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**EDUCATION, EQUITY AND EXUBERANT  
EXPECTATION: REFLECTIONS  
ON SOUTH-EAST ASIA**

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## **EDUCATION, EQUITY AND EXUBERANT EXPECTATIONS: REFLECTIONS ON SOUTH-EAST ASIA**

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Education has helped to fuel the East Asian “miracle”, and it will continue to play a positive role in economic development in the region. Sometimes too much is expected of it - hence the reference to “exuberant expectations” in the title of this paper. Education is held to be the panacea for many ills, not only economic but social. It has long had almost ‘magical’ status in the eyes of poor individuals and families trying to better themselves, and is in danger of acquiring such status in the eyes of social planners. We need a sober assessment of what education is expected to achieve. There is debate, however, over whether this requires us to ‘unpackage’ education, to state just what it is that we expect to be accomplished by what aspect of education, or rather to take a more macroscopic view, and understand education’s role as a social force embedded in a broader context of change. Caldwell (1980) argues that sometimes it may be a whole set of changes associated with the expansion of mass education that accomplishes certain social ends.

In this paper, I want to concentrate particularly on the role education could play in improving the equality of opportunity for young people in South-East Asian countries. The tragedy is, however, that access to education is so heavily dependent on socio-economic background that the pattern of access is serving to worsen the inequality of incomes by increasing the already great advantage the higher socio-economic groups enjoy. Even more regrettable, the role government is playing is to further widen the gulf in opportunities between socio-economic groups.

### **Contribution of education to the Southeast Asian economic boom**

The “second wave” of Asian tiger economies has heavily featured members of ASEAN. Singapore, of course, was one of the original “tigers”, along with Republic of Korea, Taiwan and Hong Kong. The second wave has featured Thailand, Malaysia and Indonesia. The Philippines may yet join the tigers, but remains an ordinary feline for the moment - happily, a feline

recovering well from a long-term illness (Bautista and Lamberte, 1996). The same can be said of Vietnam and Laos. Myanmar and Cambodia, alas, remain seriously ill. What is worth stressing is that, of the original ASEAN five, four countries have experienced spectacular economic growth over the three decades to 1997, the year in which growth suddenly came to a shuddering halt.

What were the reasons for this historically unprecedented period of sustained growth? Growth theorists, economic historians, and development economists have yet to agree on the answers to this question, but all seem to agree that they must be embedded somewhere in the following list of factors: (i) substantial investment in infrastructure; (ii) an efficient absorption of advanced technology; (iii) a stable political environment; and (iv) an impressive commitment to human capital formation (Ogawa et al., 1993:2). This paper will stress the last of these, although the four factors are obviously closely interrelated.

The South-East Asian tigers have benefited from their demographic dynamics (in particular, their declining dependency ratios as declining fertility halted the growth in numbers of children), and their long-term commitment to human capital deepening. Human resource development helps account for their rapid adaptation of imported technologies and thus rapid advance in productivity. Factors such as these have helped motivate a resurgent interest in formal theories of growth (Romer, 1986; Lucas, 1988; Barro, 1991). The new economic growth theories endogenize the rate of technological advance and population growth. They make the rate of physical capital accumulation (closely linked to the rate of technological advance) an increasing function of the level of human capital, in some cases making the *rate* of human capital accumulation also an increasing function of the *level* of human capital. If they are correct in endogenizing the rate of technological advance through human capital accumulation, notably through formal schooling and informal skill development on the job, these models have important implications for public education policy in ASEAN countries.

There is little doubt that broad-based human resource development has played a major role in the economic success of many East Asian countries. The case for this conclusion was argued in detail in Ogawa, Jones and Williamson (1993), which noted that countries such as Japan, Korea and Thailand have profited from the early building of a literacy base, and declines in dependency rates induced mainly by reduced fertility have facilitated both rapid growth in physical capital per worker and human capital deepening (see also Tan (ed), 1999). Many East and South-East Asian countries have shown a strong commitment to schooling, investing a larger share of public resources in education than all the Western industrialized nations in the nineteenth century and almost all of the contemporary developing countries in Latin America and Africa.

It could be, though, that we give too much emphasis to the schooling aspect of human resource development. The Philippines provides a troublesome case for any theory prioritising human capital as an engine of economic growth. It had as good an educational endowment as South Korea in 1960 and a better one than Thailand. Yet its economic performance over the subsequent three decades fell way behind those two countries. This can be explained partly by corruption and mismanagement, but a more interesting explanation has to do with the Philippines' failure to benefit much from on-the-job training because of its emphasis on import replacement strategies. 1995 Nobel Laureate Robert Lucas, while agreeing that "the main engine of growth is the accumulation of human capital - of knowledge - and the main source of differences in living standards among nations is differences in human capital" then notes that "human capital accumulation takes place in schools, in research organizations, and in the course of producing goods and engaging in trade...For understanding periods of very rapid growth in a single economy, learning on the job seems to be by far the most central" (Lucas, 1993: 270). According to this argument, it is not so much the trends in schooling that explain the East Asian growth miracle, but rather their open, export oriented economies that have required workers and managers to take on new tasks and move up the "quality ladder".

Investment in education has not only helped fuel economic growth in the region, but has had individual-level payoffs as well. Rates of return studies in the region consistently show higher returns to education than to physical capital, and the private returns are particularly high (Psacharopoulos, 1995). Thus those young people who have managed to progress through the primary school system, into high school and beyond, have profited greatly as a result. What we need to examine, though, is the background of the students who have been successful in progressing through the education system.

### **Recent trends in education**

Generalizations about South-East Asia, whether on education or anything else, will inevitably be superficial or downright wrong. There is little in common between Myanmar, Laos and Malaysia other than a degree of geographical propinquity. The original ASEAN five countries and Brunei have all achieved universal primary education or something closely approaching it,<sup>1</sup> and in this they have been greatly assisted by sharp declines in fertility rates, which have led to

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<sup>1</sup> Official statistics, particularly when expressed in terms of gross enrollment ratios (i.e. primary school enrollments related to numbers in the notional age groups from which primary school children should be drawn) generally suggest complete enrolment. This is not always the case when net enrollment ratios are used, which allow for over-age enrollments. In any case, enrolment data are frequently suspect. Data on grade to grade progression within primary schools indicates that a substantial proportion of children do not

actual declines in numbers in primary school ages in Singapore since the late 1960s and in Thailand since the early 1980s, and recently to a levelling off of such numbers in Indonesia. In Vietnam, the literacy level was raised by massive literacy campaigns in the late 1940s and 1950s, but universal primary school enrolment has still not been attained: only 85 per cent of primary school-aged children could be accommodated in schools, and fewer than 50 per cent of pupils entering primary school completed it (Kinh, 1991). Near-universal primary education is aimed for by the year 2000<sup>2</sup>. Laos lags seriously in primary education. The net enrolment rate at the primary school ages of 6-10 was officially estimated to be 73 per cent, up from 63 per cent five years earlier. The target is to reach 80 per cent in the year 2000.

Despite less than universal primary enrolment in some countries, in general the emphasis has shifted to secondary and higher education. Great progress has also been made at these levels (see Table 1). In 1970, Thailand and Indonesia lagged noticeably behind other South-East Asian countries in secondary education, but they have made considerable progress since then, albeit following quite different trajectories of expansion. In Indonesia, progress over the 1970s and early 1980s was steady, but it slowed during the 1980s, culminating in an actual decline in secondary school enrolments in the late 1980s (Oey-Gardiner, 1997), a decline which flew in the face of official government policy. Far higher costs of education at the secondary than at the primary level meant that poverty was probably the main factor. Secondary enrolments have begun to pick up again in the last few years with the introduction of (theoretically) compulsory secondary schooling and intensified efforts to increase transition rates from primary to secondary school. Thailand's story is somewhat different. Its gross secondary enrolment ratio of about 29 per cent was the lowest among the ASEAN five in 1990, but educational authorities made great efforts to increase the transition rate from primary to secondary education, with remarkable success, raising this rate from about 50 per cent in 1990 to 85 per cent in 1995 (Sussangkarn, 1995:244). Opening lower secondary school classes in primary schools helped, as did parents' growing realization that secondary education is essential for obtaining good jobs in the modern sector.

In both Indonesia and Thailand, the growth of the secondary educated population has proven to be one of the major trends of the 1990s. According to long-term planning projections in Indonesia, over the 20-year period 1990-2010 the number of working age population with completed lower secondary education will increase four-fold from 29 million to 120 million, and with upper secondary education will increase five-fold from 15 million to 71 million (Oey-

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complete primary school in a country such as Indonesia, particularly in more isolated rural areas. See Jones and Raharjo, 1995, Chapter 8.

<sup>2</sup> These data were supplied to the author by the Vice Minister for Education of Lao PDR at a briefing in August 1996.

Gardiner and Gardiner, 1997). These projections are probably over-optimistic in the light of the economic downturn, but the increases in the secondary-educated will nevertheless be very large. In countries such as the Philippines and Malaysia, the rise will be less dramatic because enrolment ratios in secondary education are already quite high.

According to the figures in Table 1, Vietnam and Laos have made considerable progress in secondary education, although the figure reported for Lao PDR appears to be distinctly too high<sup>3</sup>. In Vietnam, the gross enrolment rate at lower secondary school appears to be about 47 per cent and at upper secondary level 17 per cent<sup>4</sup>. It is claimed (Hac, 1991: 68) that the network of lower secondary schools has been spread to every village. While this may be an exaggeration, there were 1,880 such schools in 1989-90.

In terms of higher educational developments, Table 2 shows that tertiary enrolments in South-East Asia have increased 13-fold since 1960, which somewhat surprisingly is only slightly faster than they have increased in Australia (11-fold). The growth multiple is biased in two partly offsetting ways. First, the South-East Asian figure would be increased if students from the region doing their tertiary studies overseas were included; overseas study is a particularly important component of the tertiary education structure in Singapore and Malaysia. Secondly, the figures for Thailand and Indonesia are in a sense exaggerated by the inclusion of very large enrolments in open universities, where the annual graduation rate is extremely low.

Quality of tertiary education varies considerably through the region. Indonesia, as a middle range country of South-East Asia in terms of the quality of its higher education, illustrates many of the issues. While there has undoubtedly been improvement in the quality of various aspects of Indonesian higher education, serious deficiencies remain. There seems to be widespread recognition from those closely involved with Indonesian higher education that the rapid expansion of secondary and tertiary places has made quality improvement very difficult to achieve<sup>5</sup>. The level of training of staff in institutions of higher education, the budgets devoted to paying them and supporting them, the reward structures in place, which give little recognition to high quality research, and the limitations on freedom of expression combine to inhibit the improvement in quality of higher education (Hill (ed.), 1991; Hull, 1994). The conclusion seems inescapable that, although graduate education has been expanding in Indonesia, in most cases Indonesian students

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<sup>3</sup> Briefings in Vientiane in August 1996 indicated that the net enrolment rate at the lower secondary level is 15 per cent and at upper secondary level only 2 per cent.

<sup>4</sup> These calculations were based on dividing the enrollment numbers reported in Dinh, 1991, Table 1 by the numbers at the relevant ages from the 1989 Population Census.

remain disadvantaged in terms of what tertiary education should offer if they pursue Masters and PhD degrees domestically rather than travelling overseas to do so.

The Philippines faces a somewhat different set of problems, although the problems of low salaries and budgets and poor reward structures mirror those in Indonesia. Philippine tertiary educational establishments include some of the best in ASEAN as well as some very low quality institutions. The Philippines' very high enrolment rate in tertiary institutions is achieved largely through a system of private institutions, which account for 83 per cent of tertiary-level enrolments, far higher than in other South-East Asian countries (Pernia, 1991:141-3).

### **Closure of the gender gap**

It is popular these days in population policy circles to emphasize the disadvantaged position of girls in access to education and the good things that would be achieved if girls' access to education were improved: Lower fertility, better child nutrition and health and of course women's empowerment and improved gender equity. These points are well taken in relation to some parts of the world - notably South Asian countries. But in South-East Asian countries, with the exception of Laos, Cambodia and to some extent Indonesia, the sex ratio of enrolments in primary and secondary school is quite even (Knodel and Jones, 1996). Indeed, in the Philippines, a higher proportion of girls than of boys are in secondary school. In most countries of the region, female disadvantage shows up more in tertiary education enrolments. But for the broad mass of the population, who never reach tertiary education anyway, a much more pressing concern is the inequity of access to education according to socio-economic background. We will return to this later.

### **Quality is a serious issue**

It would be unwise to conclude from the earlier evidence of increased enrolment ratios that all is well with education in South-East Asian countries, or that educational developments in these countries over the past two decades have been well fitted to the needs of their growing economies. There are shortcomings in the quality of schooling in most Southeast Asian countries, the severity of the deficiencies in general being correlated with the poverty level of the country concerned. Even in Thailand and Indonesia – far from being the poorest countries in the region – there are considerable problems. Quality of education in both countries is demonstrably worse in the more isolated regions. Not only this, but enrolments in secondary education were lagging

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<sup>5</sup> An Indonesian report in the mid-1980s stated that the quality of the typical upper secondary graduate continued to decline to a level that was probably equivalent to lower secondary education before the

badly behind their needs as countries aspiring to achieve rapid industrial development. Sussangkarn has long stressed the shortage of middle level manpower in Thailand and the failure of the Thai education system to expand rapidly enough at the lower secondary level (Sussangkarn and Chalamwong, 1989). Khoman (1993) made the same point, as did Jones (1993) and Warr (1997:19). The rapid rise in transition rates from primary to secondary school during the 1990s has come too late to enable Thailand to enter the 21st century with enough middle level manpower to meet the needs of a rapidly industrializing economy. Indeed, it is projected that as far ahead as 2010, a high proportion of the labour force will still have only primary school education.

In Indonesia, despite the much-vaunted attainment of universal primary school education around 1990, to this day there remains a substantial drop-out rate and at least 10 per cent of children who do not complete primary education, not to mention the very low quality of primary education offered in many schools (Jones et al, 1998). Therefore in turning its attention to lower secondary education with the announcement of the policy of extending the period of compulsory education to nine years, the Indonesian government must continue to keep in mind that the primary education task is not yet completed; both completion of the level and quality of the education offered remain serious concerns (World Bank, 1997). At the secondary level, evidence of an actual decline in enrolment ratios at the lower secondary level in the late 1980s and early 1990s signals some problems for the policy of making education at this level compulsory. The available evidence, particularly in the poorest provinces, indicates that poverty is a major reason for the inability of children to continue at this level of schooling (Jones et al., 1998; Mason, 1995). The economic crisis of the past two years has exacerbated the problem, and left government planners and donor agencies scrambling to introduce social safety nets to avoid sharp declines in school enrolments.

In Laos and Cambodia human resource development is seriously hampered by deficiencies throughout the school system: outmoded textbooks; poorly trained and poorly paid teachers, most of whom have to “moonlight” to make ends meet; physical facilities and teaching aids which, according to one observer, are “miserably poor” (Hac, 1991: 37). But the net enrolment rate does not tell the whole story. A recent study showed that 46 per cent of primary school students are over-aged (World Bank, 1995); repetition rates are estimated at 30 per cent; and probably only 30 per cent of children complete primary school.

Throughout the region, quality of education tends to be poorest in the rural areas, particularly the more isolated rural areas. Here schools (particularly secondary schools) are more

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beginning of rapid expansion of secondary education (IEES 1986:77).

distant. Even in rural Java, where schools are much more accessible, on average, than in many parts of Indonesia, households in the poorest income quintile live, on average, about 47 per cent further away from the nearest lower secondary school than households in the wealthiest quintile (Mason, 1995: 49). This translates into higher costs and greater inconvenience of travelling to school. The least qualified teachers tend to be appointed, to schools in the more isolated regions, facilities in the schools tend to be the worst and teacher absenteeism tends to be highest. In cities, although educational facilities are generally much better, those serving the slum dwellers and lower income groups are far behind those serving the middle class.

### **Equity of access**

The points about educational quality made in the previous section are highly relevant to the issue of equity of access to education. It tends to be in the poorest regions and, within any region, among the poorest groups in the population, that schools are least accessible and educational quality lowest. This makes it particularly hard for children from these groups to move up through the school system, because it reinforces their problem of lack of resources to meet the costs of education.

Throughout South-East Asia, there are wide disparities in educational enrolment ratios according to parents' occupation and income. In Asia as a whole, children of white-collar workers are over-represented in higher education enrolments by a factor of 13 compared with children of farmers (calculated from Gertler and Rahman, 1994: Table 4.13). In Indonesia, enrolment ratios increase with income in both urban and rural areas, the disparity growing as level of education increases. Data from the late 1980s show that by age group 16-18 (the upper secondary age group), school enrolment ratios rise from 36 per cent in the two lower quintiles of households classified by household expenditure to 53 per cent in the third and fourth quintiles and to 65 per cent in the top quintile (Gertler and Rahman, 1994: Table 4.16; Mason, 1995, Table 3.1). Difference between the highest and lowest deciles were even more dramatic: in 1989 only about two per cent among the lowest but almost all among the highest income decile were attending this level of schooling (World Bank, 1993: 15-16). More recent data – for 1998 – are presented in Fig. 1.

The lower income groups are disadvantaged not only by their much more restricted access to secondary education but also by the much lower quality of the schools, both at primary and secondary level, that they are able to access. The low reputation of these schools and the poorer

quality of the education that they receive in these schools disadvantages them in the job market once they have left school.

A case study in Nusatenggara Timur, one of Indonesia's poorest provinces, illustrates the point. Here as many as 63 per cent of senior high school students interviewed in 1996 had fathers with at least lower secondary education, whereas among all members of their fathers' generation, only about 16 per cent would have had at least a junior high school education or above. Many students from poorer families experienced great financial difficulty in completing their upper secondary studies – and these were already only a small remnant of children from poorer families, most of whom had already dropped out at lower levels of education. The key burden on such students was the school fees and other costs, including the need for many students to stay in town for their education in cases where they live far from the nearest upper secondary school. Many such students entered into arrangements with a family in town whereby they are given accommodation and meals and in return work for the family as a domestic servant as well as continuing their studies. Many students are exploited under this system, and they have to work so hard that their performance in school suffers (Jones et al., 1998:68).

### **Role of public spending in accentuating socio-economic disadvantage**

It is an appropriate role of government to redress the worst economic imbalances evident in a society through fiscal measures and cross-subsidization. Unfortunately, this is not the role government is playing in relation to education in South-East Asia (or in many other regions, for that matter). Rather, patterns of government expenditure are reinforcing disparities within the society by subsidizing the education of the better-off groups – or to put it bluntly, by taxing the poor to pay the rich. It is seldom recognized that this is the case, although the evidence is quite clear. Secondary education costs much more per head than primary education, and tertiary education much more again. Although the extent of public subsidization of secondary and tertiary education varies between countries, in general the expenditure of public funds per student at these levels is higher. These higher per capita expenditures are disproportionately being directed to the better-off, because the small group of students who reach upper secondary and post-secondary education is highly selective of those from white-collar backgrounds, who have higher family income levels (Tan and Mingat, 1992: 84;99-101). Put together, these two facts indicate a heavy usage of public funds to benefit those who are already advantaged by socioeconomic background. We need to search for

...ways of enhancing the access of bright children from disadvantaged backgrounds to more advanced levels of education. The present situation, in

which “survival” to upper secondary and university education has more to do with social class than with inherent ability, is not only unjust but also extremely wasteful from a human resource development point of view (Jones, 1989:61).

The search, however, poses difficult policy dilemmas. In principle, “user pays” approaches together with heavy subsidization of students from poor backgrounds at all levels of the education system would be the logical way to deal with the issue. But even where the will is there to diminish socio-economic inequities, the approach is a difficult one to sell.

As noted by Pernia (1991), unit operating costs of public higher education are a multiple of those of primary and secondary education. The differences appear to be most extreme in the case of Malaysia (Pernia, 1991: Table 10.2). Private tertiary institutions provide a much larger share of all higher education in the Philippines and Indonesia than they do elsewhere in ASEAN. Once this is taken into account along with the extent of subsidization of private tertiary education and the extent of cost recovery through fees and other sources in both private and public tertiary education, it is possible to determine that the overall extent of private financing in higher education (both public and private) varied enormously among ASEAN countries. Philippines is highest at 86 per cent, followed distantly by Indonesia at close to 50 per cent, then Thailand at 27 per cent and Malaysia 15 per cent (a figure which would rise to 35 per cent if overseas education were considered). Pernia concludes that there remains ample scope for increasing private participation in financing higher education. This would not only address the issues of excess demand for such education, but would also allow for a reallocation of public resources to lower levels of education in accordance with efficiency and equity criteria. Part of the additional funds so released could be used to subsidise (for example through scholarships) very poor but qualified and promising students to pursue higher education (Pernia, 1991:144).

### **How has the economic crisis affected the situation?**

The economic crisis has, in the short term, almost certainly accentuated the sharp disparities in access to education between the poorest groups and the middle class. Although some of the dire early predictions in Indonesia and Thailand about dramatically increased dropout rates and “lost generations” have been proven to be overly alarmist, rates of non-progression to higher levels of education have increased. In Indonesia, declines in progression rates appear to be worst in areas, such as the vicinity of Jakarta, that were hardest hit by the crisis. It is the poor and those who have lost employment because of the crisis who have had most difficulty keeping their children in school.

Nevertheless, there may be a silver lining to this particular cloud. It had long been apparent that something needed to be done to improve access of bright children from poor families to education, and to help them reach the levels of education that their ability warranted. For example, a pre-crisis study in one of Indonesia's poorest provinces – Nusatenggara Timur – found that despite a plethora of scholarship programs, very few scholarships were actually provided, and they did not always go to the most deserving pupils. Overall, only 6 per cent of senior secondary students in this poor province had ever received scholarship support (Jones et al., 1998: 68). Moreover, schools located in disadvantaged areas were not receiving special assistance, and were therefore forced to raise revenues by charging fees. This study recommended an expanded scholarship program and other measures to lighten the economic burden of schooling on poor families, such as waiving requirements to purchase school uniforms and enabling fee payments to be made in instalments. Another pre-crisis study found that lower secondary enrolments among the poor could be increased by price subsidies, establishment of afternoon schools that would allow schooling to be combined with working, improving educational quality and reducing distances to schools (Mason, 1995).

The crisis has now engendered a sense of urgency, and development assistance funds have been assigned in large volume to provide just the sort of assistance to poor students that the Nusatenggara Timur study cited above had recommended for one chronically poor province. So far, there is a consensus that the administration of the social safety net funds for education in Indonesia has been the best among the social safety net programs, and little money has been lost through mis-targeting or corruption.

The key question for the longer run is whether elements of the social safety net program for education (a program too expensive for the government to maintain for very long) can be retained in the longer run with the aim of improving the equity of educational opportunity. If so, the crisis may have proved to be the kind of shock needed to generate action to improve the equity of the educational system.

### **Education and the labour market**

The rising levels of education in the region have already translated, with a time lag, into improved average educational levels of the workforce. Upgrading of the human capital stock provides the opportunity for rapid increases in productivity, and the rising share of workers in the total population provides the opportunity for such increases to be translated into even more rapid increases in real income per head. Both of these desirable outcomes are contingent on suitable work being available for the rapidly growing workforce. In recent years, the pace of economic

growth and structural change has been sufficient in many parts of the region to turn attention from earlier concerns over job opportunities for the growing stream of better educated to worries about labour shortages, particularly at the unskilled end of the labour market. Indeed, in Malaysia, conditions have provided the incentive for a substantial inflow of foreign labour, numbering over one million workers in 1993, or about 16 per cent of the economically active population (Abella, 1995). The number was estimated to have increased to 2.3 million in 1996 (Hugo, 1998 Table 6). Use of foreign labour is also increasing in Taiwan, Japan, Singapore and Thailand.

The dynamics of labour market changes in a number of major countries in the region (e.g. Thailand, Singapore, Indonesia, and to a lesser extent, Malaysia) are quite dramatic, and they have an important demographic element. Firstly, the volume of young workers entering the labour force is either about to level off, has already levelled off or in some cases (Singapore, Thailand) has even started to decline as a result of declining fertility rates in earlier years. However, the volume of *better-educated* younger entrants is increasing sharply as a result of educational advances. Despite earlier concern about mismatch between educated labour market entrants and suitable jobs for them (Keyfitz, 1989; Jones, 1993) the sustained rapid pace of economic growth and structural change, on the whole, enabled these young workers to be absorbed and to contribute to rising productivity, although in Indonesia unemployment rates for the educated were increasing, even before the economic crisis (Manning and Junankar, 1998). It should be stressed that the combination of rapid growth of the youth cohort and rapid expansion of secondary education would have led to serious problems of youth unemployment had it not been for a combination of rapid economic growth and evidence of some flexibility on the part of young people when their employment expectations could not be fulfilled.

The issue of “mismatch” is always lurking there, however, as a threat. There is a kind of “ratchet effect” to widened educational opportunities: once educational enrolment rates rise, only rarely do they fall again. Large numbers of educated youth will therefore be graduated into the labour market regardless of the level of demand for their services.

If rapid economic growth was all that was holding the “mismatch” problem in check, then the current economic slowdown (dramatic in Indonesia, serious in Thailand and Malaysia, evident also in the Philippines) could cause major problems. In the absence of sharp downward revision of expectations, rates of unemployment for the rapidly growing number of educated young people could be expected to rise sharply. This is a serious issue for the young people involved and their families; it is also potentially a major factor upsetting political stability, as the role of educated youth in anti-government demonstrations that brought down previous governments in Thailand and the Philippines is well known, as well as their role in demonstrations that almost brought

down former regimes in Myanmar. Students also played a key role in the events leading to the demise of the Soeharto regime in Indonesia in May 1998. Although the role of unemployment has not been conclusively demonstrated to be crucial in such events, it seems reasonable to assume that the heightened frustrations arising from high levels of youth unemployment could “raise the temperature” and increase the likelihood that such expressions of dissatisfaction would gain momentum.

A possible “escape valve” for educated youth who are unable to find suitable work is international migration. This is really only a widening of the option of moving to another region within the same country, such as from the north-east to Bangkok, from Eastern Indonesia to Java or from the Visayas to Manila. However, it does have wider ramifications than does internal migration, because it has the potential to complicate international relations in various ways. For example, the large inflow of illegal Filipinos and Indonesians to Sabah and of Indonesians and Bangladeshis to Peninsular Malaysia has caused some tensions in relations between Malaysia, on the one hand, and the Philippines, Indonesia and Bangladesh, on the other (Hugo, 1998).

There is a more positive aspect of the international flow of workers in the region. The rapid and sustained economic growth in countries such as Singapore, Thailand, Malaysia and Indonesia in recent years has made it impossible for their educational systems to produce on demand the high-level manpower needed to sustain rapidly emerging industries. While it is important for educational and manpower plans to be developed to produce the relevant high-level manpower, in the short to medium-term the spectacular rates of economic growth attained have opened up many opportunities for highly trained workers from overseas. Some of these needs have been met from Western countries such as the U.K., Australia and the U.S., and from other Asian countries such as India and Bangladesh. But well-trained workers from other ASEAN countries (notably the Philippines) have also been able to find work in their ASEAN neighbours. Not only this, but the rapidly growing local employment opportunities for highly trained workers are in some cases attracting back workers who were earlier lost through emigration by countries such as Singapore, Malaysia and the Philippines (Hugo, 1998).

### **Educational styles and international competitiveness**

Finally, some observations about educational styles in the region and what they might imply for the ability to recover the pre-1998 pace of economic development. It is difficult to generalize about the style and quality of education in a region as large and diverse as South-East Asia. Actually, the countries whose educational achievements are nowadays usually discussed with some awe in the West are Japan, Korea, Taiwan, and Singapore – all of them except

Singapore in East Asia rather than South-East Asia. These countries share a Confucianist tradition and all but Singapore a long period of Japanese educational influence. The seeming success of education in meshing with the phenomenal rates of economic growth in these countries has begun to influence educational policy in the West. However, as these East Asian countries have moved into the higher-technology end of manufacturing and into a more services-oriented economy, the content, style and quality of tertiary education has become increasingly important. "The strength of their educational system, with its emphasis on discipline, facts and learning by rote, may also be its weakness" (*Economist*, 21/9/96), by stifling creativity and inventiveness. "Manufacturing, with its emphasis on systems and teamwork, rewards the kind of disciplines and fact-filled students (they produce). But what about the more creative service industries in which Asian countries currently lag behind America - like software design or entertainment?" (*Economist*, 21/9/96).

Nevertheless, the fact remains that children in such countries perform better than Western children as measured by test scores. (A recent international study of student ability in maths and science rated Singapore, Korea, Japan and Hong Kong above Australia, even though Australia ranked among the top of the Western nations (Lokan, Ford and Greenwood, 1996: Chapter 2). Ethnic Chinese and other East Asians also appear to out-perform the general population in countries where they have settled. In the United States, "the success of Asian-Americans in gaining admission to the elite universities like Harvard and the University of California has been so marked that it has provoked rows about discrimination against Asians, as the universities attempt to maintain an ethnic balance among their students" (*Economist*, 21/9/96: 29). In the Australian state of New South Wales, the HSC examination is taken after completing upper secondary education. Over the five year period 1992-1996 an extraordinary 40 per cent of the top 100 places have gone to students with an Asian ethnicity, mainly ethnic Chinese but also Vietnamese, Indians and others (Jones, 1997, Table 3). This is far higher than their proportion in the final year high school population.

Debate rages about the superior performance of East Asians, both in their homelands and in countries such as the USA and Australia. The explanation appears to be partly cultural, having to do with the seriousness with which the educational task is approached in Chinese, Vietnamese and other East Asian traditions, and partly structural. Children in East Asian countries have to work harder, with more days in the school year and more hours in the school day. Educational objectives are kept to a minimum. Teachers enjoy considerable respect and prestige, far more than in Western countries. Examinations dominate the lives of the young, and if they fall behind, they are sent to cramming schools or given private tuition. All this may not be much fun for the children, but it achieves results.

But to what extent are these “East Asian” educational traits also characteristic of South-East Asian countries? The “East Asian “ traits are quintessentially those of Japan, Korea, Taiwan and Hong Kong. Singapore is arguably very similar, and in the cities of Malaysia and Thailand, the pressure on students to perform is also very strong. But in Indonesia and the Philippines, the “East Asian“ intensity of educational effort is not so much in evidence, except among the subgroup attending the top private schools. For most of the school population of South-East Asia, it would probably be true to say that the problems to be addressed are not those of a ‘lost childhood’ resulting from excessive pressure, after-hours cramming schools, etc., but rather a deficient level of knowledge resulting from overcrowded curricula (with heavy ideological content in cases such as Indonesia), rote learning techniques that stultify inquisitiveness and interest in learning, excessive respect for teachers, many of whom are poorly trained, and poor quality buildings, textbooks and teaching aids. Such deficiencies will not necessarily prevent those who sit at the school benches from achieving competitiveness with their counterparts in other countries in a globalizing world. Intelligent young people are, after all, very resilient, and learn in spite of facing great odds. But by the same token, the kind of schooling many of them are enduring will certainly not help them achieve this level of competitiveness. Not only will heavy investment in education be needed to overcome these shortcomings, but also a revolution in educational structures and styles. Happily, the ‘demographic bonus’ of a no-growth school-age population in most of the region will facilitate the process. All that is needed beyond this is a clear sense of purpose about what needs to be achieved, and willingness to give educational investment a high priority in government budgets.

## REFERENCES

- Abella, Manolo I., 1995, "Asian labour migration: past, present and future", *ASEAN Economic Bulletin*, 12 (2): 125-135.
- Azizah Kassim, 1997, "Intra-regional migration in South-East Asia: migration patterns and major concerns in Malaysia", in Eleanor Laquian et al., eds, *The Silent Debate: Asian Immigration and Racism in Canada*, Vancouver: Institute of Asian Research, University of British Columbia.
- Barro, R.J., 1991, *Economic Growth in a Cross-Section of Countries*, NBER Working Paper No. 3120, Cambridge, Mass: National Bureau of Economic Research.
- Bautista, Romeo M. and Mario M. Lamberte, 1996, The Philippines: Economic Developments and Prospects, *Asian-Pacific Economic Literature*, 10(2): 16-31.
- Caldwell, J.C., 1980, Mass education as a determinant of the timing of fertility decline", *Population and Development Review*, 6(2): 225-255.
- Dinh, Gia Phong, 1991, "General education in Vietnam", in Pham Minh Hac (ed), *Education in Vietnam*, Hanoi: Ministry of Education and Training.
- Economist, The, 21/9/1996, "Those educated Asians".
- Gertler, Paul J. and Omar Rahman, 1994, "Social infrastructure and urban poverty", in Ernesto M. Pernia (ed.), *Urban Poverty in Asia: A Survey of Critical Issues*, Hong Kong: Oxford University Press.
- Hac, Pham Minh, 1991, "Educational reforms", in Pham Minh Hac (ed), *Education in Vietnam 1945-1991*, Ministry of Education and Training of the Socialist Republic of Vietnam.
- Hill, Hal (ed.), 1991, *Indonesian Assessment 1991*, Political and Social Change Monograph No. 13, Dept. of Political and Social Change, Research School of Pacific and Asian Studies, Australian National University, Canberra.
- Hugo, Graeme, 1998, "Migration and mobilisation in Asia: an Overview", in Eleanor R. Laquian, Aprodicio A. Laquian, and Terry G. McGee (eds), *The Silent Debate: Asian Immigration and Racism in Canada*, Vancouver: Institute of Asian Research, University of British Columbia.
- Hull, Terence H., 1994, "Institutional constraints to building social science capability in public health research: a case study from Indonesia", *Acta Tropica*, 57:211-227.
- IEES (Improving the Efficiency of Educational Systems), 1986, *Indonesia: Education and Human Resources Sector Review*, Ch.2, Economic and Financial Analysis, Ministry of Education and Culture/USAID, Tallahassee.
- Jones, Gavin W., 1993, "Dilemmas in expanding education for faster economic growth: Indonesia, Malaysia and Thailand", in Ogawa, Jones and Williamson, 1993.
- Jones, Gavin W., 1997, "Human resource development in the Asia-Pacific region: implications for Australia", *Journal of the Australian Population Association*, 14(2): 127-144.
- Jones, Gavin W. and Yulfita Raharjo (eds), 1995, *People, Land and Sea: Development Challenges in Eastern Indonesia*, Canberra: Australian National University.

- Jones, Gavin W., Laila Nagib, Sumono and Tri Handayani, 1998, "Issues in the expansion of high school education in poor regions: the case of East Nusatenggara, Indonesia", *Bulletin of Indonesian Economic Studies*, 34(3): 59-84.
- Keyfitz, Nathan, 1989, "Putting trained labour power to work: the dilemma of education and employment", *Bulletin of Indonesian Economic Studies*, 25(3): 35-55.
- Kinh, Nguyen Quang, 1991, "The eradication of illiteracy (EOI) and universalization of primary education (UPE) in Vietnam", in Pham Minh Hac (ed), *Education in Vietnam 1945-1991*, Ministry of Education and Training of the Socialist Republic of Vietnam.
- Knodel, John and Gavin W. Jones, 1996, "Post-Cairo population policy: does promoting girls' schooling miss the mark?", *Population and Development Review*, 22(4): 683-702.
- Khoman, Sirilaksana, 1993, "Education Policy", in Peter G. Warr (ed), *The Thai Economy in Transition*, Cambridge: Cambridge University Press.
- Lokan, Jan, Phoebe Ford and Lisa Greenwood, 1996, *Maths and Science on the Line: Australian Junior Secondary Students' Performance in the Third International Mathematics and Science Study*, Melbourne: Australian Council for Educational Research
- Lucas, R.E., 1988, "On the mechanics of economic development", *Journal of Monetary Economics*, 22:3-42.
- Lucas, Robert E. Jr., 1993, "Making a miracle", *Econometrica*, 61(2): 251-272.
- Manning, Chris and P.N. Junankar, 1998, "Choosy youth or unwanted youth? A survey of unemployment", *Bulletin of Indonesian Economic Studies*, 34(1): 55-93.
- Mason, Andrew D., 1995, "Schooling, Decisions, Basic Education, and the Poor in Rural Java", Ann Arbor, UMI Dissertation Services.
- Oey-Gardiner, Mayling, 1997, "Education trends and prospects", in Gavin W. Jones and Terence H. Hull (eds), *Indonesia: Population and Human Resources*, Singapore: Institute of Southeast Asian Studies.
- Oey-Gardiner, Mayling, and Peter Gardiner, 1997, "The education explosion", in Gavin W. Jones and Terence H. Hull (eds.), *Indonesia: Population and Human Resources*, Singapore: Institute of Southeast Asian Studies.
- Ogawa, Naohiro, Gavin W. Jones and Jeffrey G. Williamson, 1993, "Introduction", in Naohiro Ogawa, Gavin W. Jones and Jeffrey G. Williamson (eds), *Human Resources in Development along the Asia-Pacific Rim*, Singapore: Oxford University Press.
- Pernia, Ernesto, 1991, "Higher education in Asia: Indonesia in comparative perspective", in Hill (ed), 1991.
- Psacharopoulos, George, 1995, "Returns to education: a further international update and implications", *Journal of Human Resources*, XX(4): 583-604.
- Stevenson, Harold W. and James W. Stigler, 1992, *The Learning Gap: Why our Schools are Failing and What we can Learn from Japanese and Chinese Education*, New York: Summit Books.

Sussangkarn, Chalongphob, 1995, "Labour market adjustments and migration in Thailand", *ASEAN Economic Bulletin*, 12(2): 237-254.

Sussangkarn, Chalongphob and Yongyuth Chalamwong, 1989, "Thailand's economic dynamism: human resource contributions and constraints", paper presented at the International Symposium on Sources of Economic Dynamism in the Asia and Pacific Region: a Human Resource Approach, Nihon University, Tokyo, November.

Tan, Jee-Peng and Alan Mingat, 1992, *Education in Asia: A Comparative Study of Cost and Financing*, Washington D.C.: The World Bank.

Tan, Joseph L.H. (ed), 1999, *Human Capital Formation as an Engine of Growth: The East Asian Experience*, Singapore: Institute of Southeast Asian Studies.

Warr, Peter, 1997, "The end of the Thai miracle?" Thailand Information Paper No. 5, National Thai Studies Centre, Australian National University, Canberra.

World Bank, 1977, *Indonesia: Suggested Priorities for Education*, Report No. 16369-IND

TABLE 1: South East and East Asian Countries, Percentage Enrolled in Secondary and Higher Education as percentage of Age Group

	Secondary		Higher	
	1970	1992	1980	1992
South East Asia				
Indonesia	16	38	4	10
Philippines	46	74	28	28
Thailand	17	33	13	19
Malaysia	34	58	4	7
Singapore	46	72	8	n.a.
Vietnam	n.a.	33	2	2
Burma	21	n.a.	5	n.a.
Lao PDR	3	22	1	1
East Asia and Australia				
China	24	51	1	2
Korea, Republic of	42	90	16	42
Australia	82	82	25	40

Note: Secondary School age range depends on national definitions. It is most commonly considered to be 12-17 years. The age range for higher education is taken to be 20-24.

Source: World Bank, World Development Report 1995, Table 28.

**TABLE 2: South-East Asia: Students Currently Enrolled in Tertiary Institutions: 1960, 1981 and 1991**

	<b>1960</b>	<b>1981</b>	<b>1991</b>
Indonesia	44,802	565,501	1,885,038
Malaysia	2,698	67,368	133,479
Philippines	271,791	1,335,889	1,656,815
Singapore	8,171	24,393	60,373
Thailand	45,548	911,166 <sup>1</sup>	1,088,120 <sup>1</sup>
<b>Total ASEAN "five"</b>	<b>375,124</b>	<b>2,905,810</b>	<b>4,823,825</b>
Brunei	n.a.	n.a.	1,299
Laos <sup>2</sup>	n.a.	n.a.	4,921
Myanmar <sup>2</sup>	13,600	165,000	195,333
Vietnam <sup>2</sup>	16,051	114,701	205,652
Cambodia	n.a.	n.a.	7,839
<b>Total ASEAN</b>	<b>404,775</b>	<b>3,185,511</b>	<b>5,231,030</b>

o

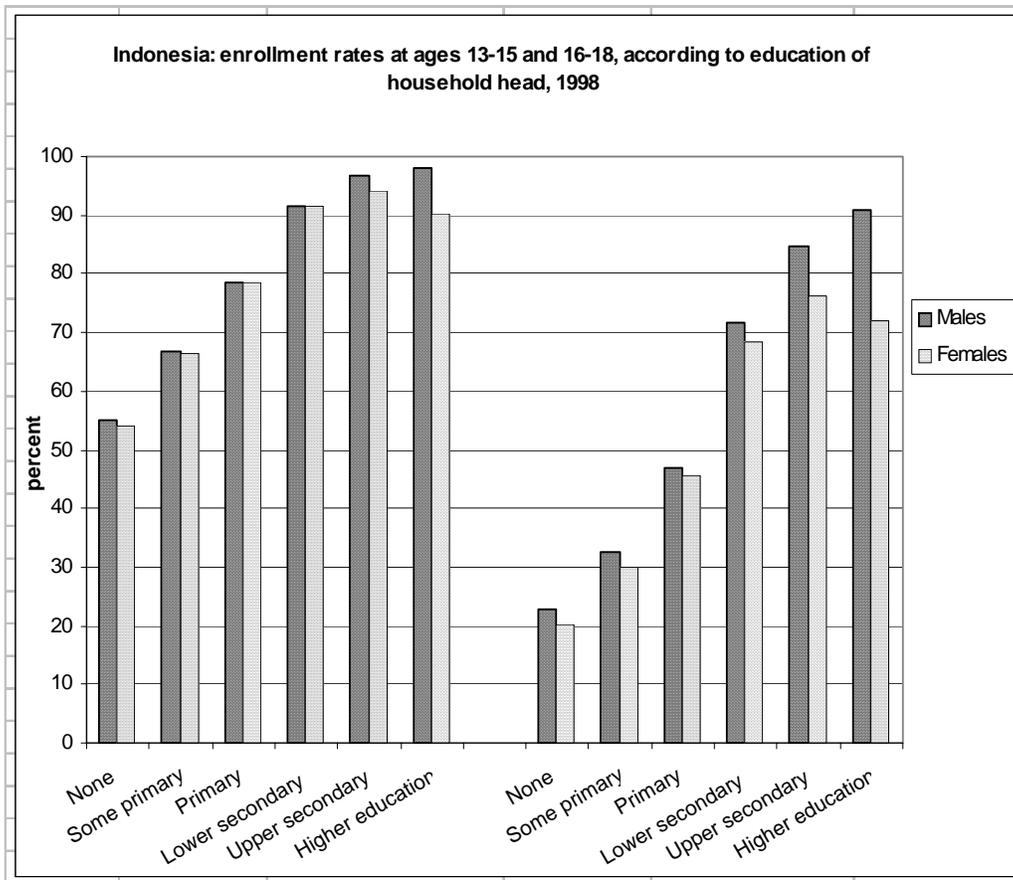
Sources: *Statistical Yearbooks*, UNESCO, Paris, various years.

*Yearbook of Statistics*, Department of Statistics, Singapore, various years.

Notes: Notes in this table refer to students enrolled in all institutions, both public and private at the third level of education; universities and equivalent degree granting institutions, teacher training colleges, technical colleges, etc. As far as possible both full-time and part-time students are included.

<sup>1</sup> Includes open admissions to Ramkamhaeng University and Sukhothaimathirath (Open University).

<sup>2</sup> Vietnam, Laos and Myanmar have become member states of ASEAN since 1991.



Source: Unpublished tabulations from Susenas 1998

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