3. Educational Financing: *Malcolm S. Adiseshiah*

Magnitudes and Rationale

The financing of education involves expenditures of large sums of money, expenditures which have been increasing at a rapid rate in the present century. Some details of public financing of education are shown in Table 1 from which it may be seen that world public expenditure in 1972 was $223 billion (being 5.7% of world G.N.P.) and that it increased during the period 1965–72 at an annual average rate of 11.6%. The rate of increase of educational expenditure over this period was highest in Asia and the Arab States, with the developing countries as a whole spending 3.6% to 5.7% of their G.N.P. on education.

The education budget averages 20% of the total national budget of developing countries, with some countries at much higher levels, such as Nigeria at 33.7%, Ivory Coast at 32.2%, Costa Rica at 33.1%, and the Netherlands Antilles at 36.8%. Details of the educational expenditures of the Ministries of Education of 18 Commonwealth countries are given in Table 2.

Another feature of educational financing in developing countries is that the share of private expenditure on education — whether it be contributions from private individuals, endowments or institutions, or fees paid by students — is both small and on the decline. In Singapore for instance it was 26% in 1951 and 3% in 1955, in Malaysia 42% in 1946 and 19% in 1955, in India 20.4% in 1950 and 15.3% in 1965 and 10% in 1970.(1)

One question that thus arises is the reason for the public financing of education which is gradually becoming total financing in the developing countries. This question has occupied the attention of economists rather seriously over the past two decades. At the start of this twenty-year period, the justification for the large and growing public expenditures on education was attempted in terms of the high returns on the investment in human capital which they were held to represent. More recently this rates of return approach has been running into trouble. There are basic unanswered questions which have been posed. Educational expenditures are not only a form of human investment which increases further earning capacity, they also enable the person concerned to satisfy present needs. This investment and consumption effect of educational expenditure on the same person makes impossible the separate analysis of the effects of such expenditures as investment and consumption. There is an even more serious question being posed about the rates of returns approach. As against the view, to which I subscribe, that education increases future earnings through increasing one's productivity is the view that education is merely a market signal or filter which classifies persons, that it is at best a predictor of productivity not an assurer of productivity.

These basic questions are posed with regard to education and educational expenditures in such industrialized countries as the United Kingdom, Canada, Australia, New Zealand, the United States or France, countries with a relatively assured educational and economic data base. When attention is turned to the developing Commonwealth countries like

Table 1

Public Financing of Education

Continents, Major Areas and groups of countries	Public Expenditure on Education in Millions of Dollars			Annual Average Increase Of Public Expenditure on Education	Annual Average Increase Of Gross National Product	Public Expenditure on Education as % of GNP			Public Expenditure on Education per Inhabitant		
	1965	1970	172	1965–1972	1965–1972	1965	1970	1972	1965	1970	1972
World Total*	103,601	171,696	222,955	11.6%	9.7%	5.0	5.5	5.7	40.4	60.5	75.6
Africa	1,679	3,005	3,750	12.2%	8.8%	3.5	4.4	4.3	5.5	8.7	10.3
America	43,060	77,218	90,754	11.2%	8.4%	5.2	6.4	6.2	93.6	151.2	170.3
Asia*	7,496	12,819	18,890	14.1%	13.3%	3.8	3.5	4.0	6.8	10.2	14.3
Europe	34,719	54,632	77,905	12.2%	10.5%	4.7	5.0	5.3	78.1	118.2	166.1
Oceania	1,057	1,987	2,990	16.0%	8.6%	3.6	4.5	5.8	60.3	102.6	148.0
U.S.S.R.	15,590	22,035	28,665	9.1%	8.4%	7.3	6.8	7.6	67.6	90.8	115.6
Developed Countries	95,561	158,942	206,922	11.7%	11.7%	5.3	5.8	5.9	93.4	147.6	188.7
Developing Countries*	8,040	12,754	16,033	10.4%	8.8%	3.3	3.5	3.7	5.2	7.2	8.6
Africa (excluding Arab States)	1,078	1,866	2,166	10.5%	8.5%	3.2	3.9	3.6	4.7	7.2	7.9
Northern America	39,742	71,538	83,810	11.3%	8.2%	5.4	6.7	6.6	185.4	314.4	363.1
Latin America	3,318	5,680	6,944	11.1%	9.9%	3.4	3.8	3.6	13.5	20.1	23.0
Asia (excluding Arab States)	7,120	12,233	17,952	14.1%	13.4%	3.8	3.5	3.9	6.6	10.0	14.1
Arab States	977	1,725	2,522	14.5%	10.0%	4.3	5.0	5.7	9.2	14.0	19.4

*Not including People's Republic of China, Democratic People's Republic of Korea, and Democratic Republic of Viet-Nam.
(Source: Statistical Year Book, 1974, UNESCO, Paris.)

Table 2

Public Expenditure on Education at Current Market Prices

Country or Area and Currency Unit	Year	Total (Thousands)	As % of Gross National Product	As % of Total Public Expenditure
Australia (Dollar)	1971	1,668,000	4.6	14.0
Canada (Dollar)	1971	7,900,029	8.5	—
United Kingdom				
England and Wales (Pound)	1970	2,521,917	—	—
Northern Ireland (Pound)	1971	92,990	—	22.1
Scotland (Pound)	1971	394,000	—	—
India (Rupee)	1968	8,803,000	2.9	19.7
Sri Lanka (Rupee)	1970	544,382	4.2	13.4
Nepal (Rupee)	1971	77,600	0.8(d)	8.4
Ghana (New Cedi)	1971	115,534	4.6(d)	33.7
Nigeria (Naira)	1970	192,732	3.5	33.7
Sierra Leone (Leone)	1969	10,263	2.8	17.9
Mauritius (Rupee)	1971	42,403	3.7	11.0
Jamaica (Pound)	1969	39,151	4.5	18.5
Trinidad (Dollar)	1970	62,143	3.7(b)	—
Malaysia				
Sabah (M. Dollar) (a)	1971	30,028	—	—
Sarawak (M. Dollar) (c)	1971	33,471	—	—
West Malaysia (M. Dollar)	1971	645,848	6.4	10.8
New Zealand (Dollar)	1971	337,000	5.4	15.4
Kenya (Shilling)	1971	571,160	4.4(d)	15.8
Uganda (Shilling)	1970	361,646	4.3	17.8
Papua New Guinea (Aus. Dollar)	1971	42,847	7.6	20.4
Singapore (Dollar)	1970	184,492	3.1	11.7

(a) Expenditure of the Ministry of Education only
(b) As percentage of Gross Domestic Product at factor cost
(c) Central or Federal Government only
(d) As percentage of Gross Domestic Product at market prices

(Source: Statistical Year Book, 1974 (pp. 845) UNESCO, PARIS)

India, Nigeria, Ghana, Jamaica or Sri Lanka with their poor data base and their inbuilt margins of error, any attempt to explain educational expenditures in terms of rates of return becomes even more difficult. In the educational finance analysis attempted for these countries, average costs rather than marginal costs, and average returns rather than marginal returns are used in the empirical studies. Time series projections are made with cross-section data and the problem of allowing for productivity series is almost impossible.

Hence there is a return to what are called the social benefits of education as the prime justification for the large public subsidizing of education. I say return, because that is what Adam Smith left us with 200 years ago. He, who was against state intervention in personal and social life except in certain well-defined spheres, established education as one area where the state should intervene with finance, not because it develops skills but because of what he called the moral and civic improvement that it brings about in the people. In his graphic language he set forth the moral thus:

"The state . . . derives no inconsiderable advantage from their [the people's] instruction. The more they are instructed, the less liable they are to the delusions of enthusiasm and superstition, which, among ignorant nations, frequently occasion the most dreadful disorders. An instructed and intelligent people, besides, are always more decent and orderly than an ignorant and stupid one . . . They are more disposed to examine, and more capable of seeing through, the interested complaints of faction and sedition, and they are, upon that account, less apt to be misled into any wanton or unnecessary opposition to the measures of government."(2)

The question then may be posed as to whether we are on relatively firm ground in using the concept of the social benefits of education as the reason for the large public expenditure on education. These social benefits can be considered under seven broad heads: (a) improved income distribution and increased social mobility; (b) changes in attitudes and values; (c) credible political leadership; (d) lower unemployment; (e) improved mix of manpower skills; (f) enhancement of the productivity of physical capital; and (g) increased quantity and improved quality of research. Some comments on each of these benefits may be attempted.

The first is the benefit of improved income distribution and increased social mobility as a result of the spread of education made possible by large expenditures of public funds on education. The general trend of education as a necessary condition for promoting equality, for widening the number of people drawn into its net, for encompassing social groups which have been kept out of education — may be conceded. Whether this leads to improved income distribution, however, depends on assuring that public educational expenditures lower tuition fees and so attract students from low income groups who as a result of their education will earn higher incomes than their uneducated or less educated parents. In this argument, there are two further assumptions. First lower tuition fees or no fees will attract students from low income groups. This depends on the opportunity cost that such students face in attending school or university. Experience in developing countries seems to indicate that the opportunity cost is high and no lowering of tuition fees can make up for the income forgone. This is at this stage a hunch: there is need for empirical studies to bring out the facts. The other assumption is that education leads to higher earnings and that higher education will result in still higher incomes. The general conclusion is that the redistribution effect or social mobility effect of public expenditure on education remains to be proved and cannot at this stage be counted as a benefit to justify the magnitude of such expenditures.

A second social benefit is the change in attitudes and values that education brings about in people, as Adam Smith pointed out and used as the reason for justifying the public financing of education. Education develops the desire to improve oneself, to be open-minded, to experiment and change, to reason and judge for oneself, and to be a better member of the local community and an intelligent citizen. These results of education are undeniable, but two problems must be faced. First, some of these attitudinal changes, like the desire to better oneself or the capacity for reasoning and analysis, are not really social benefits. They are individual gains which may have social cost. One example is when a primary school completer refuses any non-white collar job adding to the country's unemployment. This is a social disbenefit stemming from education. Another is when a graduate accepts any clerical post which makes for stagnation of the economy. The second problem is more serious. Granted that there is a large residue of this kind of social benefit in the form of attitudinal and value changes induced by education, the fact that in the developing Commonwealth countries the majority of adults are kept out of education and only a minority have access to higher levels of education means that the large public financing of education is not productive of social benefits to the majority of their peoples.

The third social benefit refers to improved public leadership that education makes available. It is true that educated persons in our countries exercise political leadership roles and that education is a necessary condition for discharging such roles. But looking around our countries, we should ask whether the quality of political ambition and/or the financial capacity to invest in the political process are not the sufficient condition as much as education is the necessary condition for political leadership.

The other social benefits of education raise similar questions. In the developing Commonwealth countries, while education makes possible a better mix of manpower skills, provides a base for developing a research and development system needed by the economy, and through vocational and technical education programmes improves the productivity of land and other physical assets, there is need for empirical studies to substantiate these guesses and recognition of the growing and wasteful marginalization of so much of science and technology in the countries. Also the co-existence of an expanding educational system and growing educated unemployment makes it difficult to establish a simple correlation between education and employment.

Private Financing

The prospects of private financing of education (in the developing Commonwealth countries) as noted earlier, are not very bright. This source of educational finance divides itself into (a) contributions by voluntary bodies; (b) income from fees; and (c) parental expenditure on textbooks, stationery and co-curricular activities. Some analysis of each source is needed.

Though contributions from voluntary bodies towards educational expenditures formed a major source of educational finance in Commonwealth countries before their independence, they have now ceased to be of significance, forming somewhere between 1 to 5% of total educational revenue nowadays.[3] Endowments have lost around 50% of their real value as a result of inflation, at first creeping, and more recently galloping, in the last two decades. Also the sources of domestic private philanthropy have been gradually drying up, with the extension of public regulation, control and ownership of all forms of assets. Thus voluntary contributions cannot be counted upon as a source of educational finance in developing countries.

Income from fees still continues to be a rather important means of financing education particularly at the secondary and post-secondary levels. Table 3 illustrates the place of fees collection in one Commonwealth country, India.

Table 3

Fees in Education (1960–61)

Stage-object	Total amount collected through fees (Rs.000's)	Percentage of students paying fees	Average annual fee collected per student (Rs.)	Percentage of fees to total expenditure on the stage	Percentage of fees collected at the stage to total of fees collected at all stages
Pre-Schools	2,184	77.5	23.3	37.2	0.4
Lower Primary Schools	17,169	3.9	16.4	2.3	2.9
Higher Primary Schools	31,677	16.4	18.2	7.4	5.4
Secondary Schools	270,394	64.8	55.6	39.2	45.8
Schools for Teacher Training	1,856	20.0	84.2	5.3	0.3
Schools for Vocational Education (excluding Teacher Training)	13,604	72.0	65.0	17.2	2.3
Schools for Special Education	1,378	10.0	8.1	4.3	0.2
University Teaching Departments	52,934	90.1	—	37.4	9.0
Research Institutions	375	86.3	147.1	1.4	0.1
Colleges for Teacher Training	2,761	34.7	156.9	12.8	0.5
Colleges for Arts & Science	101,384	84.9	172.7	48.5	17.2
Colleges for Professional Education (excluding Teacher Training)	30,346	87.9	240.5	22.2	5.1
Colleges for Special Education	1,447	52.4	109.0	15.9	0.2
All Institutions	527,510	18.7	—	20.7	89.4
Boards of Education	23,342	—	—	96.7	3.9
Indirect Expenditure	39,406	—	—	1.7	6.7
Grand Total	590,258	—	—	17.1	100.0

(Source: Report of the Education Commission, New Delhi, 1964–66)

It will be seen that fees contribute over 17% to total educational expenditures. In monetary terms the absolute amounts more than doubled between 1950–51 and 1960–61 (from Rs.233 million to Rs.540 million) and they are estimated to have doubled again (to Rs.1 billion) by 1965–66. Further over one third of the expenditures are financed from fees at the pre-primary, secondary and higher education levels. It is interesting to note that the budgeting of fees started in this country not as an educational financing device, but as an expression of the principle that "people do not value anything that is given free, that the payment of a fee is an indication of the seriousness of purpose on the part of a student or his guardian".(4) The next rather quick transition was the use of fees as a means of financing the educational system. On this there are sharply differing views. Most developing countries regard fees as "the most regressive form of taxation", falling more heavily on the poorer classes who are the majority of society and acting as an anti-egalitarian force. Any attempt to collect fees from students from the well-to-do sections alone runs up against the problem of administrative feasibility.(5) On the other hand, it is pointed out that fees are a means of recouping costs of education, since the latter's benefits will be rapidly felt by families to whom education is given, and "the poverty of the present quickly followed by education induced affluence". For the developing countries in particular, the individual returns on education are likely to be high and short term, and even if the benefits accrue to succeeding generations, the extended family system acts as a corrective to inter-generational inequities, as the family is a continuing unit.[6] There is thus a mix of economy and equity arguments on the question of fees as a source of educational finance. A general conclusion is that, provided scholarships are provided for students from the poor and vulnerable sector of society, fees at the secondary and post-secondary levels of education should be levied in the developing Commonwealth countries, at least till such time as these educational levels cease reflecting the class bias that they do. In the country to which Table 3 refers, 80% of students in higher education are from the top 20% of its society.[7] There is really no case for not levying fees at these levels to cover 50–60% of recurrent costs.

The third component of the private financing of education is the parental expenditure on books, stationery, school uniforms, transportation etc. It is difficult to quantify this part of private financing but what evidence there is shows that this is a sizeable, if widely varying, part of the total financial picture. A study of these costs in India is summarized in Table 4.

Table 4

Private Costs of Education Per Student (Annual) 1965–66
(In Rupees)

	Lowest			Highest		
Class	*Textbooks*	*Stationery*	*Total*	*Textbooks*	*Stationery*	*Total*
I	0.50	0.60	1.10	17.80	12.80	30.60
II	0.54	0.60	1.14	16.60	12.80	29.40
III	0.69	2.11	2.80	28.51	8.33	36.84
IV	2.10	3.26	5.36	38.85	14.50	53.35
V	3.91	2.40	6.31	36.10	14.50	50.60
VI	5.85	4.63	10.48	43.24	60.00	103.24
VII	7.29	4.88	12.17	47.09	75.00	112.09
VIII	9.30	6.95	16.25	169.68	21.40	191.08
IX	11.15	7.51	18.66	192.55	70.00	262.55
X	4.50	14.00	18.50	216.35	70.00	286.35
XI	13.75	11.25	25.00	189.65	70.00	259.65

(Source: Report of the Education Commission, New Delhi — 1964–66)

In another Commonwealth country[8], a study of transport and school uniform costs per student is summarized in Table 5 (in shillings).

Table 5

Category	***School***						
	A	B	C	D	E	F	G
Transport	17.88	9.3	36.14	14.62	59.00	50.19	68.14
School Uniform	55.54	61.16	6.83	92.80	69.00	65.85	8.73

(Source: Working Paper for Secondary Schools Cost Survey, Uganda.)

The impression conveyed by this admittedly partial and spotty evidence is that these costs form a substantial part of total educational costs, that they provide an inducement to escape them for the vast majority of families in the developing countries who are the poverty sector (as seen in the low range at one end), and that they might be a causal factor for the declining quality of education at the secondary and post-secondary levels. To counter these trends some public subsidizing of textbooks, paper, and school uniforms is indicated.

The Financing of Public Educational Expenditure

At this point, I return to our starting point, that the major part of educational expenditure is borne by the State. The residual question is the means of financing this large and growing educational expenditure in each of our countries.

The sources of financing may be classified as follows: (a) allocation from general taxes (central government — local government); (b) earmarked taxes; (c) cesses; (d) loans; (e) tax relief; (f) contributions in kind; and (g) foreign aid and international assistance.

General Taxes

The allocation to education from the revenue derived from general taxes is in all countries the major means of financing education. Here a distinction must be made between countries with a federal structure like Canada, India, Australia and Nigeria and those with a unitary political structure like most other African and Commonwealth countries. For both groups, a further distinction must be made between central government tax revenues allocated to education and local government tax revenues set apart for education. Taking the federal structures, education — particularly at levels below post-secondary education in most of such countries — is the responsibility of the constituent states of the federal structure. The problem faced in this situation is that the constituent states have inelastic sources of revenue (such as land tax, sales tax, transportation tax etc.) against expanding sources of development expenditure which education, health, social welfare, rural and community development, housing and agriculture represent; while the federal structure has elastic sources of income (such as income tax, wealth tax, corporation tax, customs and excise etc.). The result is that education has to be subsidized by the federal centre *vis-à-vis* the states, to the point where the development of education in the states has come to depend on the nature and quantum of the subsidy received from the federal centre. These in turn are determined by a host of criteria, in which the real demands of educational development have a relatively minor decisive role. One reform that is needed in federal structures is for a long-term (if not constitutional) provision for the sharing of these elastic sources of public revenue, particularly income tax, corporation tax and the central excise, between the federal centre and the constituent states, which reflects the functions of the two political sectors. Such long-term provisions are necessary because educational outlays are like capital formation. But this sharing cannot be a straight uniform division, because allowance has to be made for the extent of the cultivable land and the school-going age groups which vary between the constituent states, and the educational and socio-economic backwardness of some of them. I would suggest that 50% of the elastic sources of revenue should be allocated to the states for the first group of considerations and a further 20% pooled for distribution to the educationally and socio-economically undeveloped states.

There is also the financing of education through tax revenues by the local government authority, the city corporations, the town municipalities and the village governments. Parallel to the view that educational planning and execution — particularly at the primary school and adult literacy level — should be as close to the operating level as possible, the financing of these two forms of education (i.e. primary and adult literacy) should be the responsibility of local government authorities. In most countries this principle is accepted, and the local authorities are made responsible for operating the primary school and adult literacy programmes. But in fact their financial resources are meagre and there is a general lack of incentive for raising additional revenues. In federal structures, the taxable capacity of the people is almost completely pre-empted by the federal and state authorities and what is left to the local authorities are very small sources of tax revenues, usually additional cesses on taxes levied by the constituent state governments. In unitary structures, local governments have a little more leeway in regard to sources of tax revenue, though even here they are usually inelastic sources such as house-taxes, professional taxes, tolls etc. The other feature, that of the local governments' disincentive to raise revenues up to the hilt of what is possible to them, arises from two factors. First, being the most direct form of democracy, the elected personnel vie with each other in pledges to keep local taxation down. Second, the state government's (in the case of federal structures) and the central authority's (in unitary political systems) subsidizing of the local governments' budgets — which is inescapable given the meagre tax resources available to the latter — is in effect a call not to make an effort to maximize the incidence of its taxation powers.

Some of the general problems in regard to local financing of education just referred to are highlighted and made specific in an investigation I conducted in one state in a federal structure. As may be seen from Table 6, the financing of primary schools for which local governments in that state were responsible has declined over the last decade, both in absolute and relative terms.

Table 6

Unit	1965–66	1968–69	1973–74	1974–75
1. Percentage of local government's contribution to total primary education expenditure	20.29	15.75	9.78	9.75
2. Percentage of education allocation in that budget of the local governments	13.58	12.10	7.88	7.57

(Source: Table compiled by the Directorate of Rural Development, Tamil Nadu, India, 1975.)

The disincentive factor can be seen in the manner in which the subsidizing of educational expenditures of local governments operates. Each local government received a flat per capita subsidy of a given amount from the state government. The balance of its educational expenditure was shared between the local government and the state authority in accordance with the degree of development of the area covered by the local governments, which for this purpose were classified into six groups, the most developed being in group I and the least developed in group VI. The resulting financial sharing is shown in Table 7.

Table 7

Group	State Government share	Local Government share
I	60	40
II	70	30
III	80	20
IV	85	15
V	90	10
VI	95	5

(Source: Directorate of Rural Development, Tamil Nadu, India, 1975)

This table shows that local governments' financing of the first-level education is extremely tenuous. Even for the most advanced areas, the local governments contribute a minority of total expenses and the system of subsidies is in effect a major disincentive. In this situation, I have recommended (and the state government has accepted) that (a) the flat rate subsidy be abolished; (b) the local governments be allowed to levy an educational surcharge on the people, with the proceeds being maintained and operated in a separate account; (c) a per capita ceiling for each student place be established for the entire state to prevent rampant feather bedding; and (d) the state government share be reduced by around 50% for categories I to IV. The moral here is that there are local taxable resources, and fiscal machinery needs to be devised (in a democratic structure) to induce the local governments to raise the normal taxable resources.

There are four further comments that need to be made before leaving this first source of educational financing, (i.e. revenues allocated to education from general taxes). First before the question of the inadequacy of the financial resources from this source for education is raised, there should be a technical, management and financial audit of how the existing resources are being deployed in the educational enterprise. This is particularly important with regard to the education sector as compared to the other sectors such as agriculture, manufactures or even health, because in all countries about 90% of educational expenditures are just a continuing commitment from the past ten, 20 or 30 years of expenditures on teachers' salaries, educational administration, repairs of buildings and equipment. If such an examination is carried out, it will be seen that somewhere around 20% of total educational expenditure in the country is "wasted" in various forms of feather bedding in teacher placement, wasteful administrative procedures and personnel, uneconomical buildings, and unused and unusable equipment. As a result of the investigation made with regard to the educational expenditures in the state that I have referred to earlier, my general conclusion on this issue of financial waste was expressed in the following terms:

> "The economical use (of the allocated educational funds) includes a more rational and restrained policy of teacher recruitment based on an effective application of recommended teacher/pupil norms, which in turn calls for a realistic method and form of reporting average monthly school attendance. There are also certain infructuous expenditures currently incurred as in regard to financial incentives for study in one's mother tongue, the State carrying the financial burden for the first stage of post-secondary education and for teacher and physical education training, the expenditures on the central kitchens run in their present form, duplicating and overlapping uneconomical higher elementary and unviable high schools, and the State subsidizing the wide gap in the fees charged as between the Government and private aided colleges, to which I wish to call your attention. This group of economies is estimated to yield an annual saving of around 20% of the Annual Education Budget.
>
> The more efficient use of the existing resources recommended which also will meet future growth expansion needs, include launching eight programmes, covering the continuous in-service training of teachers, improvement of the school environment, non-formal education for school dropouts and non-attenders (which is also the way to meet future expansions), introduction of work experience in schools, functional literacy to eradicate illiteracy, vocationalization of the higher secondary course, setting up a full fledged State Council of Education Training and Research and taking over the scholarship programme for the poor till now financed by the Union Government and operating a small talent and merit scholarship programme. This group of essential qualitative reforms is estimated to cost around 10% of the Annual Education Budget, which is about half the level of economies recommended.
>
> Thus, there is no increase in the State's educational expenditure that is envisaged. The essential qualitative inputs that we have recommended are to be financed from within the existing level of appropriations.
>
> All this involves two essential pre-conditions. The performance budget for education must become much more of a control instrument than it is at present. And it must be established after a detailed review and scrutiny of every so called non-Plan as well as Plan scheme."

The second problem is that the revenue raised by the existing taxes at the federal, state and local levels can be considerably increased by improved methods of tax collection, plugging tax loopholes, and taking punitive action against tax evasion which is almost a national pastime in all countries. Here again the experience of some Commonwealth countries which have taken action to improve tax collection shows that the result is an increase of 10–12% in the revenue returns. A third comment relates to the effect of taxation and that part of its proceeds allocated to education on the growth of the economy. Here a distinction must be made between the industrialized countries, where the overall tax system with its major reliance on direct taxes is progressive, and the developing Commonwealth countries, where indirect taxation is the major revenue-producing instrument and is in its incidence regressive. The effects on economic growth of the two types of incidence of taxes involve the possibility that for developing countries the regressive tax instrument acts as a brake on growth. In a sense the tax proceeds allocated to education represent allocations withheld from agriculture and industrial development and to that extent call for deployment of educational expenditures in a manner that contributes to growth in the short as well as the long run. In fact a case can be made for either a rather heavy short-term diversion of tax revenues to education or a short-term increase in the general tax effort despite its possible depressing effect on growth, if educational expenditures are planned and deployed as to produce early returns and so speed growth. A fourth and final comment relates to the effect of the tax effort on distribution — particularly in Commonwealth developing countries with their widespread inequitable distribution profiles. As noted earlier their heavy reliance on indirect taxation means that the sources of financing are worsening the unequal distribution of assets, wealth and living levels. In addition the hidden private costs (including the opportunity costs) of education tend to fall disproportionately on the poor majority of the country.

Earmarked Taxes and Cesses

Another means of financing some parts of education is through taxes earmarked for specific educational expenditures. Technical, technological, management and engineering education, and workers' education expenses, should be met by taxes levied on manufacturing industry and trade, with their revenues earmarked for meeting these forms of education. Similarly part of the expenditure on agricultural education, particularly at the university level and farmers' functional literacy, should be met by earmarked taxes on large and medium sized farms and co-operatives associated with them. There are several alternative bases for the levy of these earmarked taxes. The taxes could be based on the wage bill or the number of workers employed in the firm or farm. This, however, raises problems of encouraging inappropriate capital-intensive techniques in both manufactures and agriculture, and of placing a heavier burden on labour-intensive units. The taxes could be levied on value added, which however does not form the tax base in most Commonwealth countries and gives rise to computational difficulties of its own. There is then left total sales or profits in the case of manufacturing and commerical units, and net income in the case of large or medium farms and co-operatives. Given the problems raised by taxing turnover in relation to inter-firm relations and inventories, profits or net income seems the most appropriate basis for such earmarked taxes. It may be noted that the case for earmarked taxes is only in relation to those forms of education and training which render or are planned to render identifiable service to manufactures, commerce and agriculture: it cannot and should not be used for financing primary, secondary, or general university and literacy programmes.

Cesses are in effect a form of earmarked levies except that they are smaller in scope and the revenues derived are used for even more specific services. Usually a cess is levied as a fraction of some other tax: in urban areas a cess for financing libraries is usually attached to the urban land or the profession tax; in rural areas the local authority's educational financial resources are often raised by a cess expressed as a percentage of the land tax. For municipalities, corporations and village governments, the cess can be an appropriate source of revenue which, though not elastic and expandable, is suited to the specific nature of recurrent educational costs.

Loans

Loans for financing education are a supplement to the major taxation instrument. Loans have not generally been used for financing education mainly because educational returns are, as earlier pointed out, not separable and quantifiable, and the returns are long-term ones, except in regard to professional education and training including functional literacy programmes, whereas the amortization of loans is usually within a 5–7 year period. To start with, capital expenditure — what is called non-recurring expenditure — for such forms of professional education and training can be financed by loans. Similarly educational building costs can be financed by loans.

Loans can have an inflationary impact. They can create balance of payments problems, and, in the case of loans used for financing education, there is the further question of choosing between education versus other competing sectors in the use of loan finances. Except in regard to the last issue, the other problems are general ones, not specifically related to educational financing, and must be resolved within a general economic policy framework.

Education loan finance as a resource must be tied in with the tax revenues allocated to education, for while the former provides for building and equipment, these constructions must be timed to coincide with the expenses incurred for teachers' salaries, student scholarships and other ongoing educational amenities that are a part of the educational system. Ideally the bond issues should be launched by the local government authorities, as they are disbursing agents for the capital constructions which the loan finance is to subsidize. But given the problem of the need for a uniform, co-ordinated approach in the undeveloped capital markets of most developing countries, the problem of meeting interest and amortization payments for the loan which the local government does not have the resources to meet, and the need to time non-recurring and recurring expenditures whose major source is the central and/or the state government, educational bond issues have to be centralized either in the matter of actual issue or in their co-ordinated regulation. On this basis, educational bond issues are a source which countries need to tap more widely than is the current practice in educational financing.

Thus far in the discussion, the raising of educational loans has been restricted to the financing of the capital costs of the educational system. The International Development Association credits of the World Bank have, however, introduced a new element in the use of loan finance to meet the capital as well as the recurrent costs of the educational system. Apart from the fact that the division between the two costs is a useful but essentially an accounting device, and should not be taken as a firm basis for financing, the IDA credit, which is repayable after a long period of

30–50 years with a ten-year grace period and no interest charge, enables integrated planning and long-term co-ordinated financing of educational reform programmes.

Tax Relief and Contributions in Kind

In the area of the private financing of education, there is need in most of our countries for a coherent national policy on income tax, wealth tax and gift tax relief and concessions for financial contributions made to education. This can be a not inconsiderable source of financing, as the manufacturing sector begins to expand in a country and as legislation is adopted with regard to land ownership and control, urban land size, and ownership of industrial assets, with a view to reducing glaring distributional inequalities in most of our societies. In one Commonwealth country, private contributions made to research are granted 150% tax relief. This suggests that the taxing authority can regulate the flow of private funds into those sectors of education, training and research that constitute its priorities for the present through legislating that contributions made to what it has from time to time established as the priority education sector will be afforded the tax relief. In view of the many ingenious ways in which these concessions are liable to be misused, safeguards should be built into the rules as to the beneficiary agency being separate from the donor and being a real educational agency. One area where tax relief can start is in regard to firms who run workers' education or apprenticeship training programmes. Another area for such relief is the financing of research in the universities.

At another level, there is the untapped contribution (in labour, local building materials and teaching personnel) that the local community can make to the educational enterprise, as highlighted by the successful efforts made in Tanzania. The Tanzanian experience indicates that what is lacking in mobilizing this resource is the political will and technical machinery. Given the political will to make the people responsible for their educational facilities (as part of a radical decentralization of political and socio-economic structures and decision making), what is further needed to call forth massive public contributions are small funds to lubricate the machine, purchase iron or steel rafters and — in some cases where local material is unavailable — to indent for roofing materials. The contribution of the local community is not only in labour and local material. In so far as the reformed educational structures enshrine work experience as an educational activity, the best teacher of arts and crafts could be the local village artisan, the best agricultural or fisheries teacher could be the local progressive farmer or seasonal inland fisherman, the music master could be the village musician. There are thus large possibilities for incorporating in the educational system contributions in kind from local communities. I have a suspicion that what is holding up this means of financing education in our countries is the lack of a political will — such as obtains in China, Cuba and the communist countries and in Tanzania.

Foreign Aid and International Assistance

In all developing countries, internal sources of financing of the educational system are inadequate to meet the demands imposed by the natural growth of the education system, the increase in emoluments and intakes resulting from the youthful nature of the population, and the reform of the education system. In a sense any foreign assistance to a country — whether it be for building irrigation dams or setting up a fertiliser or textile factory or for any other purpose — releases local resources, a part of which may be used for financing education. Hence the first note that I wish to strike is one of regret at the long stagnation of foreign aid at 0.34% of the combined national income of the OECD countries (for 1975 it is estimated to have gone up to 0.36%) as against their pledged 1%.(9)

Second the brain drain represents foreign aid in reverse in that developing countries are aiding affluent ones. The extent of the resource transfers involved have been computed by UNCTAD and UNITAR Secretariats and the U.S. Congress Studies. The problem is basically due to the fact that the quantum of their scientific manpower is ahead of the local economy's absorptive capacity. For some countries, this situation may require a planned short-term programme of migration of its scientists and engineers. Given the brute facts of the brain drain situation and the absence of any simple speedy remedy to counter them, the contribution being made by the developing countries' educational systems must be taken into account in taking decisions on the sources of the educational finance.

Third there is a stronger case for educational aid than is commonly recognized. Whether we regard education in a country as investment or a consumption item (or as noted earlier a bit of both) it is — in terms of scale — one of the largest industries, with a high income elasticity of demand. Aid is needed to meet its capital costs as well as its recurrent costs, without regard to such further divisions as those relating to foreign exchange or import components of its total educational expenditures. Education is one industry which is heavily a public sector industry, depending, as noted earlier , to the extent of 80 to 90% of its financing on the government, which in turn faces an all round fiscal inadequacy in relation to the growing and competing claims of its various sectors.

Fourth, the time is past when the so called criteria of the absorptive capacity of the country or the lack of teachers and other real resources can be brought up against the need for aiding education. Apart from the vagueness and subjective nature of the concept of the capacity of a country to absorb foreign assistance, it should be remembered that aid to education in a country — by increasing the trained manpower needed for expanding and diversifying its agricultural production, its irrigation system, its flood control programme and its manufacturing and capital goods production sector, and by being the change agent in social structures, tastes and consumer demand — is itself a means of increasing the country's need for foreign aid and a guarantee that it will be used effectively. In other words educational aid is one means of increasing the country's capacity to use external aid in other sectors. The period of teacher shortage — even in recently independent African countries — is now past, and some countries face unemployment of their trained teachers. Educational unemployment, up to a point, is a signpost of a growing and expanding economy, because education, given its longer gestation period, has to be ahead of the rate of growth of the economy. The moral of the discussion thus far is that a good rule of thumb is that 15–20% of a country's foreign aid should be educational aid.

More viable criteria for allocating this amount of educational aid between countries would be (a) the extent to which the country is making the maximum effort from its own resources to finance its education system, (b) the extent to which the education system is being planned and is tied in with the country's national plan and (c) the extent of the reform and restructuration of the educational system underway.

The first criterion — the extent to which the country is making the maximum effort to finance its education system — is not simply indicated by the percentage of G.N.P. devoted to education: for one thing G.N.P. estimates are in some countries a rather crude approximation, and in all countries can be considerably improved; but more serious, the amount of national resources devoted by a country to education depends on its level of development, on the age structure of its population, and the prices and wages prevalent in the country. Taking all these into account, it is possible to arrive at a rough estimate of the national educational effort.

The second criterion is more urgent and necessary. Educational assistance must be within the framework of a national educational plan if the creation of white elephants by power groups within the country or by the external aiding agency is to be avoided. Equally disastrous would be the lop-sided development of certain forms or levels of education which has happened when aid to education is not within the educational plan. The internal coherence of the educational system should be reflected in the educational plan. And the integration of the educational plan with the national plan will result in many a hard decision, but is the only means of ensuring educational economy and educational and national relevance. Such integration sets the priorities of the educational system.

The first two criteria are a prolegomena to aid relations between countries. I would recommend as the major area for educational aid between the Commonwealth countries, educational reform and restructuration that is now underway in each country. The borrowed educational model which served as a good starting point is now being critically re-examined and gradually replaced by an education and training system relevant to the country's political, socio-economic and cultural characteristics, as well as the demands of each of the disciplines. This calls for new structures, new learning content, changed methods of learning and evaluation, a complete re-writing and creation of learning materials, continuous and demanding research and its accompanying costly equipment needs. This is a new area to which I call the attention of the Conference. In the exchange of scholars and teachers, the training through fellowships of teachers and experts and the provision of equipment, the Commonwealth programme of assistance should concentrate on aid to the educational reform programme of each country. And within this major area of concentration, a new form of assistance that I would recommend to the affluent Commonwealth countries is to finance the exchanges in this area between developing Commonwealth countries. For instance, India's emerging non-formal educational structures can be assisted by experts from Jamaica, Trinidad and Tanzania; Sri Lanka's vocational training experts can help Ghana in its vocationalization programmes, and so on. This third country aid programme would involve an affluent Commonwealth country also financing the capital costs — buildings, books, equipment and pilot experiments involved in the reform programme — costs which may be incurred in any of the developing Commonwealth countries.

A further aid needed is a Commonwealth documentation centre which can collect, analyse and diffuse both basic educational financial statistics with a far greater degree of specificity than is now available from UNESCO, and the educational reform programmes underway in the countries. The Centre will make available not plans and ideas (of which we probably have more than what can be practised), but the actual profiles of educational finance and educational reform in the Commonwealth countries.

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