PERGAMON

International Journal of
Educational Research 29 (1998) 627–642

International Journal of
Educational
Research

Chapter 3

Financing education in developing Asia: themes, tensions, and policies

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Abstract

Even as the demand on public resources to support education grows, governments face compelling alternative demands to address issues of pollution, disease, and infrastructure development. The resulting search for new sources of revenues and new efficiencies in education will force difficult trade-offs over the next decade.

The enormous national diversity across Asia presents a challenge to any regional analysis. The diversity is instructive, however, because it exposes contrasts, and raises questions which might otherwise be overlooked. Moreover, the countries of developing Asia have a great deal in common, despite the diversity. All are facing issues related to expansion of educational access and the supply of and demand for highly-trained education personnel. All are addressing questions on the role for the state in the education sector. Almost all have witnessed a growth of private education during the 1990s. Thus the diversity and commonality provide an instructive basis for analysis and identification of appropriate policies in various national settings. In focusing on the financing of education, this chapter distinguishes among the roles of governments, individuals, households, and entrepreneurs of various sorts. The chapter is concerned chiefly with government policies, though it also addresses policies that are and/or might be adopted by others.

1. The scale of government and private financing

In almost all Asian countries, governments are the dominant providers of resources for education, with public expenditures on education as a proportion of total government budgets ranging from about 7% to just over 23% (Table 1). Likewise, public expenditures on education as a proportion of Gross National Product (GNP) range from only 1% to over 6%. In Eastern Asia, public expenditure on education as

0883-0355/98/$ – see front matter
PII: S0883-0355(98)00053-6

Table 1
Public expenditures on education in selected ADB developing member countries, 1995

Country	Public expenditures on education as a % of GNP	Public expenditures on education as a % of total govt. budget	% Distribution of recurrent expenditure		
			Pre-Primary	Secondary	Tertiary
Bangladesh	2.3	8.7	44.2	43.3	7.9
Bhutan	4.0	10.0	41.5	18.4	22.3
Cambodia	1.0	10.0	—	—	—
China, People's Republic	2.3	12.2	36.9	31.5	16.5
Fiji	5.4	18.6	50.5	37.0	9.0
Hong Kong, China	2.8	17.0	21.9	35.0	37.1
India	3.5	12.1	38.4	26.1	13.6
Indonesia	2.2	—	—	—	—
Kazakstan	4.5	17.6	—	—	12.5
Kiribati	6.3	17.6	—	—	—
Korea, Republic of	3.7	17.4	45.5	34.4	7.9
Kyrgyz Republic	6.8	23.1	—	—	8.3
Lao People's Dem. Rep.	2.4	—	42.2	43.5	3.9
Malaysia	5.3	15.5	35.4	41.2	16.8
Nepal	2.9	13.2	44.5	17.7	28.1
Philippines	2.2	—	63.9	10.1	22.5
Samoa	4.2	—	52.6	25.2	—
Solomon Islands	4.2	—	56.5	29.8	13.7
Sri Lanka	3.1	8.1	—	—	12.2
Taipei, China	6.2	17.9	—	—	—
Thailand	4.2	20.1	52.8	21.5	16.5
Tonga	4.7	17.3	38.8	24.2	7.3
Vanuatu	4.9	18.8	57.9	33.0	6.4
Viet Nam	2.7	7.4	40.0	20.0	16.0

— = not available.
Source: UNESCO (1998); various national sources.

a proportion of GNP rose slightly between 1980 and 1995, but in Southern Asia it fluctuated (Table 2). In general, the developing countries of Asia devoted a smaller proportion of GNP to education than did their counterparts in Africa, North America, Oceania, and Europe. This was largely due to the low level of teachers' salaries in Asia as a proportion of per capita GNP. While no universal formula can be applied, the bulk of evidence suggests that a strong justification on both economic and social grounds can be made for raising government expenditures on education in countries where such expenditures are low.

The scale of private (non-government) expenditures deserves clearer recognition than it has typically received in either official or non-official analyses of educational investment. Data in this area are weak. One indirect indicator of expenditure is the level of enrollment in private schools. As Table 3 indicates, the rate of private enrollment is highest at the pre-primary level. Cross-national data on private

Table 2
Public expenditure on education as a percentage of GNP, by region, 1980–95

Region	1980	1985	1990	1995
More Developed Countries	5.2	5.0	5.0	5.1
North America	5.2	5.1	5.4	5.5
Asia/Oceania	5.0	4.5	4.0	4.0
Europe	5.2	5.2	5.1	5.4
Less Developed Countries	3.8	3.9	3.9	4.1
Africa (excluding Arab States)	5.1	4.8	5.1	5.6
Eastern Asia	2.8	3.1	3.0	3.0
China, People's Republic of	2.5	2.5	2.3	2.3
Latin America & the Caribbean	3.8	3.9	4.1	4.5
Southern Asia	4.1	3.3	3.9	4.3
Arab States	4.1	5.8	5.2	5.2

Source: UNESCO (1998), p. 110.

Table 3
Private enrollments as percentage of total enrollments, selected ADB developing member countries, 1995

	Pre-primary	Primary	Secondary
Cambodia	—	1	1
Fiji	100	96	87
Hong Kong, China	100	10	12
Indonesia	100	18	42
Kazakstan	—	0	0
Kiribati	—	0	77
Korea, Republic of	78	2	37
Lao People's Dem. Rep.	11	2	0
Malaysia	42	—	5
Maldives	93	—	38
Nepal	—	6	—
Papua New Guinea	41	2	3
Philippines	53	7	31
Samoa	—	13	43
Solomon Islands	9	11	17
Sri Lanka	—	2	2
Thailand	26	12	6
Tonga	—	7	80

— = not available.
Source: UNESCO (1998), pp. 158–159.

enrollment is often misleading, however, because the definition of a private school varies across countries. Thus, many students in Fiji and Tonga, for example, are in schools which are legally private but which are heavily subsidized by the government and are generally considered part of the public sector of education. Countries with

longstanding capitalist traditions are more likely to have substantial numbers of private enrollments than countries which are still officially socialist societies, such as the People's Republic of China and the Socialist Republic of Viet Nam. However, even in those countries the number of private schools has increased significantly since the early 1990s (Kwong, 1997; World Bank, 1997).

Moreover, even for students in public schools, the proportion of financing coming from private sources may differ. Fig. 1 shows estimates of the proportions of household and government expenditures in public primary schools of nine countries of East Asia (Bray, 1996a, p. 32). Particularly dramatic is the picture in Cambodia, where government inputs are small and where gaps are bridged by parents and communities. The non-government figure includes fees, transport, supplementary tutoring, and other items. Household costs are also high in Viet Nam, though the percentages are much smaller in Indonesia and Thailand. The reason household expenditures are high in Cambodia and Viet Nam is not because of deliberate government policies. Rather, it is because the governments have been unable to meet needs, and parents have found that if they want to have schooling of even minimum quality, they must provide resources themselves. Other statistics are available from various national contexts. In the Republic of Korea, for example, non-government expenditures on education in 1994 represented 71.1% of total expenditures (Paik, 1995). While this partly reflects a vigorous private sector, particularly in tertiary education, it also reflects substantial household supplementary inputs to the public system.

2. What level of education provides the best investment?

One of the main reasons why households and communities invest in education is that they perceive it to provide a strong rate of return. That is, they believe the

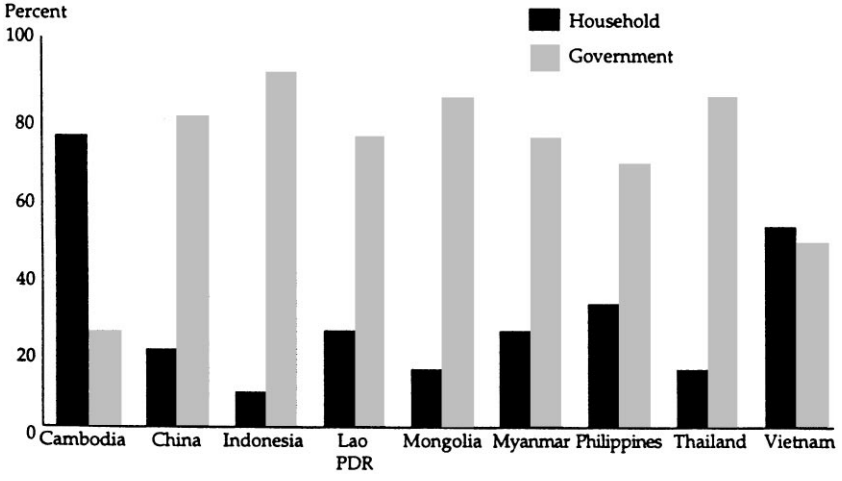

Fig. 1. Household and Government public primary education resourcing in nine countries of East Asia.

economic benefits that will return to them will considerably exceed their initial investment. While governments also invest in education for economic reasons, they have additional social and political goals. Among the justifications for government involvement is that markets work imperfectly and education yields benefits that do not accrue to specific individuals.

The precise scale and nature of rates of return remain controversial. One guideline, widely promoted during the 1980s and the first half of the 1990s, was that investment in primary education generally gives a better rate of return than investment in secondary or higher education. Thus, governments should consider reallocating their existing expenditures in favor of the primary sector (Psacharopoulos, 1994; World Bank, 1996). An alternative view, now heard more loudly, is that in some circumstances secondary and higher education may provide better rates of return. For example, one study which has reappraised the contribution of education to economic growth during the 1960–1985 period suggests that while primary education was the best investment for low-income countries, expansion of secondary education would have been the best investment for middle-income countries, and that for high-income countries tertiary education would have been the best investment. Moreover, while the bulk of discussion focuses on primary, secondary, and tertiary education, in some contexts pre-school and adult nonformal education may be a good investment (Mingat and Tan, 1996). The same applies to technical and vocational education, though the dominant literature on that topic has suggested that investments do not generate good returns at the secondary level (Psacharopoulos, 1991; Middleton et al., 1993).

2.1. Unit costs in education

Unit costs are an important guide for education policy makers and planners. The term *unit cost* commonly refers to the cost of a school place allocated to a single student for one year (Coombs and Hallak, 1987, p. 51). However, this definition says nothing about attendance (i.e., whether pupils actually occupy the places allocated to them), the quality of teaching, or the amount of learning. Moreover, for some analyses it is important to identify the unit costs per graduate, which permits inclusion of repetition and drop-out rates in the calculation. Education planners often attach particular importance to unit costs by level of education (i.e. preschool, primary, secondary and tertiary), though some policy considerations require statistics by subjects (e.g., Sciences or Languages), by streams (e.g., Grammar or Technical), and by geographical areas within a country (e.g., different provinces).

Unit costs typically are lowest for pre-primary and increase at each subsequent level of education. In China in 1994, for example, estimated recurrent unit costs in vocational secondary education in China were 3.8 times the level in general elementary education. Higher education had 17.7 times the unit cost of general elementary education (Jiang, 1996, p. 26). The fact that unit costs generally rise at each level of education must be taken into account by policy makers and planners. Unit costs also commonly rise at specific levels when a thrust is made from enrollment rates of, say, 95% to 100%. This is because many of the unreached children at this level of

enrollment have special needs and/or live in remote areas. Unit costs may vary as much within a country as they do across countries. This is well illustrated by interprovincial variations in China (Table 4) where average unit costs in 1995 at the primary level in Beijing were over five times the costs in Guizhou. The increase in unit costs by level is largely because at each higher level teachers are paid more, class sizes tend to be smaller, and buildings and equipment are more elaborate.

Education remains a strongly labor-intensive activity. Hence, salaries account for the major component of unit costs. Capital costs, in the form of buildings and equipment, tend to become more visible at higher levels of education. In Lao People's Democratic Republic, for example, teachers' salaries comprised 83.8% of public recurrent costs at primary level, but 80.6% at junior secondary, 35.5% in teacher education, 34.1% in higher education, and only 28.7% in technical/vocational education (Mingat, 1996, p. 16).

A key policy issue concerns which of these costs can be intentionally manipulated by government to lower overall expenditure without undercutting quality. Policy makers and planners can use many tools to adjust unit costs. Since the cost of teachers is usually the largest single item of expenditure, that is generally considered the most fruitful place to begin. Even when teachers' salaries must be taken as fixed, planners may be able to adjust the number of hours worked, the efficiency with which the hours are used, and the number of pupils taught by each teacher. Other useful tools for adjustment of unit costs include the number of grades taught simultaneously, the number of shifts, and the scale and nature of inputs of equipment, books, and other facilities.

While teachers' salaries are a tempting target for scrutiny, however, high teacher salaries do not easily translate into an opportunity for cost cutting. In Hong Kong and Singapore, for example, teachers are considered to be well paid in comparison with other professions, especially at the entry level. Teachers in Cambodia, on the other hand, are paid so poorly that an official salary is barely adequate even for one person to live on, let alone an entire family. That is not to say that the governments of Hong Kong and Singapore should leap to reduce teachers' salaries and that the Cambodian government should immediately increase them. The authorities in

Table 4
Unit costs by level and province, China, 1995 (Yuan)

Province	Primary	Junior Secondary
Beijing	1015	1923
Shanghai	1435	1903
Guangdong	704	1236
Zhejiang	679	970
Sichuan	343	592
Shaanxi	261	589
Jiangxi	284	441
Guizhou	186	385

Source: Min (1997), p. 150.

Hong Kong and Singapore have not been under pressure to reduce salaries because both had regular budget surpluses and consider it important to maintain the attractiveness of the teaching profession in comparison with other occupations. The Cambodian government, by contrast, would certainly like to increase teachers' salaries; but that move would create a massive wage bill which would in turn demand mechanisms for increased generation of revenue and/or redistribution of existing expenditure which are not easy to accomplish.

3. Cost-sharing in education

The 1990s brought a worldwide change of emphasis on the issue of cost-sharing and cost-recovery in education. While policy changes have not been evident in all countries to an equal extent, the overall thrust of trends is unmistakably toward greater cost sharing by communities and private sources. During the four decades following the Second World War, the dominant international view was that public education should be free of charge, especially at the level of basic education (see, for example, the 1948 United Nations Declaration of Human Rights; the 1959 Declaration of the Rights of the Child; and the 1966 International Covenant on Economic, Social and Cultural Rights). The chief justification was that education was a major route for social mobility, and the possibility of the poor being excluded from education by fees was considered inequitable.

By the 1990s, however, the dominant view had become that fee-free education was not necessarily desirable. Since tertiary students are more likely to come from prosperous families, many analysts consider it inequitable to give them state resources which could instead be allocated to poorer groups. Since in addition tertiary education is considered likely to lead to substantial private rates of return, many people advocate charging of fees at that level, supported as necessary and feasible by grants and/or loans. Education is still generally accepted as a public good that can benefit societies as a whole as well as individuals (Levin, 1987; Solmon and Fagnano, 1995), but a worldwide swing of opinion now favors fees for higher education, supported by loans and other mechanisms to protect the poor (Ziderman and Albrecht, 1995; Tilak, 1997).

At the level of primary education, arguments based on equity are more likely still to favor fee-free education. However, the fact remains that many governments are impoverished and cannot by themselves provide fee-free education of reasonable quality. Significantly, the 1990 World Declaration on Education for All did not advocate fee-free education. Instead it recommended partnerships in educational provision. Such partnerships may be with households, communities, and/or enterprises of various kinds.

Some educational institutions also gain income from factories, businesses, and other enterprises. In Manila, for example, three elementary and two secondary schools have received inputs from an oil refinery, a match manufacturer, a detergent company, and a large multinational hamburger outlet. In Singapore, banks, supermarkets, and other companies have donated cash and goods to schools, and have been able to claim taxation relief on these donations from the government.

Another form of cost-sharing may involve community contributions (Bray, 1996b; Bray and Lillis, 1988). Such communities may be of many kinds, including ones based on geographic proximity, religion, ethnicity, and race. The level of support by religious communities varies widely across countries but, in some, represents a significant source of funds. For example, Islamic communities are prominent sponsors of schools in Bangladesh, Indonesia and Pakistan, whereas Christian communities are prominent sponsors in such countries as Philippines and Vanuatu. Buddhist, Hindu, and other religious communities also play major roles in some settings. In Cambodia, communities and households meet over 50% of the cost of primary education (Bray, 1998). This, however, is an extreme case and not typical of the region.

The issues and mechanics associated with cost-sharing by communities, families, and students are complex, and require continued exploration of the merits and problems associated with different options. Community financing, if not guided and controlled, may exacerbate regional and socio-economic inequalities; and mechanisms are needed at the local level to ensure that levies do not obstruct access to education for the poor. At the tertiary level, the costs of loan schemes may outweigh the benefits; and not all countries have the necessary administrative infrastructure either to ensure that grants are given only to those who need them or to secure repayment of loans from students who have graduated. Much can be learned from the successes and failures in different parts of the Asian region and beyond.

3.1. Alternatives to cost-sharing

The chief alternative to cost-sharing is a system of taxation which generates sufficient revenue for the government to pay for services. Of course even in such a system, society, which includes the consumers of services, still ultimately pays for the costs incurred. However, the payment is indirect rather than direct.

Table 5 provides some figures on the scale of central government tax and non-tax revenues in selected countries. The fact that it shows figures only for central governments is a weakness, but the table is nevertheless useful. In this sample of countries, the average of both tax and non-tax revenue formed a larger share of the Gross Domestic Product (GDP) in 1995 than in 1980. However, the capacity and/or willingness to generate income from taxation was lower in some countries than in others. China, for example, had moved to a market economy, and did not have the type of taxation infrastructure of more established capitalist economies. Similar comments apply to Lao PDR, Mongolia, and Viet Nam, though the figure for Mongolia in Table 5 suggests that in that country the capacity of the taxation system had been considerably increased by 1995.

To facilitate understanding of broader patterns, Table 6 shows aggregates by country type (i.e., industrial vs. developing) and region. Taxation in industrialized countries formed a considerably larger proportion of GDP than in developing countries. Asia was almost the lowest, next to the Middle East. Income taxes were the lowest in Asia, less than half the proportion in industrialized countries. More money was raised by foreign taxes, whereas social security, wealth and property, and other taxes were almost negligible.

Table 5
Central government revenues as percentages of GDP, selected ADB developing member countries

	Tax revenue		Non-tax revenue		Total revenue	
	1980	1995	1980	1995	1980	1995
Bangladesh	7.7	—	2.9	—	10.6	—
China, People's Republic of	—	5.7	—	4.6	—	10.3
Indonesia	20.2	16.4	1.8	*6.2*	22.0	*22.6*
Korea, Republic of	15.3	17.7	8.0	6.5	23.3	24.2
Malaysia	23.4	20.6	4.4	6.6	27.8	27.2
Mongolia	—	20.3	—	5.0	—	25.3
Nepal	6.6	9.1	2.9	4.3	9.5	13.4
Pakistan	13.3	15.3	5.5	7.2	18.8	22.5
Papua New Guinea	20.5	18.9	2.8	*2.3*	23.3	*21.2*
Philippines	12.5	16.0	5.9	*4.9*	18.4	*20.9*
Singapore	17.5	17.2	4.0	*4.6*	21.5	*21.8*
Sri Lanka	19.1	18.0	5.4	10.8	24.5	28.8
Thailand	13.2	17.1	6.6	7.4	19.8	24.5
Average	15.4	16.0	4.6	5.9	20.0	21.9

— = not available.
Figures in italics are for years other than that specified.
Source: World Bank (1997) pp. 240–241.

Table 6
Regional breakdown of taxation revenue by type of tax (% of GDP)

Region	Average GNP per capita (US$)	Total taxes	Income taxes	Domestic taxes	Foreign taxes	Social security	Wealth and property	Other
Industrial	13477	31.2	11.0	9.4	0.7	8.9	1.1	0.1
Developing	1241	18.2	5.5	5.2	5.1	1.3	0.5	0.5
Africa	621	19.5	6.7	4.8	6.8	0.4	0.4	0.4
Asia	743	14.8	4.5	4.5	5.5	0.0	0.2	0.2
Europe	3361	21.9	5.8	6.9	2.8	5.1	1.1	1.1
Middle East	2339	14.7	4.8	2.3	4.2	1.2	1.5	1.5

Notes: Figures are weighted averages for the three years closest to 1987 for which data were available. Income taxes include individual and corporate taxes. Domestic taxes include general sales taxes and excises. Foreign taxes include import and export duties.
Source: Burgess (1997, pp. 316–317).

Burgess (1997) argues that taxation is the only sustainable way to finance basic education in less developed countries. Aid, debt, and inflation finance, he points out (p. 309), are not sustainable and may ultimately reduce financing capacity. Contributory social security schemes are not a promising source of additional funding for most developing countries, and Burgess argues (p. 342) that the bulk of additional finance

should come from broad-based domestic indirect taxes such as Value Added Taxes. Direct taxes, he suggests, are less suitable, both because of difficulties in implementation and because of their limited scope for achieving redistribution.

Yet even when governments have the capacity to raise substantial revenues through taxation, for political and/or economic reasons they are not always willing to do so. In such cases, governments may still insist on cost-sharing. Particularly at the level of tertiary education, governments may consider it appropriate for users to pay directly for at least some of the costs of their studies. They may also find that individuals are more willing to do this than to countenance general increases in taxation.

A compromise policy, which at least allows tax payers to know precisely where their money is going, is to impose taxes designated specifically for the education sector. This is a common practice in China, where many local governments have taxed enterprises either on their total volume of business or on their profits (Lewin and Wang, 1994, p. 29). Local governments may also raise revenue from farmers, government employees, and owners of buildings.

3.2. Privatization in education

Privatization has been widely advocated as a mechanism to reduce costs paid by governments and to promote the efficiency of educational institutions. Across the Asian region, shifts in the ownership, management, and control of educational institutions can be observed. In most cases this involves a reduced role for governments. This is partly because the balance has shifted so markedly towards public ownership, management, and control during the last few decades, and the pendulum has begun to swing back.

An official Asian Development Bank document has stated that "Support for the private sector in Developing Member Countries is an important part of the Bank's operational policy in achieving its strategic objectives" (ADB, 1997, p. 8). This general philosophy may be appropriate in the economic sphere. In education, however, the role of the private sector is controversial. Education is rather different from other commodities; private institutions do not necessarily operate more efficiently than public ones, and they commonly exacerbate social inequalities. Governments would be ill-advised to see privatization as a panacea for their problems.

Privatization of course has many effects — economic, social, and political, as well as educational (e.g., James, 1993; Cummings and Riddell, 1994; Bray, 1996c). From an economic perspective, a question of major interest is whether privatization is able to increase the efficiency of education systems. Most of the evidence appears positive, but more research is needed.

Research on this topic has been conducted by Jimenez and colleagues on Colombia, Dominican Republic, Philippines, Tanzania and Thailand (Jimenez et al., 1991; Lockheed and Jimenez, 1994). The findings from these studies, which focused on selected core academic subjects in secondary education, are summarized in Table 7. The researchers took care to control for the home background of students and for other effects, though the studies excluded household and other non-institutional inputs, such as supplementary books, additional tutoring, and endowments. These

Table 7
Cost-effectiveness of private secondary schools, selected countries, early 1980s

	Indicator of achievement	Ratio of private to public cost	Relative advantage[a]	Ratio of relative cost to effectiveness
Colombia	Average mathematics and verbal	0.69	1.13	0.61
Dominican	Mathematics O-Type[b]	0.65	1.31	0.50
Republic	Mathematics F-Type[b]	1.46	1.47	0.99
Philippines	Mathematics	0.83	1.00	0.83
	English	0.83	1.18	0.70
	Filipino	0.83	1.02	0.81
Tanzania	Average mathematics and verbal	0.69	1.16	0.59
Thailand	Mathematics	0.39	2.63	0.17

[a]Proportional gain in achievement score if a randomly selected student, with the characteristics of the average public school student, attends a private rather than public school, holding constant that student's background.

[b]F-type schools are authorized to give Ministry of Education examinations. O-type schools are not so authorized.

Source: Lockheed and Jimenez (1994), pp. 7, 9.

inputs may be particularly high for private schools and could therefore be important to the comparison. Nevertheless, on the data that were available, the studies suggested that private schools generally achieved better results at lower costs and as such were more cost-effective than public schools.

However, one study in India seems to contradict these findings. It focused on primary school mathematics and reading in Tamil Nadu state and indicated that fully-private schools were the least cost-effective. Government-aided schools were the most cost-effective, and fully government schools were intermediate (Bashir, 1994, p. 264; 1997, p. 153). In contrast, another Indian study, on both primary and secondary schools in Uttar Pradesh state, produced findings more in line with those of Jimenez and colleagues. The magnitude of findings diverged considerably for junior and senior secondary schools, but in both types of institution private unaided schools were shown to be considerably more cost-effective than aided and government schools (Kingdon, 1994, p. 233).

To explain the differences in effectiveness, most authors highlight the importance of management practices. Lockheed and Jimenez (1994, p. 15) showed that head teachers in private schools generally have more control over school-level decisions able to affect student achievement. This includes selection of teachers, adaptation of the curriculum, improvement of instructional practice, and choice of textbooks. To identify cost factors, Lockheed and Jimenez conducted a small follow-up survey to their main research, in which they paired elite and non-elite private and public schools. This survey did not show dramatic differences in the resources and physical facilities in the pairs of schools; but the private schools appeared to use these inputs more cost-effectively.

Several studies have also observed that private schools are less constrained by the conditions of service and accompanying salaries that are mandatory in the public

schools. In India, for example, many private schools hire teachers with lower qualifications who are less costly but not necessarily less effective than their counterparts in the public schools (Kingdon, 1994, p. 175). Cost-saving patterns are also evident in Japan, where many private schools employ (i) teachers who have retired from the public sector, (ii) women who have been unable to secure career-track positions in large companies or the civil service, and (iii) part-time staff (James and Benjamin, 1988, p. 101).

However, while the research seems on balance to show that private schools are more cost-effective than public ones, most researchers still underline the need for caution. Riddell (1993), following careful review of the work not only by Jimenez and his colleagues, but also by other researchers, stressed that "there is no overwhelming conclusion regarding the (cost-effectiveness) advantages of private schools over public schools, notwithstanding statements to the contrary" (p. 384).

Moreover, as noted by Lockheed and Jimenez (1994, p. 18), the fact that particular samples of private schools might appear more efficient than comparable samples of public schools is not necessarily in itself a strong argument for privatization. First, full-scale privatization would by definition remove some of the advantages which the private schools currently exploit. For example, there would not be enough retired teachers and people seeking part-time jobs for every school to gain efficiencies to the extent that were previously demonstrated when only a few institutions were seeking such personnel. Second, some management practices can be improved within the public sector. Headteachers can be given greater freedom to manage resources and adapt curricula, without their schools necessarily being privatized.

It is also important to address the argument that the existence of private schools helps to improve the efficiency of public institutions. The World Bank (1993, pp. 193–194), suggests that, in some countries, the competition posed by private schools will improve the productivity and quality of public education, as government schools compete with private schools. Such an outcome is far from generalizable or certain. Much depends on whether private and public schools really do compete, and on the ways in which managers of public schools respond to such competition. In most settings, private and public schools serve different markets. Elite private schools do not compete even with ordinary public schools, because most people cannot afford the fees. Alternative curriculum private schools do not compete with mainstream curriculum public schools, because most people do not want the alternative curriculum. Finally, second chance private schools do not compete with the public sector because the students in those private schools would rather be in public ones.

4. Private tutoring — an issue deserving particular scrutiny

The scale, modes of operation, and implications of supplementary private tutoring have been seriously neglected in both policy debates and the academic literature. In some countries such tutoring is a massive enterprise. For example:

- A Sri Lankan survey found that in Colombo, 60% of Ordinary Level students and 84% of Advanced Level students received private tutoring (de Silva, 1994, p. 4).

- In the Republic of Korea, private tutoring consumed 37.4% of out-of-school educational expenditures in 1994 (Paik, 1995, p. 24), far exceeding the proportions devoted to books (19.3%), stationery (7.4%), transportation (6.4%), or uniforms, boarding and other expenses (29.5%).
- A 1992 survey of urban parts of Bangladesh found that 65% of pupils in government primary schools received private tutoring, which consumed 43% of the direct private costs of education for the total number of parents in the sample (World Bank, 1996, p. 53).
- Private tutoring has also been shown to be a major activity in parts of Cambodia (Bray, 1998), Malaysia (Marimuthu and de Silva, 1995), Myanmar (Gibson, 1992), and Singapore (George, 1992).

While more research is needed on the topic, some points are clear:

- Private tutoring is a major sphere of activity, not only in prosperous countries but also in impoverished ones.
- Private tutoring is growing. In societies such as Hong Kong and Singapore where it has long roots, it is expanding. In countries where it was not previously evident, such as China and Viet Nam, it has emerged.
- Private tutoring is found at all levels, but is especially common in the years in which students take public examinations, both primary (where relevant) and secondary.
- The organizational structures for private tutoring are varied. Some tutoring is individualized and takes place in either the clients' or the tutors' homes. At the other end of the scale are insitutions which operate from many campuses. Some enterprises even operate on an international basis. Kumon, which is a company specializing in mathematics tutoring and is headquartered in Japan, is an example.
- The quality of private tutoring is also very varied. In few societies do governments set (let alone enforce) regulations on teacher qualifications, class size, and the like. Much tutoring is of the "cramming" type, with very questionable pedagogical quality.
- Private tutoring may be found in both rural and urban areas, though is more common in the latter than in the former.

It is far from certain that the unfettered growth of private tutoring, which has become a feature of many societies, is desirable. Governments should at least monitor the scale and nature of private tutoring so they are aware not only of its impact on household budgets, but also of its implications for the quality and effectiveness of mainstream schooling. Private tutoring is an instrument for maintaining or increasing social and geographic inequalities. While it presumably gives good private rates of return to the individual clients, it is not self-evidently an activity deserving encouragement.

5. Conclusion

All countries of the region now operate in a context of globalization, especially in terms of economic interdependence, and in an environment in which national development is almost universally considered in terms of capitalist structures. In all

countries, education is seen as a major investment for economic and social goals. It is arguable that some governments do not invest as much in the sector as it merits. In some cases the gap is bridged by the private sector, though in some countries the private sector is also underdeveloped. The nature and consequences of private financing are not simple. More investigation is needed into the implications of:

- household and community contributions to public institutions;
- private institutions which operate in parallel to public ones; and
- private tutoring which supplements public schooling.

One of the notable trends in the region has been the shift from the view that education should be free of charge to the view that, in some situations, fees are desirable, not only as a mechanism for limiting the burden on the public purse but also as a way to restrict what could otherwise be the non-equitable effects of fee-free education. In particular, there is a growing consensus that fees for tertiary education are both appropriate and necessary. Most governments which charge fees in tertiary education also provide grants and scholarships for needy students; some have experimented with loan schemes. Experience with loans has highlighted the many administrative complexities which make such schemes less attractive in practice than they might appear in principle. Even in the absence of efficient loan schemes, however, the economic and social justifications for demanding at least some fees for higher education remain strong. Of course governments must also heed political factors, and one key factor in successful introduction of reform is the ability to show the general public that, contrary to widespread belief, the provision of fee-free higher education is *in*equitable rather than equitable.

At lower levels of education, fees in public institutions are less easy to justify. A particularly strong argument can be presented for fee-free primary education given the externalities that whole societies gain from high enrollment rates. However, some governments suffer such severe fiscal stress that they are unable by themselves to provide fee-free primary education of an acceptable minimum quality. Moreover, some observers emphasize the importance of households and communities making at least some contributions to schools in order to promote feelings of ownership and public interest in the operations of the schools. Because of these factors, policy-makers have underlined the importance of partnerships and the value of community participation. The dominant consensus is that the public sector should remain the principal provider of education, but that partnerships can be valuable provided they pay careful attention to socio-economic, rural/urban and regional equity.

References

Asian Development Bank (1996). *Cambodia: Education sector strategy study*. Manila: Asian Development Bank.

Asian Development Bank (1997). *Asian Development Bank: Basic information*. Manila: Asian Development Bank.

Bashir, S. (1994). *Public versus private in primary education: Comparisons of school effectiveness and costs in Tamil Nadu*. Ph.D. thesis, London School of Economics, University of London.

Bashir, S. (1997). The cost effectiveness of public and private schools: Knowledge gaps, new research methodologies, and an application in India. In Colclough, C. (ed.), *Marketizing education and health in developing countries*: *Miracle or mirage?* Oxford: Clarendon Press. pp. 124–164.

Bray, M. (1996a). *Counting the full cost*: *Parental and community financing of education in East Asia*. Washington, DC: The World Bank in collaboration with UNICEF.

Bray, M. (1996b). *Decentralization of education*: *Community financing*. Washington, DC: The World Bank.

Bray, M. (1996c). *Privatization of secondary education*: *Issues and policy implications*. Paris: UNESCO.

Bray M. (1998). *The private cost of public schooling*: *Household and community financing of primary education in Cambodia*. Phnom Penh: UNICEF.

Bray, M., & Lillis, K. (Eds.) (1988). *Community financing of education*: *Issues and policy implications in less developed countries*. Oxford: Pergamon Press.

Burgess, R. S. L. (1997). 'Fiscal reform and the extension of basic health and education coverage', in Colclough, C. (Ed.), *Marketizing education and health in developing countries*: *Miracle or mirage?* Oxford: Clarendon Press. pp. 307–46.

Coombs, P. H., & Hallak, J. (1987). *Cost analysis in education*: *A tool for policy and planning*. Baltimore: Johns Hopkins University Press.

Cummings, W. K., & Riddell, A. (1994). Alternative policies for the finance, control, and delivery of basic education. *International Journal of Educational Research*, *21*, 751–776.

de Silva, A. (1994). *Extra-school tutoring in the Asian context with special reference to Sri Lanka*. Maharagama, Sri Lanka: Department of Educational Research, National Institute of Education.

George, C. (1992). About $260 Million a year spent on tutors' fees. *Straits Times*, 4 April.

Gibson, U. S. (1992). *Non-government expenditure on education*, Working paper No. 4.3, Education Sector Study Project. Yangon: Myanmar Education Research Bureau.

Hakim, S., Seidenstat, P., & Bowman, G. W. (Eds.) (1994). *Privatizing education and educational choice*: *Concepts*, *plans and experiences*. New York: Praeger.

Hong Kong, Government of (1997a). *Direct subsidy scheme*, Administration Circular No. 50/97. Hong Kong: Education Department, Government of Hong Kong.

Hong Kong, Government of (1997b). *Progress report*: *The 1997 policy address*. Hong Kong Government Printer.

James, E. (1993). *Why is there proportionately more enrollment in private schools in some countries?* Working Paper Series 1069. Washington, DC: Country Economics Department, The World Bank.

James, E., & Benjamin, G. (1988). *Public policy and private education in Japan*. New York: Macmillan.

Jiang, M. (1996). *Education sector in transitional economies: China case study report*, Document for TA Project, *Social Sectors in Asian Transition Economies*. Manila: Asian Development Bank.

Jimenez, E., Lockheed, M. E., Luna, E., & Paqueo, V. (1991). School effects and costs for private and public schools in the Dominican Republic. *International Journal of Educational Research*, *15*, 393–410.

Kingdon, G. G. (1994). *An economic evaluation of school management-types in urban India: A case study of Uttar Pradesh*. Ph.D. thesis, University of Oxford.

Koo, R., & Ma, H. T. (Eds.) (1994). *Macau education: Choice and freedom*. Macau: Macau Foundation (in Chinese).

Kwong, J. (1997). The reemergence of private schools in socialist China. *Comparative Education Review*, *41*, 244–259.

Levin, H. M. (1987). Education as a public and private good. *Journal of Policy Analysis and Management*, *6*, 628–641.

Lewin, K., & Wang Y. J. (1994). *Implementing basic education in China*: *Progress and prospects in rich*, *poor and national minority areas*, Research Report No. 101. Paris: International Institute for Educational Planning.

Lockheed, M. E., & Jimenez, E. (1994). *Public and private schools in developing countries*, HRO Working Paper No. 43. Washington, DC: The World Bank.

Marimuthu, T., & de Silva, W. A. (1995). *Private tuition in Malaysia and Sri Lanka*: *A comparative study*. Kuala Lumpur: Department of Social Foundations in Education, University of Malaya.

Middleton, J., Ziderman, A., & Van Adams, A. (1993). *Skills for productivity: Vocational education and training in developing countries*. New York: Oxford University Press.

Min, W. (1997). Basic education and national development: Current issues and strategies for China. *Educational Research Journal* (*Hong Kong*), *12,* 142–151.
Mingat, A. (1996). *Elements on the cost and financing of education in Lao PDR*. Dijon, France: University of Dijon.
Mingat, A., & Tan, J. P. (1996). *The full social returns to education: Estimates based on countries' economic growth performance*. Human Capital Development Working Paper No. 73. Washington, DC: The World Bank.
Paik, S.-J. (1995). *Education finance in Korea*: *Its development*, *current issues, and policy directions*. Paper for the workshop on Financing Human Resource Development in Asia. Manila: Asian Development Bank.
Psacharopoulos, G. (1991). Vocational Education Theory, VOCED 101: Including Hints for 'Vocational Planners'. *International Journal of Educational Development*, *11*, 193–199.
Psacharopoulos, G. (1994). Returns to investment in education: A global update. *World Development*, *22*, 1325–1343.
Riddell, A. R. (1993). The evidence on public/private educational trade-offs in developing countries. *International Journal of Educational Development*, *13*, 373–386.
Solmon, L. C., & Fagnano, C. L. (1995). Benefits of education. In Carnoy, M. (Ed.). *International Encyclopedia of Economics of Education* (2nd ed.), Oxford: Pergamon Press. pp. 114–125.
Tilak J. B. G. (1997). Lessons from Cost Recovery in Education. In Colclough, C. (Ed.), *Marketizing education and health in developing countries: Miracle or mirage?* Oxford: Clarendon Press. pp. 63–89.
UNESCO (1998). *World education report 1998*. Paris: UNESCO.
West, E. G. (1996). *Education vouchers in practice and principle*: *A world survey*, HCD Working Paper 64. Washington, DC: The World Bank.
World Bank, (1993). *Viet Nam: Transition to the market*. Washington, DC: The World Bank.
World Bank, (1996). *Bangladesh: Education financing*. Washington, DC: The World Bank.
World Bank, (1997). *Viet Nam: Education financing*. Washington, DC: The World Bank.
Ziderman, A., & Albrecht, D. (1995): *Financing universities in developing countries*. London: Falmer Press.

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