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Spurring economic growth through education: The Malaysian approach

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The economic progress made by many countries is attributed to many factors. Education is often quoted as a major contributing factor. There are many researches done in evaluating and determining the role of education in nations. In this paper, factors of education which have helped in the case of Malaysia are dwelled upon. Education has helped this country by strengthening and widening the quality of human capital available. How this is done is explored. Most of the factors that contributed are related to the education system practiced in this country.

Key words: Education, economic growth.

INTRODUCTION

Any increase in the educational expenditure signifies that there is a relationship between economic growth and education (Jürges and Schneider, 2004). This conclusion is derived because in many countries expenditure on education is higher than investments in fixed capital (Welfe, 2008). This notion can also be seen in the case of Malaysia. Although Malaysia embarks on mega-projects such as the Multimedia Super Corridor (MSC) and "Cross border bullet train project", some of the planned mega-projects are put on hold, whenever there is an economic downturn, while expenditure on education remains or at times increases. Expenditure on education in Malaysia always dominates the social expenditure realm. For instance, in the 9th Malaysian plan (2006-2010), education received the highest allocation.

Developing countries began to allocate more of their resources to education. This can be seen by the amount of national income devoted to public education (Siphambe, 2000). Developing countries' public educational expenditure had increased by almost 75% while only 50% in developed countries, from 1970's to 1980's (Tsang, 1988). Generally total public educational expenditure had increased by 250% (Tsang, 1988). But, if one were to take inflation into consideration, then this amount would be smaller. Even then, the amount of increase is

still substantial when inflation and the value are converted into real values (Rothstein and Miles, 1995). For example, in Malaysia, only about RM6.5 million was spent on education in the year, 1970 and it increased to almost RM27 million in the year, 2005 (Figure 1). The amount spent on education has always been on the increase since the 1990s. This reflects the importance given to education by the Malaysian government.

The government of Malaysia has taken upon itself to provide education to its people. Although, there is private education in Malaysia, the number of public education institutions easily outnumbers private institutions. Education is still seen as a public good in Malaysia. Thus, education in Malaysia is financed almost entirely from the national revenue. The Ministry of education (MOE) will make its own estimates of expenditures annually which would be presented to the Ministry of Finance for submission to the parliament for approval.

The government plays a pivotal role in the education sector. Since it is provided by the government, the amount spent on education will have numerous interactions with the economy (Dennison, 1984). The increase in educational spending could be attributed to the belief that education has the capacity to increase the income of an individual and life-time earning of individuals (Ribich and Murphy, 1975). The government would like to use education as the mean to eradicate poverty in the country (Snodgrass, 1980). Although the contribution of education to one's income is still a disputed and debatable

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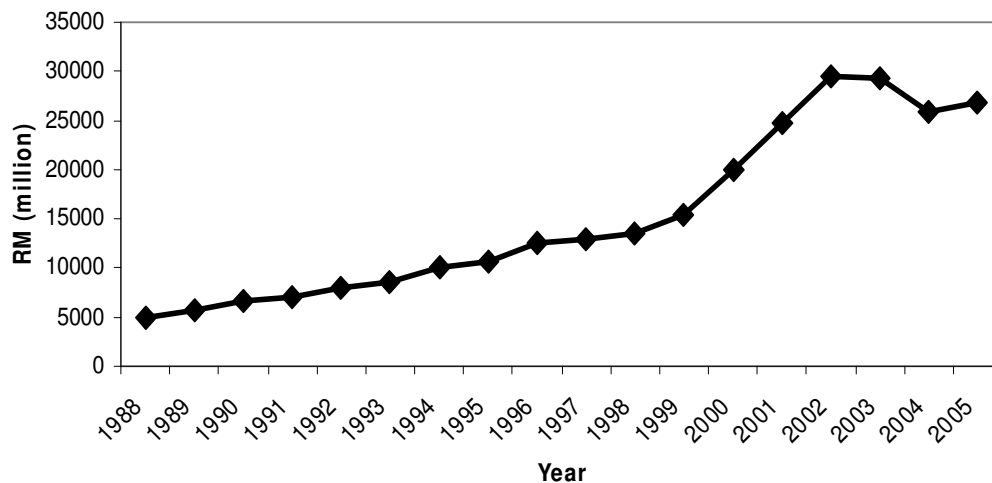


Figure 1. Amount of expenditure on education by Central Government Malaysia (1990-2005). Source:www.adb.org/statistics (26 November, 2006).

issue, this had not dampened the general belief that education plays a key role in improving one's income.

The role of education in any economy can be seen through the role it plays in the formation of human capital in a country (Soto, 2002). The Traditional Human Capital Theory suggests that education increases productivity of a labourer through the enhancement of his skills (Yamauchi, 2005). Many researches have indicated that education is an important endogenous factor of production which can explain the economic growth of a country (Arellano and Fullerton, 2005). The current growth literature accepts that, education should be viewed as one of the primary components for the creation of human capital. In fact there are many who view education as a more important variable than any other variables in determining the economic growth and development of a country (Ghailani and Khan, 2004).

Many countries that have invested in education are reaping the benefits from it now. Other than the Philippines, India, China and Turkey, Malaysia too has benefited greatly by investing in education (Vinod and Kaushik, 2007). A country that only pays attention to the physical capital and not human capital investment could be subjected to a serious distortion in its development. As Heckman (2005) argues, the trend in investing more in physical capital than in human capital by the Chinese government could retard the economic development of that country in the future.

There are many factors which have helped the Malaysian economy grow. Some of the factors related to education are discussed in this paper. Most importantly education helped in the formation of a sizeable human capital in this country. In this paper, we would explain the

factors that helped chart the formation of human capital in greater detail.

How did education help nation building?

Improving education quality

The quality of education in this country had improved over the years. There are many ways to measure education quality. For example, in the case of measuring school quality, the number of teachers with a degree teaching in a school, pupil-teacher ratio or even per-pupil district expenditure is used (Eide and Showalter, 2005). The development of a country is closely associated with the quality of education offered in a country (Stukalina, 2008). In the case of Malaysia, the quality of education especially at elementary level had improved. For example, the MOE had embarked in an ambitious project where at least all secondary school teachers possess at least a basic degree, while about 50% teachers teaching at primary school should be graduates by 2010 (MOE, 2006).

In this era of globalization, mere investment in education does not necessarily enhance the human capital in a country (Hartog et al., 2007). It is necessary that students are exposed to technology while they are still in school. Almost all students at public schools are exposed to "computers". In Malaysia, the MOE tries to incorporate technology into teaching and learning in schools. For example, in 1998 the MOE embarked in a project called Smart Schools. The MOE allocated almost RM100 million, where about 100 schools were selected in

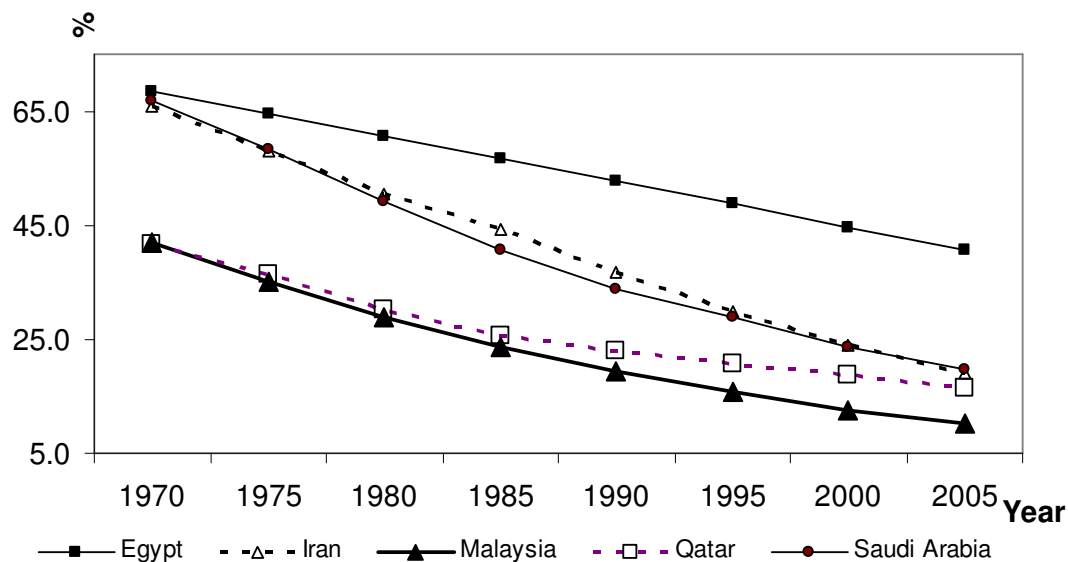


Figure 2. Illiteracy Rate (1970-2005).

a pilot project. In this Smart School, computers were used extensively in teaching and learning. Meanwhile at institutions, it has become a norm where computer lab was set up in every department. Through this, students are exposed to new methods of learning such as e-learning. Although computer technology is dynamically fast, exposing students to such technology has given rise to IT literate workers in this country. This has contributed greatly to Malaysia becoming one of the most sought outsourcing destinations for many multi-national companies which have set-up their operations in Cyberjaya, an IT city similar to the Silicon Valley in the US.

Most of the values on the measure of quality of education in Malaysia show tremendous improvement. As a result of this, students' performance had also progressed. In the long-run, the effect of this is reflected in the quality and quantity of human capital available in this country. The drop in illiteracy rate is a testimonial to this (Figure 2).

Free education

Although the relationship between the expected future income and education is well established, many people in undeveloped countries are unable to provide education for their children (Mude et al., 2007). Much of this is attributed to the affordability of parents and the high cost of education. Realizing this, the Malaysian government has taken upon itself the responsibility of providing free pre-tertiary education to its people. One of the recommendations made in the "Rahman Talib Report" in 1960 was to offer free secondary education to all students as to encourage more Malaysians to obtain secondary education (Keow, 2008). While at the tertiary level many students. Even the private institutions of learning are encour-

aged to provide scholarship to students. The government encourages the private sector by giving them tax exemptions.

By offering free education, more people in Malaysia are given access to education which in the long term had increased the quality of workers available in this country. Prior to independence, the colonial government did not introduce measures such as free education, because of the fear of uprising by the locals which the British experienced in their other colonies (Mahat, 2003). By doing so they had in reality "retarded" the formation of human capital in this country. As a result of this, at early stages of independence, the country was very depended on foreign expatriates to administer the country. However over the years, through education, this shortfall was overcome.

Tertiary education

In the endogenous growth models, education is viewed as a factor which affects income growth rate. Benhabib and Spiegel (1994) showed that human capital is a determinant of domestic innovation and foreign technologies. Changes in years of schooling was found to be either non-significant or had negative coefficients in a growth regression model. When 'level of education' was used as proxy for education, it was either positive or significantly correlated with growth.

Comparing that finding with the Malaysian experience, it can be seen that, Malaysia's economic growth was rapid after secondary and tertiary education began to increase. At the initial stages, the Malaysian government paid more attention to primary education but at later stages secondary and tertiary education were given the

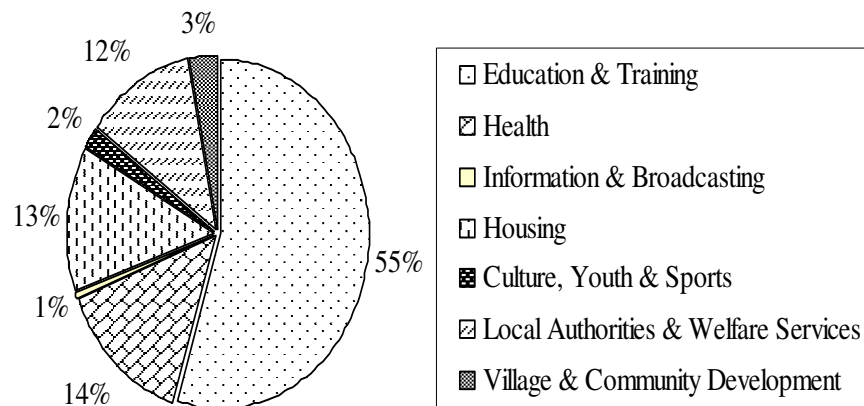


Figure 3. Federal government development allocation for the social sector under the ninth Malaysian Plan. (Source: Ninth Malaysian Plan. Table A-1).

necessary allocation too.

For any country to sustain economy growth, it must invest sufficiently in education (Günther, 2007; Basu and Guariglia, 2008). In the case of Malaysia, education is always given priority in any development plan (Figure 3). Nevertheless the increase in the allocation is not sufficient to sustain the growth. What is more important is how the amount is utilized. Many tertiary institutions were built in this country to meet the increasing demand for a more skilled labor force. At the same time, private organizations were allowed to set up their own universities. To maintain quality and attract foreign students, these private universities were allowed to offer programs though collaboration with foreign universities. This, not only increases and ensures the quality of education but also assures, a positive spillover is enjoyed for these foreign collaborations allow local graduates to obtain foreign knowledge without ever leaving the country. This has also helped in reducing Malaysia's currency outflow.

Adult education

Malaysia had not only raised the education opportunities for young people or children but also working adults. The difference between investment in education for children and adults is in terms of the returns. While returns to education on children can only be seen in the long run, for adults it can be felt in the short run, namely, in terms of economic growth (UNESCO, 1999).

Adult learners are people who are in the midst of their life and career, but have returned to further their studies to improve their job prospect (Badke, 2008). With the advancement in the use of technology in this country, working adults have the chance to pursue their education without leaving their jobs. Universities such as "Open University of Malaysia" offers distance education programmes. This mode of education had increased the number of graduates in this country which in the long run

had raised the number of K-workers in this country. It is the desire of the Malaysian government to have at least 20% of its population to possess a basic degree.

Gender equality

Equality in terms of gender opportunities in education varies from one country to another (Moletsane, 2005). In many countries, women play an important role in economic growth. Although access to education in many countries is decreasing, the same cannot be said of equal access. Female students still face many hurdles in completing or pursuing their studies. For example, in Vietnam, parents send boys to school while girls are not encouraged (Liu, 2004). Liu (2004) drew this conclusion by looking at the high drop out rates and low enrollment rates of girls compared to boys. In this aspect, female students in Malaysia do not face such a predicament. Both sexes in Malaysia are given equal treatment when it comes to education. As shown in Figure 4, compared with some countries, the completion rate of primary education is high and almost same for both sexes in Malaysia. When women are given the opportunity to seek knowledge, the benefit will not only be seen in the social aspect, but also in the economic perspective.

Constant population growth

An educational system is usually slow in responding to the fluctuation in population growth (Grob and Wolter, 2007). Similar to many other countries, Malaysia too experiences population increase. However, unlike in other countries, the population growth in Malaysia has been almost constant. As shown in Figure 5, the fluctuation in the population growth rate is within 2-3%. This has enabled educational administrators to plan education expenditure effectively and efficiently. For example, one

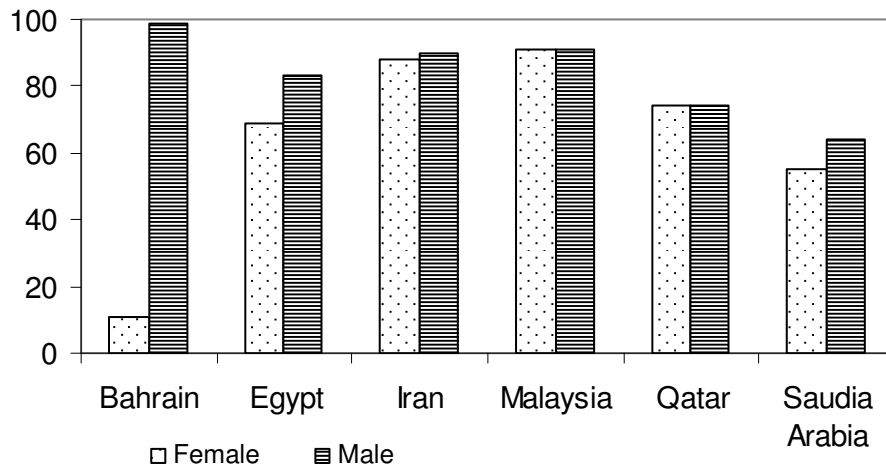


Figure 4. Primary School Completion Rate (%) (1990).

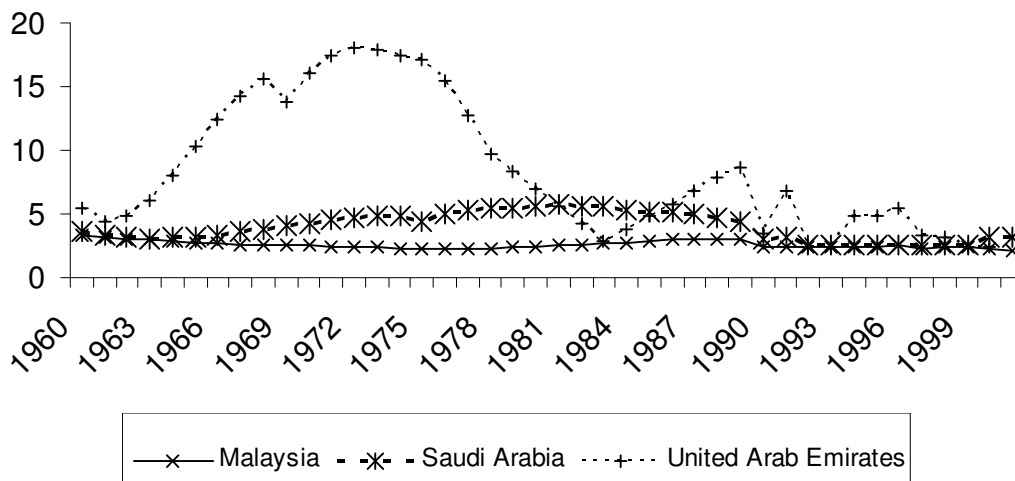


Figure 5. Population Growth (%) (1960-2001).

of the educational resources which is vital at the school level is teachers. By having a less volatile population growth, it was possible for the MOE to allocate teachers to schools in an equitable manner. By doing this, the chances of providing quality education increases.

Conclusion

One of the goals in the “Millennium Development Goals” set by the United Nations is achieving at least primary education for all by the year 2015. Although this is a noble act, the United Nations should try to increase this scope by trying to achieve at least secondary education. This is necessary because, mere primary education attainment would not be sufficient for many countries

to compete in the era of globalization. The experience in Malaysia has revealed that offering secondary and tertiary education has enabled its people to compete globally which eventually brought about the current economic growth.

REFERENCE

Arellano A, Fullerton TMJ (2005). Educational Attainment and Regional Economic Performance in Mexico. *Int. Adv. Econ. Res.* 11(2) 12.
 Badke W (2008). Information Literacy Meets Adult Learners. *Online*, 32(4): 48-50.
 Basu P, Guariglia A (2008). Does Low Education Delay Structural Transformation? *South. Econ. J.* 75(1): 104-127.
 Benhabib J, Spiegel M (1994). The Role of Human Capital in Economic Development: Evidence from Aggregate Cross-Country Data. *J. Monet. Econ.* 143-173.

- Dennison WF (1984). *Educational Finance and Resources*. Sydney: Croom Helm Australia.
- Eide ER, Showalter MH (2005). Does Improving School Quality Reduce The Probability Of Unemployment? *Contemp. Econ. Policy*. 23(4): 578-584.
- Ghailani JS, Khan SA (2004). Quality Of Secondary Education And Labour Market Requirement. *J. Serv. Res.* 4(1): 161-172.
- Grob U, Wolter SC (2007). Demographic Change and Public Education Spending: A Conflict between Young and Old? *Educ. Econ.* 15(3): 277-292.
- Günther R (2007). Education, Economic Growth and Measured Income Inequality. *Economica* 74(295): 493-514.
- Hartog J, Hans VO, Bajdechi SM (2007). Simulating the Risk of Investment in Human Capital. *Educ. Econ.* 15(3): 259-275.
- Heckman JJ (2005). China's human capital investment. *China Econ. Rev.* 16(1): 50-70.
- Keow CL (2008). *Philosophy and Education in Malaysia*. Kuala Lumpur: Kumpulan Budiman Sdn. Bhd.
- Liu AYC (2004). Flying Ducks? Girls' Schooling in Rural Vietnam: A Revisit. *Asian Econ. J.* 18(3): 293-318.
- Mahat AR (2003). *Education in Malaysia: unifying or divisive?* Kuala Lumpur: Malaysian Strategic Research Centre and Konrad-Adenauer-Foundation.
- MOE (2006). *National Educational Blueprint 2006-2010*. Retrieved 10 October 2008. from <http://www.moe.gov.my/taya-ng.php?laman=pip-p&unit=kementerian&bhs=en>.
- Moletsane R (2005). Gender Equality In Education In The Context Of The Millennium Development Goals: Challenges And Opportunities For Women. *Convergence* 38(3): 59-68.
- Mude AG, Barrett CB, Mcpeak JG, Doss CR (2007). Educational Investments in a Dual Economy. *Economica* 74(294): 351-369.
- Ribich TI, Murphy JL (1975). The Economic Returns To Increased Educational Spending. *J. Hum. Resour.* 10(1): 56-77.
- Rothstein R, Miles KH (1995). Where's the Money Gone? Changes in the Level and Composition of Education Spending. Retrieved 13 August, 2008, from <http://www.epi.org/books/moneygone.pdf>
- Siphambe HK (2000). Rates of return to education in Botswana. *Econ. Educ. Rev.* 19(3): 291-300.
- Snodgrass DR (1980). *Inequality and Economic Development in Malaysia*. Kuala Lumpur: Oxford University Press.
- Soto M (2002). *Rediscovering Education in Growth Regressions*. Retrieved 14 December 2007, from <http://puck.sourceoe-cd.org/vl=4179051/cl=41/nw=1/rpsv/cgi-bin/wppdf?file=5lgsjhvj78d7.pdf>
- Stukalina Y (2008). Technological & Economic Development. *Econmics* 14(2): 197-207.
- Tsang MC (1988). Cost Analysis for educational policymaking: A review of cost studies in education in Developing countries. *Rev. Educ. Res.* 58(2): 181-230.
- UNESCO (1999). *The economics of adult learning: the role of government UNESCO Institute for Education*.
- Vinod HD, Kaushik SK (2007). Human Capital And Economic Growth: Evidence From Developing Countries. *Am. Econ.* 51(1): 29-39.
- Welfe W (2008). A Knowledge-Based Economy: New Directions of Macromodelling. *Int. Adv. Econ. Res.* 14(2): 167-180.