universities are public ly funded and they are located throughout the country. Their campuses are relatively large, they offer a variety of courses, and the medium of instruction is Bahasa Malaysia, though selected courses are taught in English. In contrast, private institutions are commercially funded, concentrated in urban areas, and mostly situated in the Klang Valley. Their campuses are relatively small, while the larger institutions are usually supported by large business entities. They offer a narrow range of courses and the medium of instruction is English. Public and private institutions are driven by different objectives. Private universities are commercially driven where fees are charged on a commercial basis. Public universities offer education as a public good and the fees are nominal.

The huge investment in tertiary education by the private sector has greatly expanded the market for tertiary education. Student enrolment in private institutions increased more than twofold from 143,803 in 1997 to 270,904 in 2001. There was also increased intake of students in public institutions due to the establishment of new campuses and expansion of existing ones. As a result, the total student population in tertiary educational institutions was close to 0.5 million in 2001, with about 68.0 per cent enrolled in private institutions of higher learning (Table 6).

TABLE 6
Number of Students and Academic Staff
in Public and Private Institutions of Higher Learning, 1997-2001

	1997	1998	1999	2000	2001
Student enrolment	250,865	307,206	359,565	402,863	463,415
Public	107,062	129,841	143,971	170,794	192,511
Private	143,803	177,841	215,594	232,069	270,904
Academic staff	16,221	19,528	20,422	24,127	25,931
Public	11,489	12,388	13,092	14,732	16,003
Private	4,732	7,140	7,330	9,395	9,928
Academic staff to student ratio	1:15	1:16	1:18	1:17	1:18
Public	1: 9	1:10	1:10	1:11	1:12
Private	1:30	1:25	1:29	1:25	1:25

Source: Department of Higher Education, Ministry of Education.

The academic staff-to-student ratio for tertiary education was 1:18 in 2001, comparable to the ratios prevailing in such major exporters of higher education as the United States, Australia, the United Kingdom and Canada. The ratio is higher in the private institutions where it ranges from 1:25 to 1:30, whereas in public institutions it is between 1:15 to 1:18. Generally, public institutions have a higher ratio of academic staff with Master's degrees and PhDs as compared to private institutions (Table 7). Foreign lecturers represent less than 10 per cent of the total teaching personnel in private institutions (Ministry of Education).

TABLE 7
Teaching Staff in Public and Private Institutions of Higher Learning by Academic Qualification, 2001

	Public		Private		Total	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
PhD	3,375	32.6	362	3.6	3,737	18.4
Masters degree	4,932	47.6	2,289	23.1	7,221	35.6
Bachelor's degree	2,045	13.8	6,210	62.6	8,255	40.7
Diploma	--		1,076	10.8	1,067	5.3
All teaching staff	10,352	100.0	9,928	100.0	20,280	100.0

Source: Ministry of Education.

There were 18,245 foreign students enrolled in the various institutions of higher learning in 2001, with about 72.0 per cent of them in private institutions. They contributed an estimated RM325 million in foreign exchange earnings based on the Central Bank's cash balance of payments reporting. Foreign students accounted for only about 3 per cent of total students enrolled in institutions of higher learning in Malaysia in 2001, but there was rapid growth in foreign student population over the past few years. According to the Ministry of Education, as at 1 January 2003, there were a total of 36,466 foreign students studying at various levels in both public and private institutions. These trends indicate substantial potential for the export of education services. The Ministry of Education targets to have about 50,000 foreign students by the year 2005 and this would translate to about RM3 billion in export earnings from higher education. The majority of students come from China (11,058), followed by Indonesia (7,503), India (1,409), Thailand (1,369), and Singapore (1,296). There was a sharp increase in the number of students from the Middle Eastern nations. Their number rose from 901 in 2002 to 2,173 as of 1 January 2003. The majority of foreign students pursued courses in business, information technology, and engineering.

Despite the rapid increase in enrolment in private institutions of higher learning, their enrolment was heavily skewed towards lower tertiary education, that is, the certificate and diploma levels. In 2001, of the total student enrolment in private institutions of higher learning, only 0.93 per cent were in the post-graduate programme, 22.3 per cent in degree or higher level programmes, and 76.7 per cent in diploma and certificate programmes. The majority of international students were enrolled in courses that are tied in with internationally recognised programmes or universities whereby the final degree is awarded by the foreign partner. The internationally linked programmes enable foreign students to save time and money by doing part of the course in Malaysia. Entry qualifications for these programmes are also more flexible, making them very attractive for foreign students.

The sharp rise in the supply of tertiary education is largely attributed to excess demand from local students due to severe shortages in the supply of public tertiary education and the high cost of overseas education following the depreciation of the Malaysian ringgit in 1997. The domestic market is far too small for sustained expansion of the industry. To sustain growth, the tertiary education industry in Malaysia has to address several structural challenges to attract more local and international students.

There has been a perceptible decline in the usage and standard of English. There is also an emerging divergence in the structure and quality of public and private tertiary education. While private-sector courses are entirely in English, public-sector courses are taught in Bahasa Malaysia. The distinct differences in the medium of instruction discourage good students who are less proficient in English or those who prefer to develop multi-lingual talents from enrolling in public institutions of higher learning. The majority of non-Malay students prefer to enrol in private colleges and universities while Malay students opt for public universities, causing an ethnic divide that does not augur well for nation building. There is also a near absence of research and teaching links in private institutes as compared to public universities. The higher education industry involves high initial outlays and high operating costs, but the private institutions of higher learning receive little financial or fiscal assistance, while the public colleges and universities are almost entirely funded by the state.

Export Potential of Higher Education

Malaysia's competitive advantages in the export of higher education lie in its ability to provide good quality education in selected fields at competitive prices. The cost-of-living is relatively low in Malaysia as compared to Singapore, which remains its principal competitor. The medium of instruction in the private institutions is English, and foreign students are able to obtain a foreign degree at competitive rates through the several twinning programmes that are offered by the private institutions.

Malaysia's diverse culture and language are a source of attraction for students from around the region. It can leverage its Asian and Islamic cultural heritage to attract students from the Islamic nations of the Middle East as well as from China, India, and Indonesia. Malaysia is also a relatively safe environment, despite the perceived threat of religious extremism.

Malaysia needs to build upon its present strengths to capture the expanding overseas market for higher education. In order to do this, it has to have a more integrated strategy to promote its higher education services in targeted overseas markets. Promotional efforts such as those carried out by the UK, the United States, Canada, and Australia are vital in marketing and promoting Malaysia as a centre of excellence in higher education. At the domestic level, it has to revamp the policy and institutional framework governing tertiary education to remove the barriers that prevent the education industry from responding to changing market needs.

Private institutions of higher learning need to build strong links between teaching and research. At present only public institutions of higher learning are engaged in research, though the demand structure for higher education has changed drastically, with about 70.0 per cent of students enrolled in private institutions. Apart from forging research links with private industry, public funds should be made equally accessible to teaching-related research in private institutes of higher learning. It is also important to tie up with top-notch universities to foster quality research and teaching capabilities, which remains an important factor in attracting top calibre students.

In order to attract international students, employment and post-graduate training opportunities must be made available by relaxing immigration and employment regulations. Encouraging top calibre students to study and work in Malaysia also helps to foster research and technology development as envisaged in the K-based Economy Master Plan.

HEALTH CARE SERVICES

Traditionally, the government has been the largest provider of health services for the community. Malaysians in general have access to a wide range of medical services though a nationwide network of public hospitals and clinics. These centres provide both curative and preventive healthcare services, and their services are complemented by the private sector, but these are mostly located in urban areas. Both public and private healthcare services have expanded very rapidly, to cope with increasing demand for more and better quality services as household income increases.

The health care industry also underwent substantial restructuring in the 1990s. The traditional role of hospitals and the Ministry of Health (MOH) in providing medical and healthcare services in the country has shifted towards wellness rather than disease. To implement this paradigm shift, the MOH has introduced the following initiatives: health promotion and prevention programmes, restructuring of public hospitals, setting up sub-speciality centres, development of health infrastructure, use of information and multimedia technology, introduction of the National Healthcare Financing Scheme (NHFS), and the Implementation of National Quality Assurance Programme

Overview of Public and Private Hospitals in Malaysia

The number of hospitals in Malaysia has recorded a compounded annual growth rate of 1.3 per cent, from 336 hospitals in 1999 to 345 hospitals in 2001. While public hospitals have demonstrated marginal growth, private hospitals have grown at a more rapid rate of 1.8 per cent (Table 8).

TABLE 8
Number of Hospitals in Malaysia, 1999-2001

	Public	Private	Total
1999	120	216	336
2000	120	224	344
2001	121	224	345
CAGR 1999-2001	0.4	1.8	1.3

Source: Ministry of Health.

The proliferation of private hospitals is also evidenced by the increase in the number of beds over the last 15 to 20 years. In public hospitals the number of beds stood at approximately 32,500 in 1985 and increased to 34,536 in 2001. In private hospitals, the number of beds increased from about 1,200 in 1980 to almost 10,000 in 2001 (Table 9).

TABLE 9
Number of Beds in Public and Private Hospitals, 1980-2001

	Public	Private
1980	n.a.	1,171
1983	n.a.	3,465
1985	32,495	4,073
1993	33,201	5,799
1997	33,918	9,011
1999	33,437	9,498
2001	34,536	9,949
CAGR 1985-2001	0.4	5.7

Source: Ministry of Health, "Health in Malaysia, Achievements and Challenges", 1999, *Annual Report*, 1998 & 1999, and "Health Management Information System", 2002.

Public hospitals accounted for about 78 per cent of total beds, but the expansion of beds has been more rapid in the private sector, at 5.7 per cent. The growth in private healthcare in Malaysia appears to be in line with the increasing need for health services and the growing affluence of the population. While private-sector capacity has grown, it should be noted that the public sector is still the dominant provider of healthcare services in the country. Moreover, academic and research hospitals such as the University Malaya Medical Center, the UKM Hospital and the USM Hospital are all public hospitals. Thus, unlike in the higher education industry, in healthcare the private sector is still relatively small. The majority of private hospitals are in urban areas—the Klang Valley, Penang, and Malacca.

The total number of doctors in Malaysia in 2001 was 15,619. Of this, 54 per cent were employed in the public sector. At 1:1,490 the doctor-to-population ratio is rather low in

Malaysia compared to advanced nations. The ratio for Singapore is 1:720, and for the United States and the UK it is 1:363 and 1:649, respectively. Of the total number of doctors in the public sector, about 18 per cent were specialists. There is a vast disparity between the public and private sectors in the ratio of doctors to beds. In public hospitals there are 4.1 beds per doctor, whereas the ratio is only 1.4 beds per doctor in the private sector. The total number of nurses was approximately 31,000 (Table 10). The public sector suffers from a severe shortage of medical personnel, especially doctors, due to relatively lower remuneration in public services. Other health professionals such as nurses, medical assistants and laboratory technologists, physiotherapists, occupational therapists, and radiographers are also in short supply in the public sector. Heavy investment in the training of healthcare professionals is needed to meet the targets set under the Eighth Malaysia Plan.

TABLE 10
Number of Health Professionals in Malaysia, 2000

				Health Professional to Population Ratio	
	Public	**Private**	**Total**	**2000**	**Eighth Malaysia Plan Target**
Doctors	8,410	7,209	15,619	1: 1,490	1: 836
Specialists	1,493	n.a.	n.a.	1: 15,580 (public)	-
Nurses	23,255	7,874	31,129	1: 747	1: 306
Medical lab technologists	2,974	n.a.	-	1: 7,823 (public)	-
Physiotherapists	271	n.a.	-	1: 85,849 (public)	1: 13,260
Occupational therapists	n.a.	n.a.	148	1: 157,202 (public)	1: 23,576
Radiographers	638	n.a.	-	1: 36,466 (public)	1: 11,923

Source: Malaysia, *Eighth Malaysia Plan, 2001-2005*, Kuala Lumpur: Ministry of Health.

Public health care expenditure in 2002 stood at RM6.0 billion, of which RM4.8 billion was for operating expenses (Table 11). Healthcare costs have been increasing rapidly due to several factors. There has been an increase in the prices of drugs. Malaysia imports the bulk of its drugs (over 70 per cent), and there has been a sharp rise in prices of medicine and medical equipment (by about 30 per cent) since 1998 following the ringgit depreciation.

TABLE 11
Public Sector Health Expenditure, 1998-2002
(RM million)

	1998	1999	2000	2001	2002
Operating Expenditure	3,331	3,626	4,131	4,363	4,762
Development Expenditure	716	836	1,272	1,098	1,273
Total	4,047	4,462	5,403	5,461	6,035

Source: Ministry of Finance, *Economic Report, 2001/2002*, Kuala Lumpur.

The present disparity in facilities and services between the public and private healthcare systems will be greatly reduced with the introduction of the National Healthcare Financing Scheme (NHFS). The NHFS will have far-reaching implications for the growth and development of the healthcare industry in the country. Of greater significance will be the equitable distribution of quality healthcare facilities to the lower income group. Under the National Health Insurance Scheme (NHIS), all employed individuals would make a mandatory contribution based on their income level, while the poor, elderly, and disabled would receive free healthcare. The underlying principle of the NHIS is that the rich will finance the poor and the young will pay for the elderly citizens.

Foreign Patient Market in Malaysia

The inflow of foreign patients seeking healthcare services in Malaysia has increased over the past few years. According to the Central Bank, the inflow of foreign exchange earnings from healthcare services was RM11.2 million in 2001. This figure is a severe underestimate as the Central Bank only records transactions above RM10,000. Private estimates set the total inflow of foreign exchange from the provision of healthcare services at about RM154 million in 2001.

The number of foreign patient admissions in public and private hospitals was around 14,747 in 2001, growing at an average annual rate of 27 per cent over the last three years. Foreign patients from Indonesia accounted for about 50 per cent of patient admissions in 2001. The majority of foreign patients chose Malaysia based on referrals. Quality, location and competitive price were the major reasons for seeking healthcare in Malaysia.

Promotion of health tourism was initiated in 1998 with the establishment of the National Committee for the Promotion of Medical and Health Tourism. To date, the Committee has implemented the following measures:

- Identified target countries for marketing and promotion of health care facilities and participated in a number of trade missions led by other agencies.
- Developed special privileges on foreign patient immigration procedures and simplified immigration procedures for foreign specialists.
- Introduced new tax incentives
- Enhanced the advertisement approval process
- Started to monitor progress of MSQH (Malaysian Society for Quality in Health).

Export Potential of Health care Services

Though Malaysia's foreign patient market is relatively small, it has been expanding at a rapid pace in recent years. Its competitive advantages include relatively low cost for fairly high quality services, cultural similarities, and proximity to large markets.

The general situation with regard to the availability of healthcare professionals in Malaysia does not appear very promising. Statistics on doctors and other healthcare professionals indicate that Malaysia suffers from an acute shortage of medical personnel. Given the severe shortages in healthcare facilities to meet domestic needs, it has to target areas where there is excess capacity to export health services. Areas such as medical screening, beauty and wellness programmes, eye care services, cosmetic surgery, dental services, alternative medicine, and the like hold promising prospects for export of health services. The on-going efforts to promote health tourism in targeted markets should be carried out in a more co-ordinated manner.

Malaysia needs to continuously upgrade the local healthcare sector to enhance its potential and to capitalise on the opportunities it presents. Specifically, it needs to address the following key challenges:

1. Provision of quality healthcare
2. Improve the quantity and quality of healthcare professionals
3. Undertake more concerted and integrated promotion and marketing of Malaysia's healthcare services in overseas markets.
4. Introduce special fiscal incentives for the development of the healthcare industry similar to those prevailing for the manufacturing sector.
5. Improve immigration procedures further to enable foreigners to seek treatment in Malaysia without undue bureaucratic problems.

6. Liberalise and co-ordinate advertising by the healthcare industry, as adequate information is a crucial to selling healthcare services.

CONCLUSION

The services sector is central to the national strategy to re-engineer the economy to focus on domestic sources of growth. There are several compelling reasons for Malaysia to develop its services sector. The demand for services increases as the income level rises and as the population ages. In addition, as the economy matures, there is greater de-integration of service activities of goods and services firms. Many service-related activities are typically skill-based and not investment intensive. As such, they are ideal sources of growth for countries with scarce capital and an increasingly educated workforce.

Over the past three decades, Malaysia's services sector has undergone drastic structural and policy changes to meet the nation's growing demand for more and better quality services, and it is now well-poised to be the principal engine of future growth.

Not withstanding the recognition of the importance of services sector development, given Malaysia's limited financial and human resources and its domestic market size, it should concentrate on a narrow range of market segments in which its has already built up some competitive advantages. Both education and healthcare show promising prospects for further development as engines of growth and export earnings. However, in order to harness the growth potential of these industries, Malaysia needs to ensure adequate supply of skilled personnel and to implement quality assurance to meet international standards.

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