



hard-landing of the U.S. economy upon which a quarter of Malaysia's manufactured exports is dependent. Meanwhile, Japan is deep in debt of over \$5.6 trillion and the current trend is for foreign direct investments to go to China because of the huge market potential there. Capital controls alone, as an economic strategy, is therefore no longer sufficient. (Again, readers are reminded that the pegged ringgit is a closed issue since floating the ringgit when the economy is weak is never a good idea and devaluation will result in loss of confidence because the exchange rate should only be fixed by the market.)

The main anxiety over how business cycles are moving is how long will the ride down take before the bottom is reached and before the next upswing could be expected. Past cycles might give us a clue of what could be expected. Over the last five cycles, there were three periods of expansion each lasting more than two years (one went on for 38 months) interspersed by two expansions that lasted only less than 12 months. More interesting, however, are the length of the recessions during these five cycles. The period of recession during the first cycle lasted 26 months. Since then, the recessions appear to be shortening to become 17, 14, 11 and then only 9 months long. There would be reasons to be optimistic if shortening periods of recessions could be believed to continue.

Global Challenges

The critical difference in policy prescription that is appropriate between the 1997 crisis and the current prescription is the extent by which the local economy could be isolated from the rest of the world. Capital controls allowed a low interest liquidity regime to be pursued at home while fixing the rate of exchange at the border. So long as exports remain strong, the government can concentrate its attention on managing the local economy. Now that exports have weakened, it is necessary to turn our attention from the local to the external. Professor Mahani sees these external forces as a series of global challenges. The world's economy and production structure is more integrated than ever before. Partly it is due to greater market liberalisation allowing not only outputs of production but also the inputs, i.e., the factors of production to move more easily across international boundaries. But perhaps more important it is also the result of the so-called K-economy that is becoming the predetermining factor for what products will appear on the market and at which location on the globe.

Perceptions about the different countries form part of the basis by which capital flows, both short term and long term, occur even though the way various countries are ranked sometimes say different things. On the confidence index, as Dr. Mahani pointed out, Malaysia ranks 22 while China ranks no.2. On the other hand, on the competitive index, Malaysia ranks 29 while China's rank is 33. There is only a limited extent to which Malaysia can deal with its low ranking on the confidence index. Malaysia's low ranking might have been caused by the many negative press reports by foreign media as well as the contagion effects on Malaysia following the poor performances of neighbouring economies particularly Indonesia.

National Challenges

More could be done about making better Malaysia's competitive position. These are what Professor Mahani sees as national challenges. Productivity in Malaysia must increase to match those of more advanced nations if it wants to become one itself. The country has to become more resilient to external shocks. More so because Malaysia is a very open economy for which exports account for a much greater portion of the GDP compared to say the U.S. where exports is only a tenth of the economy. There has to be greater diversity in Malaysia's economy. Move exports out of commodity and into more differentiated products while at the same time shift itself from mere physical production into outputs that are knowledge based.

Prof. Mahani says there are five gaps that Malaysia must take steps to close in order not to be left behind by its competitors. These gaps are in productivity, innovation, human resource, trade (i.e., the difference between exports and imports) and global investments. Malaysia's economy has always been regarded as one with strong fundamentals along these factors. To be competitive, however, much more has still to be done to strengthen these factors before they measure up to the rankings of the developed industrialised nations.

Prescriptions

The above are not new challenges to Malaysia, because even the older plans that have for years been in place contain their corresponding policies and measures. During boom times of the past, growth was achievable regardless of how these factors performed. The difference between now and then, however, is these factors have become conditional upon the country's future progress. Closing the various gaps call for careful positioning of the existing production capacity by a series of actions that could be taken at the state level such as in Penang. Prof. Mahani



makes the following prescriptions. First, evaluate threats and opportunities so that the needed measures can be taken early. For example, if the skills gap is likely to threaten future output capacity, action has to be taken today since it will take many years to build up the knowledge capacity. If the market opportunity in the future is going to stem from the larger and more quickly expanding population of Asia then steps have to be taken soon to configure the country's industry complex towards an Eastern market.

Much of the production capacity in Malaysia today has been created out of foreign capital and foreign innovative know-how and it will yet take awhile before Malaysia will have the innovative strength to compete globally on its own. Thus the country has to continue attracting foreign direct investments. Doing this is harder and more competitive than ever before. That is why, the second prescription is for the investment climate to be made more positive. Doing this essentially involves good corporate governance. Keep infrastructure efficient through appropriate capital investments, cut down procedural delays, lower cost of production and strive towards greater regulatory transparency.

Third, more value added might be achieved by expanding along the value chain. While the past has concentrated mostly on fabrication, attempts have now to be made to move upstream into aspects of innovation, design and product development as well as downstream into marketing and distribution. Successfully doing this will require what Prof. Mahani refers to as defensible output, her fourth prescription. This is to inculcate core competency in the production that we do, because by controlling a greater part of the value chain, Malaysia's production capacity is less vulnerable to externally induced forces that could either boost or trample down production rates. It is only then that Malaysia can hope to guide its own destiny instead of playing the more traditional role as a mere production enclave remotely controlled from beyond.

It may not be possible to achieve the above end in a single step. That is why a fifth prescription would be to build alliances with global partners. This way core competency can first be developed more selectively allowing Malaysia to perform more specific roles along the value chain and leaving the other aspects to others in the alliance.

Globalisation And Information Technology

Making it as a nation nowadays depends on how it can respond to two intrinsic features of today's production: globalisation and information technology. Malaysia has embraced both for many years even though it needs more time to build greater strength in them. The concept of the international division of labour has been around for decades. But it is not until nearly all computers in the world have become interconnected by the Internet, making possible timeless and seamless transmission of information back and forth across the globe, that globalisation of the world's production could really come of age.

An example of how application of information technology has impacted on global production is the current practice of just-in-time production based on zero warehousing. Because purchases for needed components could be made on-line, orders are made only when they are needed on the production floor to satisfy a customer's demand for the final product. The ordered components arrive from different corners of the globe going straight into production and the final product shipped off to the waiting customer at the other end. Production planning has reached a new stage of sophistication because knowing where in the world components are available for immediate shipping and at what price allow for competitive quotes for the final product at the point of customer demand. This way prices of both component inputs and final products become a function of current demand and supply that would vary from season to season. There is a lot of efficiency and prospects of a near perfect competition market comes within reach.

A Northern MSC?

To sustain economic growth in Penang is to address all the little issues raised. But to grow both globalisation and information technology must be embraced, because this is how labour (more precisely knowledge), capital and other resources are being allocated across nations and how the market of the future is shaping. By pointing this out, Professor Mahani has indeed made Penang more hopeful. Ever since the government took steps to build the multimedia super corridor adjacent to the Klang valley, Penang has harboured ambition to replicate a northern super corridor. It sees it as an essential component of the future growth of industries in Penang. So far, the federal government has not been as keen. Being head of the special consultancy team on globalisation of the NEAC, Prof. Mahani would be an influential ally, policy wise, to Penang in pursuit of its northern super corridor. **§ Chan Huan Chiang**



Comparative Benchmarking : Is Malaysia Competitive? (Part Two)

Productivity Contributing Factors

Literacy

Table 6 compares the literacy rate of the five countries in 2000. Malaysia has the lowest literacy rate for men in 2000, at 91.4 per cent, slightly lower than China (91.7 per cent). It is rather surprising that Singapore, being the most developed among the five countries, has the second highest literacy rate, about one per cent less than Thailand.

Malaysia scored second lowest for literacy rate for women (83.5 per cent) among the five countries, slightly higher than China's 76.3 per cent. As in the case of literacy rate for men, literacy rate for women in Singapore (88.4 per cent) was lower than that in Philippines (95.2 per cent) and Thailand (93.98 per cent).

The data on literacy rate indicates that Thailand, Philippines and Singapore have higher proportions of literate population than Malaysia, thus indicating the probability that their labour force are more educated and trainable compared with Malaysia's. The high literacy rates in China also indicate that China's labour force is rapidly catching up, thus building greater competition for Malaysia, especially in terms of promoting and attracting foreign direct investments.

Despite the lower literacy rate in Malaysia in comparison with the other countries, literacy rate in Penang is relatively higher than Malaysia's as a whole. A comparison of literacy rates between Penang and Malaysia indicates that the population of Penang is relatively more literate than the overall population of Malaysia. Literacy rate in Penang was at 89.6 per cent in 1990 compared with 85.1 per cent in Malaysia while literacy rate in Penang was at a high 93.1 per cent in 1995 compared with a much lower 89.3 per cent for overall Malaysia (7MP MTR)

Table 6: Literacy Rate (%), 2000

	Men	Women
Malaysia	91.4	83.5
China PRC	91.7	76.3
Thailand	97.2	93.9
Philippines	95.5	95.2
Singapore	96.3	88.4

Source: Derived from UNESCO
(<http://www.un.org/Depts/unsd/social/literacy.htm>)

Productivity

Figures 9 & 10 compare the changes in productivity in Malaysia, Thailand, Philippines and Singapore. Productivity growth in Malaysia fluctuated between 4 per cent and 6 per cent during the 1990 and 1997 period but contracted by 1.8 per cent in 1998. During the 1999 recovery year, productivity increased by 3.9 per cent.

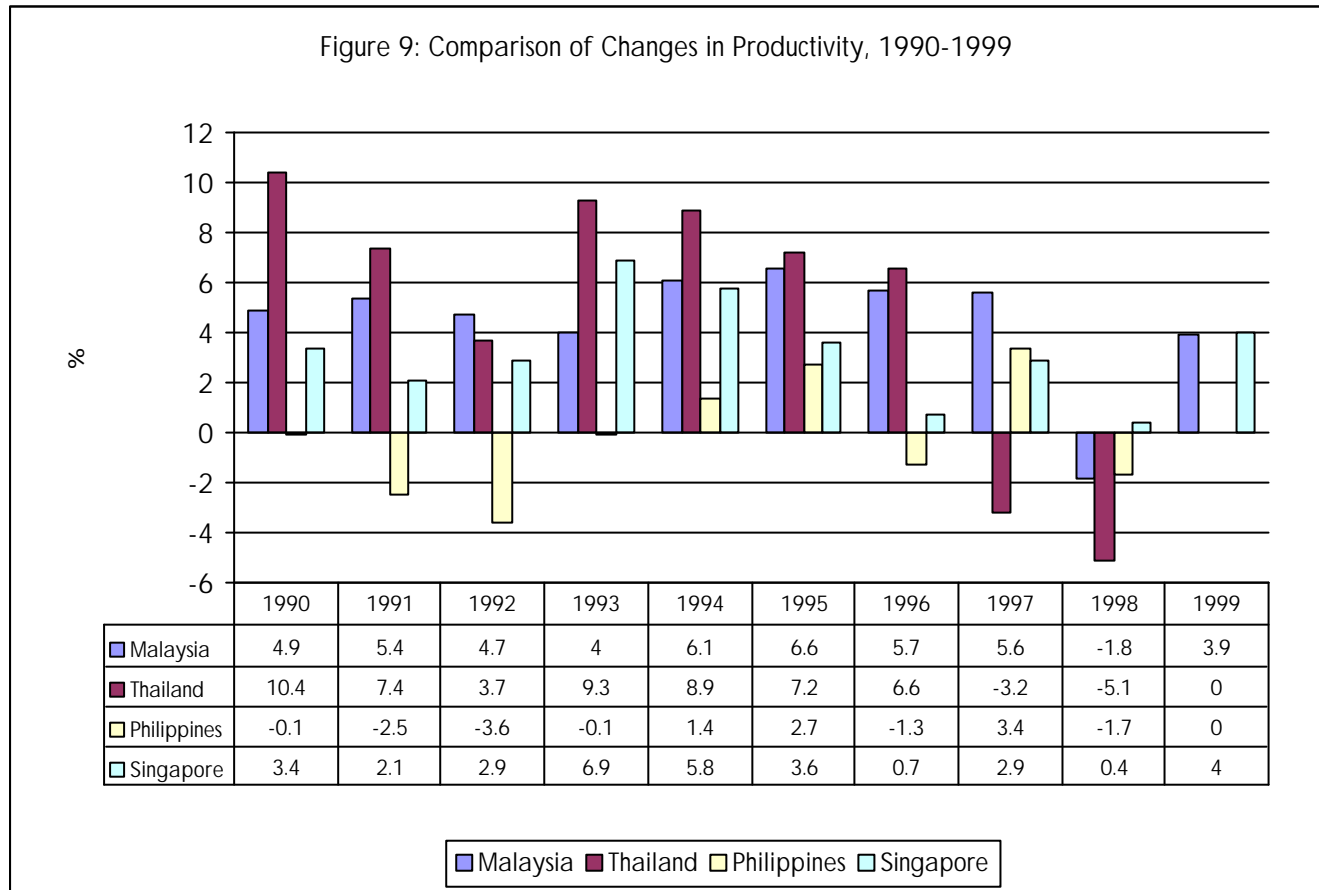
Thailand recorded significantly high productivity growths during the 1990s prior to the onset of the Asian financial crisis in 1997. Productivity growths in Thailand ranged from 6.6 per cent and 10.4 per cent during the pre-crisis years, except for 1992, when productivity in Thailand only grew by 3.7 per cent over the 1991 figure. However, productivity in Thailand contracted by 3.2 per cent in 1997 and 5.1 per cent in 1998. Data on productivity in 1999 is not available for further comparison. Thus, it is not possible to assume here whether productivity in Thailand has managed to grow again after the crisis.

On the contrary, Philippines recorded negative growths from 1990 to 1993. Productivity in the Philippines grew 1.4 per cent in 1994 and 2.7 per cent in 1995 but contracted again in 1996 (by 1.3 per cent). Productivity in Philippines picked up and grew by 3.4 per cent in 1997 and as in the case of Malaysia & Thailand, productivity in Philippines contracted in 1998 by 1.7 per cent. Similar to the case in Thailand, data for 1999 is not available for further analysis.

Singapore, on the other hand recorded positive growth in terms of productivity throughout the 1990s decade.



Productivity growth peaked in 1993, with a 6.9 per cent growth over the 1992 figure. While the other three countries recorded negative growth for productivity in 1998, productivity grew at a slower pace in Singapore, registering a growth of 0.4 per cent. The growth picked up in 1999, achieving a 4 per cent growth.

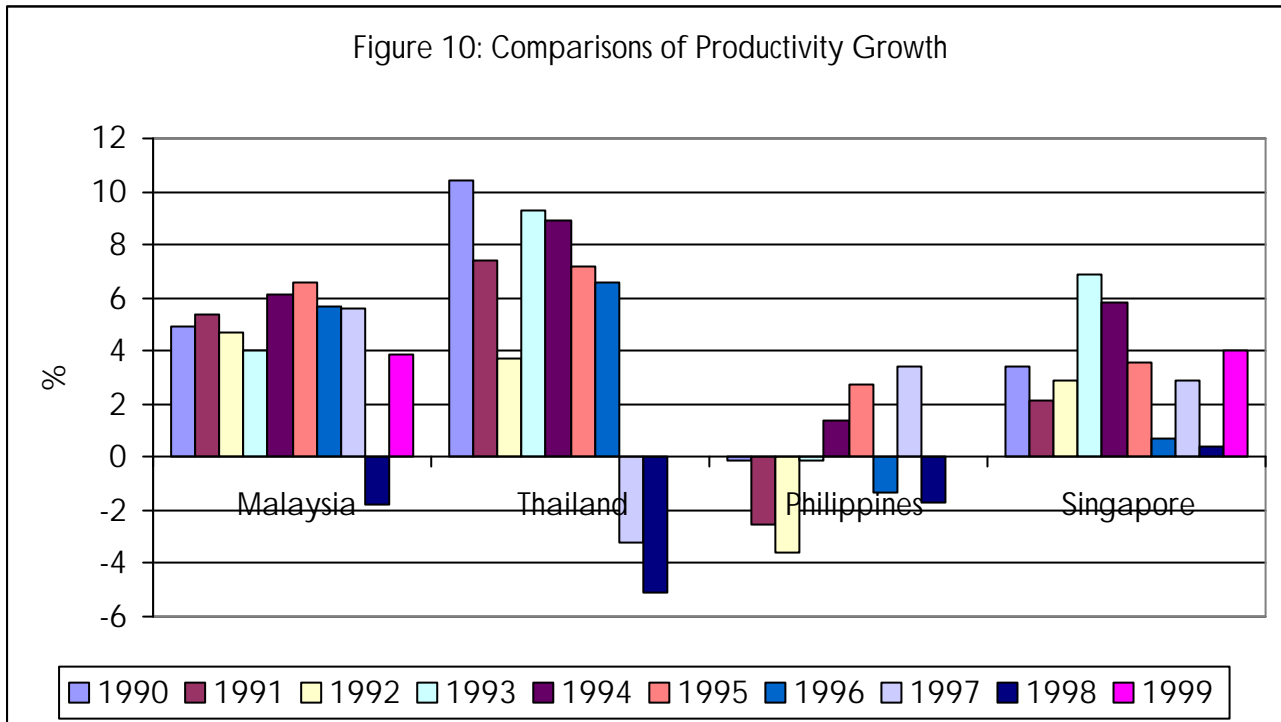


Note: Data for Thailand and Philippines in 1999 are not available.
Source: NPC Productivity Report 1998 & 1999

As for Penang, productivity in the state recorded an annual growth of 9.8 per cent during the first half of the 1990s. However, productivity growth tapered off (zero growth) during the second half of the 1990s. Manufacturing productivity grew at an annual rate of 7.2 per cent during the first half of 1990s compared to the growth of 10.6 per cent in the services sector during the same period. Growth in manufacturing productivity slowed down during the second half of the 1990s, recording an annual growth of 3.8 per cent. However, productivity growth in the services sector contracted (-1.4 per cent) during the same period.

The continuous growth in productivity in Singapore signifies labour efficiency and competitiveness of the country in maintaining growth. The high productivity growth achieved by Thailand indicates the country's potential to further enhance its labour efficiency as well as overall competitiveness. Both Singapore and Thailand seem to be at an advantage compared with Malaysia in this aspect. However, data on Malaysian productivity also indicates sustainability as the country managed to sustain its productivity growth throughout the 1990s decade except for 1998.

The IMD compiles and publishes competitiveness indicators annually. Among these indicators is the data on the overall productivity. The overall productivity measured as purchasing power parity per employed person shows that Singapore is more competitive than the rest of the four countries. Malaysia ranked second, followed by Thailand, Philippines and China. Data on overall productivity indicates that the labour force in Singapore is the most productive, while labour force in China is the least productive.



Source: NPC Productivity Report 1998 & 1999

Table 7: Overall Productivity (PPP) (US\$)

	1994	1995	1996	1997	1998
Malaysia	17612	18980	19560	20039	20937
China PRC	4578	5132	5146	5514	5837
Thailand	10580	11890	12727	12230	11762
Philippines	8536	9004	9005	9283	10063
Singapore	41338	4777	47037	48247	47220
Ranking					
Malaysia	36	37	37	36	39
China PRC	45	46	46	46	46
Thailand	41	42	42	42	42
Philippines	43	44	44	44	44
Singapore	21	17	15	14	19

Note: GDP (PPP) per employed person
Source: IMD, The World Competitiveness Report, 1999

Other Indicators

R&D Expenditure

Although data on R&D expenditure is not complete, there is a clear indication that Singapore spends more on R&D compared with the rest of the four countries. China, which is the least productive among the five countries, has a higher proportion of R&D expenditure compared with Malaysia, Thailand and Philippines. No data is available on R&D expenditure in the Philippines. This data indicates that Singapore and China are more inclined to spend on

Table 8: Total Expenditure on R&D as a Percentage of GDP

	1994	1995	1996	1997	1998
Malaysia	0.32	n.a.	n.a.	0.20	n.a.
China PRC	0.48	0.49	0.49	0.64	n.a.
Thailand	n.a.	0.13	0.15	0.18	0.18
Philippines	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	1.08	1.13	1.37	1.49	n.a.
Ranking					
Malaysia	37	n.a.	n.a.	42	n.a.
China PRC	33	34	35	33	n.a.
Thailand	n.a.	43	44	44	44
Philippines	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	24	21	22	22	n.a.

Source: IMD, The World Competitiveness Report, 1999

R&D, thus making them more prepared for newer technologies (Table 8).

Worker Motivation

Table 9 compares the scores based on 47-country average on worker motivation as well as the ranking by countries. A higher score indicates higher worker motivation, while a lower score depicts lower worker motivation. Singapore scored the highest in terms of worker motivation in the five countries from 1994 to 1999, except 1996 when Philippines registered a higher score than Singapore. The Philippines achieved relatively high scores for worker motivation throughout the six-year period. On the other hand, Thailand seemed to achieve much lower scores than the rest of the countries, especially from 1996 onwards. Prior to 1996, China used to record the lowest score among the five countries.

Table 9: Scores and Ranking on Worker Motivation

	1994	1995	1996	1997	1998	1999
Malaysia	6.22	5.31	5.62	5.69	5.69	6.22
China PRC	4.72	5.12	5.79	6.56	6.59	6.22
Thailand	5.22	5.23	4.43	5.45	4.72	5.62
Philippines	6.06	6.07	6.18	5.95	5.55	6.44
Singapore	6.5	6.39	5.81	6.62	6.28	7.36
Ranking						
Malaysia	13	31	23	22	20	20
China PRC	36	35	18	7	7	21
Thailand	29	33	37	28	36	33
Philippines	16	19	12	15	23	16
Singapore	6	9	17	6	9	2

Note: Employees do identify with company objectives
Scores based on 47-country average
Source: IMD, The World Competitiveness Report, 1999



Skilled Labour

It is rather surprising for a country, which did not perform very well in terms of overall productivity and did not have data on R&D expenditure, like Philippines to attain high scores in terms of availability of relevant skilled labour. However, the high literacy rate of more than 95 per cent complements these findings. Philippines has been recording higher scores among the 47 participating countries in the IMD World Competitiveness Report and has been placed at first position in terms of availability of relevant skilled labour for four consecutive years from 1996 to 1999. Positioned second among the five countries is Singapore. Singapore's ranking among the 47 participating countries was between 10 and 39. Its best ranking was at the 10th position in 1999, and its worse was at 39th position in 1996. Malaysia's ranking fluctuated from a high 44th placing to a lower 32nd placing. Its best was at the 32nd placing in 1999. Likewise, Thailand's ranking also fluctuated from a high 42nd position to a lower 35th position. Its best ranking was at the 35th position in 1999. China, on the other hand ranked 44th in 1999 and performed much better the previous year, with a ranking of 22nd.

Table 10: Scores and Ranking on Skilled Labour

	1994	1995	1996	1997	1998	1999
Malaysia	4.33	3.41	3.21	3.88	4.6	6.29
China PRC	4.48	4.58	5.16	5.50	5.63	4.80
Thailand	4.28	4.69	3.47	4.17	4.89	6.02
Philippines	7.26	6.99	7.93	7.93	7.25	8.18
Singapore	5.7	5.13	4.77	5.26	5.64	7.37
Ranking						
Malaysia	41	45	44	42	39	32
China PRC	40	42	35	33	22	44
Thailand	42	40	42	41	35	35
Philippines	5	8	1	1	1	1
Singapore	27	34	39	34	21	10

Note: Availability of relevant skilled labour
Scores based on 47-country average
Source: IMD, The World Competitiveness Report, 1999

High Tech & R&D Indicators

According to the World Bank's competitiveness indicator, high tech export as a percentage of total export in Singapore (71 per cent) was highest among the five countries in 1996. This was followed by Malaysia (67 per cent) and Philippines (62 per cent). Thailand (36 per cent) and China (21 per cent) ranked fourth and fifth respectively as shown in Table 11.

Despite the high export content for high tech products, the science graduates as a percentage of total number of graduates in Malaysia (28 per cent), is relatively lower than China's (43 per cent) and Philippines' (30 per cent). Likewise, the number of scientists and technicians per 1000 people in Malaysia (0.4) is also much lower than in China (1.6).

Transparency

In addition to the indicators on labour force that determine the competitiveness of the country, there are also indicators that explain the responsiveness of the public sector. Table 12 shows the scores on transparency of the government in the respective countries. Transparency here refers to how clearly the government communicates its policy intentions to the community. Singapore's ranking has been between 1st and 2nd placing within the period 1995 and 1999. This implies that the government is very transparent in conveying its policy intentions to the community. Malaysia was ranked first in terms of transparency in 1994 but has dropped to the 12th placing in 1999.

Table 11: Comparative Indicators on High Tech And R&D

	High Tech Exports	Science Graduates	Scientists & Technicians	R&D Expenditure
Malaysia	67	28	0.4	n.a.
China PRC	21	43	1.6	n.a.
Thailand	36	18	0.2	0.2
Philippines	62	30	0.1	n.a.
Singapore	71	53	1.8	0.9

High Tech Exports as % of exports), 1996

Science Graduates as % of total graduates, Average 1988-90

Number of Scientists & Technicians per 1000 people, 1981-95

R&D Expenditure as % of GNP, 1981-95

Source: World Bank, Competitiveness Indicator (<http://www/wbi0018.worldbank.org/psd/compete.nsf>)

Table 12: Transparency

	1994	1995	1996	1997	1998	1999
Malaysia	6.65	6.10	6.42	6.13	6.65	6.27
China PRC	6.48	6.04	6.14	5.80	5.35	6.43
Thailand	3.72	4.39	3.26	2.92	4.38	5.44
Philippines	4.21	4.1	3.98	4.83	5.33	5.25
Singapore	6.04	6.81	7.46	7.38	7.56	8.45
Ranking						
Malaysia	1	4	5	8	4	12
China PRC	2	5	7	11	18	10
Thailand	33	30	37	39	31	23
Philippines	27	32	29	23	19	28
Singapore	5	1	1	2	1	1

Note: The government communicates its policy intentions clearly (survey)

Scores based on 47-country average

Source: IMD, The World Competitiveness Report, 1999

China ranked 2nd in 1994 but dropped to the 18th placing in 1998. It improved slightly to the 10th placing in 1999. Both the Thailand and Philippines governments are deemed less transparent compared with Singapore, Malaysia and China.

Image Abroad

With regards to the international images of these countries as business centers, Singapore has been ranked 1st among the 47 participating countries for four consecutive years from 1996 to 1999. Malaysia's ranking improved from its 18th position in 1994 to the 6th position in 1996 and 1997 but dropped to a drastic 30th position in 1999 as shown in Table 13. Thailand's position has been fluctuating over the 6-year period, with its worst position at 33rd place in 1998 and its best at the 15th place in 1997. Philippines, on the other hand did not fare too well. Its worst position was at the 45th place in 1994 but has been improving since then, achieving the 26th position in 1997 but dropped slightly to the 28th position in 1999. Likewise, China has also not fared too well. Its best ranking was at the 22nd placing in 1998 and its worst was at the 44th position in 1999.



Table 13: Image Abroad

	1994	1995	1996	1997	1998	1999
Malaysia	5.48	5.77	8.31	8.39	6.85	5.16
China PRC	4.48	4.58	5.16	5.50	5.63	4.80
Thailand	5.39	5.70	6.89	7.39	5.04	6.42
Philippines	2.79	2.90	4.82	6.39	5.55	5.39
Singapore	6.67	6.41	9.35	9.00	8.68	8.95
Ranking						
Malaysia	18	16	6	6	15	30
China PRC	40	42	35	33	22	44
Thailand	20	18	21	15	33	22
Philippines	45	44	36	26	28	28
Singapore	7	9	1	1	1	1

Note: Image of the country abroad that supports the development of business

Scores based on 47-country average

Source: IMD, The World Competitiveness Report, 1999

Annual Remuneration

Singapore workers enjoy the highest pay across all occupations. Philippines ranked second for the positions of CEOs, engineers, as well as directors of manufacturing and human resource while Thailand ranked third for the same occupational categories. Remunerations in Thailand were also higher than Malaysia's for bank clerks and primary school teachers. The data on annual remuneration contradicted the claims of many investors who stated that wage rates are cheaper in Thailand and Philippines. However, their claims could be true if they were referring to other job categories, which are not stated in Table 14, namely production workers and technicians. If this is true, then it also indicates that the investments are labour-intensive in nature and not technology- or skill-intensive. However, it should be noted that the data on remuneration in Malaysia is pertaining to the whole of Malaysia and wage rates in Penang (taking into consideration that Penang is the most industrialized state in Malaysia) for the above-mentioned job categories (namely CEO, Engineer and Director of Manufacturing & HR) could be much higher than in Thailand and Philippines. Remunerations in China were the lowest for the various job categories, making it attractive to foreign direct investors, particularly those that are labour-intensive.

Table 14: Annual Remuneration

	Bank Clerk *	Dept Mgr in Services Sector *	Primary School Teacher *	Secretary *	CEO #	Engineer #	Director of Mfg #	HR Director #
Malaysia	7300	40000	6200	14000	74006	31091	56728	44687
China PRC	4800	3600	1450	2700	45175	19084	33289	26634
Thailand	13200	30700	7500	8700	90176	37477	67371	54329
Philippines	5300	10600	5500	3200	145159	59912	108283	87656
Singapore	15500	33100	15300	16200	182331	70801	129468	102839

* 1997

1998

Source: IMD, The World Competitiveness Report, 1999

Conclusion

Investors who have investments in Malaysia, Thailand, Philippines and/or China have claimed that productivity is higher in the latter three locations and the cost of doing business is also lower there. Some claimed that the incentive packages offered by the latter three locations are more attractive. This paper attempted to compare existing data related to the competitiveness of these four locations as well as Singapore but has not included the qualitative aspects of these locations. That is, this paper has not compared the incentives given nor made attempts to analyze any bureaucratic procedures that are being implemented in these locations.

From the data analysis alone, Malaysia is facing stiff competition from these locations. Historical data on FDI inflows and inward stocks have pointed out the strength of China in attracting foreign investments. Malaysia, being a small country, is way behind China in its ability to attract foreign investments, mainly due to the fact that Malaysia is unable to provide the markets for the outputs of these investments. Secondly, Thailand has proven its prowess in attracting investments, even in the midst of the economic crisis. As such, as far as attracting and promoting FDI is concerned, Malaysia has to be vigilant against stiff competition from China & Thailand as well as Singapore, which has remained competitive even until today.

Malaysia cannot compete with the Philippines as far as export trade is concerned, especially when Philippines' export sector performed so well despite the country being affected by the Asian financial crisis. Philippines and Thailand outperformed Malaysia in terms of trade during the crisis years, and also posed a threat to Malaysia because the export-oriented activities in these countries are mainly the results of FDIs.

Production Performance

However, a consolation to Malaysia is that its production performance was maintained or even improved during the crisis years, mainly a result of increase in domestic consumption, which is due to the pro-active stance taken by the government to promote greater consumption of locally produced goods. Furthermore, Malaysia's high tech export as a percentage of total exports is still ahead of Philippines & Thailand.

Despite the claims of lower labour costs in Thailand, Philippines and China, these three locations actually experienced higher inflation rates than Singapore and Malaysia. In addition, data on annual remunerations and unit labour cost in the manufacturing sector still support Malaysia's advantage as a productive but lower cost center. As such, in terms of overall costs of doing business, Malaysia is still competitive compared with Thailand, China and Philippines. The average labour cost in Penang is still comparably lower than some developed locations in Malaysia. The average labour cost for engineering services is only 72 per cent of the national average, compared to 103 per cent in Selangor and 115 per cent in Kuala Lumpur (derived from Department of Statistics, Malaysia)

However, costs alone would not determine the competitiveness of a country. The capability of the labour force plays an important role as a determining factor. A very important factor in determining the capability of the labour force is the literacy rate. Despite the efforts by the Malaysian government to provide free education and make it compulsory until Form 3 (9 years of formal education), literacy rate in Malaysia is still relatively lower than the rest of the four countries.

Malaysia also lost out to Singapore and Philippines as far as perception on worker motivation is concerned. This could also mean that the investors perceive that the Malaysian workforce is complacent and are not motivated to improve, thus resulting in them not meeting the requirements of the investors. Secondly, investors could also perceive that the Malaysian workforce does not take initiatives to improve on their performances as well as not being innovative in coming out with new ideas to improve performance.

Skilled Labour

Data on the availability of skilled labour among the five countries also put Malaysia at a disadvantage, especially where Philippines and Singapore are concerned. This means that new investments that are skill- and technology-intensive would most probably pick Philippines and/or Singapore as their location(s) for investments. The data on science graduates as a percentage of total graduates also put Malaysia at a disadvantage against Singapore, Philippines and even China. This implies that the three latter countries, particularly Philippines and China, which have high unemployment rates, would have the supply of science graduates to meet the demands of the potential investors.

While Malaysia's performance in overall productivity is relatively better than China, Thailand and Philippines, its productivity performance is way behind Singapore's. Furthermore, Singapore has been registering continuous productivity growth for the past 10 years, even during the crisis years. On the other hand, Malaysia should also watch out for Thailand, which has been recording significantly high growth rates in productivity during the decade of the 1990s, except during the crisis years.

The Malaysia government has emphasized the importance of R&D, particularly after the formulation of the Sec-



ond Industrial Master Plan (IMP2). However, available data on expenditure on R&D shows that Malaysia is outperformed by Singapore and also China. This implies that Malaysia places less emphasis on R&D as compared with the other two countries or lack R&D infrastructure and personnel to conduct R&D activities in Malaysia. The data on the availability of skilled workers, literacy rate as well as worker motivation are also in concordance with these findings, especially when comparing Malaysia with Singapore.

The image of Malaysia as a center for business activities is still positive compared with China. However, Malaysia should be more concerned about its deteriorating image abroad, namely from its 6th position in 1996 & 1997 among the 47 participating countries in the IMD World Competitiveness Report to the 30th placing in 1999. In fact, in 1999, Malaysia's ranking dropped below that of Singapore, Thailand as well as Philippines, while its ranking was second to Singapore among the five countries in 1996 & 1997. Likewise, the Malaysian government, which was once perceived to be the most transparent in 1994 among the 47 participating countries, has dropped to the 12th position in 1999.

Remedies

Efforts need to be made by both public and private sectors to boost Malaysia's position as a center for FDI as well as its overall image as an international business center. The most important of all is to enhance the productivity level of the Malaysian workforce that would determine the competitiveness of the country. To do so, several broad approaches need to be taken.

- A revamp in the Malaysian education system that could inculcate the fondness for science & technology related subjects right from the primary/elementary school level. This would be able to produce a pool of potential students to be trained in the fields of science, technology and engineering.
- It is important to identify the relevant skills that are required to provide the thrust for Malaysia to move towards a higher technology era. Continuous human resource development in the form of training and retraining is important to further enhance the level of skills among Malaysian labour force.
- It is also important to change the attitude of the existing labour force, educating them on the importance to improve and upgrade their capabilities and knowledge as a means to build and sustain the competitiveness of the country in the global market.
- The public sector should also facilitate R&D activities in the country. Among the various ways include allocating more conducive and attractive incentives for R&D activities, develop more R&D infrastructure like incubators and laboratories as well as encourage the private sector to carry out more R&D activities.
- Encourage public and private sector collaboration in R&D.
- A more cohesive development strategy to attract the desired type of investments and to guide skills development needs and infrastructure needs.
- Lastly, the government also has to be more transparent in its policy implications and implementation, such as more efficiency and effective bureaucracy for approvals of investments to attract the FDIs. ***§ Anna Ong***