

II General, Regional and Sectoral Analyses

Economic Slowdown and Education Recession in Latin America¹

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1. Introduction

A broad general trend can be discerned in the development of education globally in the last quarter century. The 1960s were characterised as a golden age for education, with rapid expansion of education networks, and huge public investments flowing into education, synchronising with Theodore Schultz's 'human investment revolution in economic thought' [Bowman 1966]. The 1970s were a period of education recession, partly attributable to the educational pessimism that 'schools do not matter' [Jencks *et al.* 1972]; and the 1980s are a period of cautious optimism, with the re-emergence of faith in education, and slow but steady reconstruction of the education edifice [see Coombs 1985].

It is tempting to relate these broad trends in education to the stable economic conditions of the 1960s, the world economic recession of the 1970s, and the 'adjustment process' and associated rekindling of hopes in the world economy of the 1980s. The world recession of the 1970s drastically affected the revenues and expenditures of national budgets. As Sylvain Lourie observed, 'the economic crisis of the 1970s and its ensuring consequences ... have had a gradually brutal impact on both productive and non-productive sectors of the economy'.² The impact on 'soft' sectors such as education, which are in general characterised by ad hoc policies of resource allocation, might be quite high. Particularly for the education sector, this is not altogether a surprise, given the predictions relating to the education crisis [Coombs 1968]. How exactly did the education sector suffer or, indeed, react to worsening economic conditions? By comparing the trends in economic conditions and education in the Latin American and the Caribbean region, this article attempts to answer this question. The following section provides a conceptual framework for the analysis, followed in Section 3 by a short discussion on data. Section 4 briefly describes the nature of the economic recession. The reaction of the education sector to the economic trends is analysed in Section 5, and the article ends with a short summary in Section 6.

¹ The views expressed here are those of the author, and should not necessarily be attributed to the organisation where he is working.

² See Preface to Lewin (1987).

2. Conceptual Framework

The pattern of allocation of resources to education varies under different conditions, even within a given region. The various sectors of education are influenced differently by changing economic conditions. In this context, three propositions can be advanced:

i) Under normal conditions of economic well-being, allocation of resources to education is generally found to be least significantly influenced by economic factors. Economic ability factors, such as GNP per capita and public spending on education, are not significantly related.³ Efficiency criteria, such as the rate of return to education, are also found not to be influencing policies of resource allocation to education [Tilak 1982]. Further, neither the manpower needs of the economy nor even social factors such as constitutional directives on universalisation of elementary education, and predominant levels of widespread illiteracy guide the educational planners on resource allocation [Tilak 1980].⁴ Yet it seems reasonable to fear that worsening economic conditions do influence negatively the allocation of resources to education, as policy makers find education to be an easy scapegoat under such circumstances. Moreover, the nature of investment in education is not widely recognised by policy makers, particularly as the benefits of education are not only intangible, but also do not flow immediately. As a result, education becomes a sector that is highly vulnerable under adverse economic conditions.

ii) In modern political systems popular pressures are quite important. This may be more true in the countries historically characterised by long periods of independent rule. No modern welfare state can afford to face popular unrest and the associated consequences of closing down human service sectors such as the education institutions, even under conditions of severe

³ See Eicher and Orivel (1980) for evidence on a cross section of countries; and Tilak (1984) for evidence on South Asian countries, and Tilak (1988a) for evidence on India.

⁴ Tilak (1984) has shown earlier that allocation of resources to education in the South Asian countries can not be explained with the help of educational factors such as enrolment ratios and rates of literacy.

economic crisis. Gripped by the two forces, viz., worsening economic conditions on the one hand, and socio-political popular pressures for educational expansion on the other, the policy makers find a compromise solution of apparent maintenance of the status quo by meeting the quantitative demand fairly satisfactorily, but diluting the quality of education, with inadequate physical and monetary resources for improvement. Thus, under conditions of overall financial squeeze, due to popular pressures public demand for education is met, but provision of resources such as teachers and finance diminish. In short, the quality of education is traded off for quantitative expansion.

iii) The differential impact of different levels of education on various socio-economic groups of the population is now well known. Based on Bowles' [1971] hypothesis, I have argued elsewhere [Tilak 1986:212] that:

as the benefits from higher education accrue largely to the elite classes and those of primary education to the masses, and as higher education can be used as an effective instrument for transferring the resources from lower to upper classes, the 'upper-class governments' favour expansion of higher education at the cost of primary education

Given the available evidence, one may expect that under conditions of recession, it is the lower levels of education that suffer more than higher education,⁵ as policy makers try to protect from the brutal impact of economic crisis the higher education system that benefits their own class, the elite and the rich, even at the cost of expansion of lower levels of education, the benefits of which accrue relatively more to the masses. This short article examines these three propositions with the help of aggregate data for the Latin America and the Caribbean region as a whole,⁶ spanning the period 1960-85.

3. The Data

Most of the data are collected from World Bank publications, notably *World Development Report*, *World Tables*, and *Social Indicators of Development*, and UNESCO publications, particularly the *Statistical Yearbook*. Other sources are listed as appropriate. The limitations of such aggregate data are well known. They suffer from several inaccuracies, due to a variety of problems associated with aggregation, in addition to differences in definitions, coverage, methods of conversion of GNP in local currencies into US dollars

⁵ Tilak (1983) has shown that under various stages of planning in India, when the overall plan outlays are reduced, different levels of education suffer differently, the suffrage being inversely related to the increasing levels of education.

⁶ A more detailed study by the author using cross-country data in the region is in progress.

based on ordinary exchange rates, methods of data collection, etc. The data used here are of the same kind and suffer from the same weaknesses. However, these are the very same data that are available to researchers, technocrats, policy makers and administrators around the world. Further, the country-wise data are aggregated here for the region as a whole. It may be kept in mind that while many countries in the region have common tariffs, there also exist large differences in geographical size, population, political system, etc., as well as in their education systems. Hence the generalisations attempted here should be treated with caution.

4. The Economic Slowdown

The world economic crisis has had a significant impact on the economies of the Latin American and Caribbean countries. Rates of growth in GDP have fallen rapidly. Despite declining rates of growth of population (still, however, around two per cent), growth rates in GDP per capita have also fallen in the region as a whole from 3.4 per cent during 1965-70 to 2.7 per cent during 1970-81; the manufacturing sector suffered the most, with the rate of growth falling during this period from 6.3 per cent to 4.8 per cent — below that experienced during the first half of the 1960s. External debt in the region is presently over \$360 bn, and seven South American countries are among the 10 largest debtors in the world. Interest payments alone required more than 35 per cent of the regional exports of goods and services during 1982-84 [Soares 1985:9], and the debt service ratio is now the highest in the world. The debt problem may make it difficult for the countries in the region to obtain external financing: savings rates have declined, and current account deficits as a percentage of GDP more than doubled over this period. Rates of unemployment have increased rapidly, with open urban unemployment rising from 6.5 per cent in 1970 to 7.2 per cent in 1981, and again to 10.8 per cent in 1984 [Schiefelbein 1987:102]. The crisis, as Soares [1985:10] points out:

has produced a decline in per capita income to levels of 10 years ago or more, and has led to the transfer of a large part of the region's product abroad in interest payments, to an inability to apply, as internal investment, the savings generated with tremendous difficulty to the postponement of multiple aspirations for scientific, technological and social development and, with increasing frequency, to a loss of confidence in the possibility of meeting the most basic needs of the region's populations.

Some of these indicators of recession are presented in Table 1.

Table 1

Selected Economic Indicators
(Latin American and Caribbean Region)

	1960-65	1965-70	1970-81
Annual Growth Rates (%)			
GDP	5.0	6.1	5.2
GDP per capita	2.0	3.4	2.7
Output of the Manufacturing sector	5.2	6.3	4.8
Gross Domestic Investment	4.5	8.0	6.0
Exports	6.1	5.0	4.3
Imports	3.0	7.6	8.0
Private Consumption	4.7	6.1	4.3
Population	2.8	2.6	2.3
Percentages			
	1960	1970	1981
Deficits on Current Account as % of GDP	1.5	2.1	4.4
Average National Savings Rate (%)	19.4	20.4	19.5

Source: *World Tables*, Third Edition, World Bank, Washington, DC, 1983

An analysis of the causes of this worldwide recession, or 'slowdown' as it is euphemistically termed, is outside the scope of this article. On the other hand, we are concerned here with the relationship between the recession and the education sector in the region.

5. The Education Recession

Like most developing economies, Latin America and the Caribbean countries experienced very rapid growth in education during the last two or three decades.⁷ The current situation in the Latin American and Caribbean region is reasonably satisfactory, and is relatively much better than other developing regions, such as South Asia and sub-Saharan Africa. Four out of every five people in the region are literate. According to the available data on gross enrolment ratios, primary education is universal for both sexes, 50 per cent of the children of the relevant age-group are in secondary schools, and 15 per cent in institutions of higher education. On average there is a teacher for every 30 students at the first level and for 17 students at the second level. Presently about 4 per cent of GNP is invested in education from the public exchequers. These ratios compare very favourably with the rest of the developing world.⁸

⁷ See Patel (1985) for a description of the educational miracle in the Third World.

⁸ See Behrman (1985) who shows that the Latin American countries have high schooling levels in comparison with other developing countries, but with respect to the changes in schooling investments over the past two decades, the Latin American experience was 'about average' for developing countries, once changes in real per capita income are controlled.

Further, economic returns to investment in education are also fairly high in Latin America. Even if one ignores the non-market indirect benefits of education, one still finds that primary education in Latin America yields a social rate of return of 26 per cent compared to 24 per cent for the developing countries as a whole; secondary education yields 18 per cent and higher education 16 per cent, compared to 15 and 13 per cent respectively in the developing countries as a whole [Psacharopoulos *et al*, 1986:380].

Let us now turn to the growth of the education system in the region over the last 25 years and see how it fared during periods of economic crisis.

Growth in Enrolments and Teachers

Total enrolments (see Table 2) have tripled over the last quarter century, but the rate of growth of total enrolments has declined quite significantly over the years, with short-term fluctuations. While the rate of growth of enrolments in primary and secondary education declined rather consistently throughout, the rate of growth in enrolments in higher education doubled between 1960-65 and 1970-75, and then started declining. Further, the rate of growth of enrolments in higher education has already been consistently higher than those at other levels, except during 1975-80, when it was slightly less than the rate of growth at secondary level. With near universalisation,⁹ it is understandable that the rate of growth of primary education slowed; but the rate of growth of secondary education has also been declining. Since 1975 a relative flattening of the enrolment ratios at all

Table 2

Growth in Enrolments in Education

	All Levels	Primary	Secondary	Higher
Enrolment (mn)				
1960	31.4	26.8	4.1	0.6
1965	42.4	34.6	6.8	0.9
1970	56.3	46.6	8.1	1.6
1975	72.5	56.3	12.6	3.6
1980	87.2	64.8	17.6	4.9
1985	98.1	70.4	21.3	6.4
Rate of Growth (%)				
1960-65	6.2	5.2	10.7	8.5
1965-70	5.8	6.1	3.6	12.2
1970-75	5.2	3.9	9.2	17.6
1975-80	3.8	2.9	6.9	6.4
1980-85	2.4	1.7	3.9	5.5
1960-70	5.5	5.0	6.4	14.5
1970-80	4.5	3.4	8.1	11.8
Enrolment Ratios (%)				
1960	40.0	73.0	14.2	3.0
1965	45.9	81.5	19.4	4.2
1970	52.1	91.4	24.9	6.3
1975	58.5	98.0	35.4	11.7
1980	63.3	105.8	43.5	13.4
1850	66.6	107.9	52.2	15.0

Source: Based on *Statistical Yearbook(s)*, UNESCO, Paris (various years).

levels can also be noted, as shown in Fig. 1. However, despite falling rates of growth, enrolment ratios, expressed as a percentage of the relevant age-group population, increased, partly due to declining population growth.

The growth in teachers also depicts a similar picture of declining and fluctuating trends, as shown in Table 3.

The rate of growth of teachers also began to fall after 1960, but the decline has been more marked since 1975. However, the marked decline in rates of growth is confined to primary and higher education. In fact, during the 1970s the rate of growth of teachers in secondary education was on the increase. Both in terms of growth in student numbers and teachers, there is a steep decline during 1975-80 in the higher education sector. The declining trends in all three levels of education continue during the 1980s, as if the economic recession has both a concurrent and a lagged effect.

⁹ This is according to the gross enrolment ratios. If we adjust these ratios for over and under age children in the schools, the actual or 'net' enrolment ratios may be much smaller. For example, according to UNESCO data, only 84 per cent of children aged 6-11 were enrolled in schools in 1985.

Further, changes in the distribution of teachers provide evidence for the familiar bias in education planning in favour of higher education at the expense of primary education. While the percentage of teachers in primary schools declined continuously, those in higher education increased during 1970-85, as seen in Table 4, a topic we will return to later.

Public Investment in Education

Public expenditure on education increased nearly ten times between 1965 and 1980 — rising from \$3,320 mn to \$31,400 mn, an annual rate of growth of 9.4 per cent during 1965-70, and 19.7 per cent during the 1970s, followed by a steep decline — even in absolute figures — during the first half of the 1980s, as shown in Table 5. The impressive growth during 1965-80 was more than offset by two factors. As a result of population growth, public expenditure on education per inhabitant increased by only six times during this period, marginally from \$14 in 1965 to \$19 in 1970, and then to \$88 in 1980. The more important factor is the rate of inflation. As Coombs [1985:144] stated, inflation 'played havoc with the education systems'. A

Fig. 1

Growth in Enrolment Ratios and Literacy

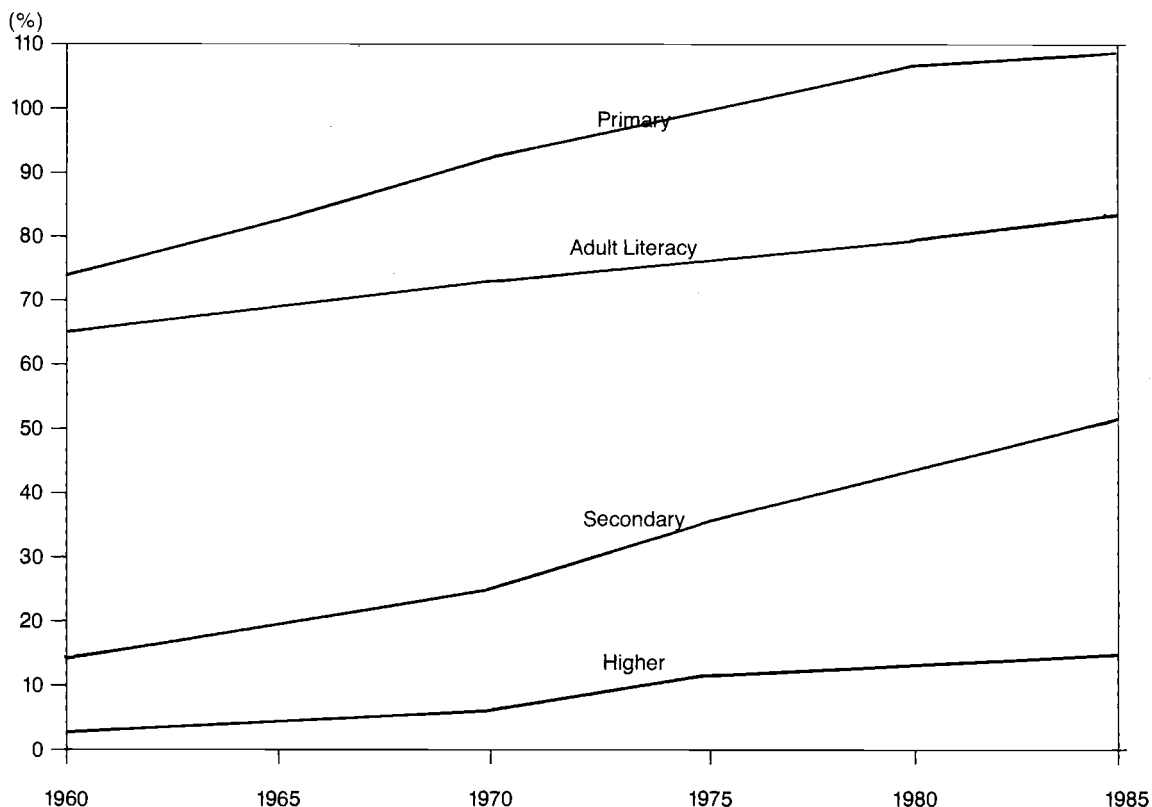


Table 3

Growth in Teachers in Education

	<i>All Levels</i>	<i>Primary</i>	<i>Secondary</i>	<i>Higher</i>
Teachers (mn)				
1960	1.18	0.78	0.33	0.07
1965	1.69	1.07	0.51	0.11
1970	2.31	1.53	0.63	0.16
1975	3.14	2.02	0.81	0.31
1980	3.74	3.23	1.11	0.40
1985	4.46	2.55	1.39	0.52
Rates of Growth (%)				
1960-65	7.45	6.53	9.10	9.46
1965-70	6.45	7.41	4.32	7.78
1970-75	6.33	5.71	5.15	14.14
1975-80	3.56	2.00	6.50	5.23
1980-85	3.58	2.72	4.60	5.39
1960-70	6.39	5.71	5.15	14.14
1970-80	4.94	3.84	5.83	9.60

Source: Based on *Statistical Yearbook(s)*, UNESCO, Paris (various years).

Table 4

Distribution of Teachers
(% Distribution by Levels)

	1960	1965	1970	1975	1980	1985
Primary	66.2	63.3	65.9	64.4	59.7	57.2
Secondary	28.1	30.1	27.2	25.9	29.7	31.0
Higher	5.8	6.6	6.9	9.7	10.6	11.7

Source: Based on *Statistical Yearbook(s)*, UNESCO, Paris (various years).

comparison of the rate of inflation and rate of growth of expenditure on education in current prices indicates that public expenditure on education in real terms declined or increased at a negative rate of growth during the 1970s, as the rate of inflation¹⁰ was as high as 43.4 per cent per annum, much higher than the rate of growth of expenditure in current prices, which was only 18.5 per cent. However, during 1965-70 a rate of growth of 9.4 per cent in educational expenditure was associated with a rate of inflation of 8.1 per cent (1960-70), suggesting a small but positive rate of growth. Even in current prices, we find a negative rate of growth of 3.2 per cent in public investment in education during 1980-85. Adjustment for the alarming rate of inflation of 64.9 per cent during this period pushes down the rate of growth to a further negative level. All this indicates that in constant prices, public investment in education might have been falling at an increasing rate of growth since the beginning of the 1970s along with the increasingly worsening economic conditions.¹¹ The decline during the first half of the 1980s, when the adjustment process was taking place, is much higher and perhaps more intriguing.

If we avoid the problems connected with the rate of inflation and the conversion of figures on expenditure into constant prices, and consider public expenditure on education as a percentage of GNP, a different picture emerges, according to which public investment in education has been consistently increasing in the region, from 3.0 per cent in 1965 to 4.0 per cent in 1985, with a steep increase during the 1970s (from 3.2 per cent in 1970 to 3.9 per cent in 1980), and the curve flattening during the 1980s. This gives the impression that the recession of the 1970s had little or no impact on the relative priority accorded to education, and when there was an effect, it was

positive. Thus the evidence on the impact of the recession on public spending on education may seem to be inconclusive.

But the relative priority given to education, deduced from its percentage share of GNP may be different from the changes in the level of public spending. In fact, even though public expenditure in education as a percentage of GNP did not decline, the relative priority allocated to education in the government budget, which is 'a relatively more reliable gauge of what is really happening . . . [and which] provides direct evidence of the relative priority given to education' [Coombs 1985:142], did change for the worse. The share of education in the state budget declined, after an initial marginal increase from 18.7 per cent in 1965 to 18.9 per cent in 1970, falling thereafter to 16.5 per cent in 1975 and to 15.3 per cent in 1980. The elasticity of public expenditure on education in relation to GNP also shows a significant decline: from 2.57 during 1960-65 to 1.11 during 1965-70, marginally increasing to 1.22 during 1970-74. At the beginning of the economic crisis, 1974-76 it fell steeply to 0.60 [Eicher and Orivel 1980:38].

Now let us compare the growth rates in education expenditure and those in GDP at constant prices, presented in Table 6. One notices a systematic decline in the rate of growth in education expenditure over the years, with an exception during 1975-80 when the rate of growth was slightly higher than the corresponding rate relating to the preceding period, 1970-75. On average, the 1970s, notably the period from 1975 to 1980, experienced a much lower rate of growth than the 1960s.

Following the slowdown during 1965-70, there was an attempt to increase public spending during 1970-75. Unfortunately the economic crisis crippled such efforts and prevented any speedy recovery. While there is a positive association between economic growth and education spending during the 1970s, both declining from the earlier levels of higher growth, the trends in the preceding and the following periods, graphically presented in Fig. 2, do not indicate any such relationship between the two, as increasing rates

¹⁰ The rates of inflation are region averages (weighted by population) for the average annual rates of inflation, given in the *World Development Report(s)*.

¹¹ However, using the available country-wise statistics on expenditure on education in constant prices [Eicher and Orivel 1980 and Komenon 1987], rates of growth are estimated and are discussed below.

Table 5

Public Investment in Education
(US \$)

	<i>Total (millions)</i> <i>at current prices</i>	<i>per capita (\$)</i>	<i>% of GNP</i>	<i>% of Budget*</i>
1965	3320	14	3.0	18.7
1970	5190	19	3.2	18.9
1975	13445	42	3.5	16.5
1980	31399	88	3.9	15.3
1985	26670	67	4.0	..

Source: * Psacharopoulos *et al.* [1986, p.381]; others: based on *Statistical Yearbook*, UNESCO, Paris (various years).

Table 6

Growth in GDP and Expenditure on Education
(at constant prices)

	1960-65	1965-70	1970-75	1975-80	1980-85	1960-70	1970-80
GDP	5.0	6.1	-- 5.8 --		0.4	5.1	5.8
GDP per capita	2.0	3.4	-- 3.1 --		2.4	..	3.1
Expenditure on Education	13.3	6.5	8.7	6.0	-0.4	7.6	7.1

Source: Based on *World Tables*, World Bank, Washington DC, and Komenon (1987).

of economic growth are associated with declining rates of growth in education expenditure, suggesting that during normal periods, allocation to education is not influenced by economic factors, while during periods of economic crisis, it is.¹²

Intra Sectoral Allocation of Resources in Education

Education policy makers in Latin America are no exception to the bias in favour of higher education in the developing countries. In several Latin American countries, including Colombia, Argentina, Costa Rica, Dominican Republic, Uruguay and Chile, it was found that a large proportion of higher education subsidies (as high as 60 per cent in Colombia) go to the top 20 per cent of the population, and a large proportion of primary education subsidies are received by the bottom 40 per cent of the population [see Selowsky 1979; Petrei 1987, and Bowman *et al.*

¹² See Tilak (1988b) wherein he found in South Asia four types of such patterns; (a) increasing economic growth associated with increasing growth in education expenditure; (b) increasing economic growth associated with declining growth in education expenditure; (c) declining economic growth associated with increasing growth in education spending; and (d) declining economic growth associated with declining education expenditure.

1986]. As a result, even under conditions of economic slowdown, as the elite policy makers try to protect the sector that benefits their own class, we note that the distribution of public expenditure on education favours higher education.

Table 7

**Public Recurring Expenditure
on Education: Latin America**
(% Distribution by levels)

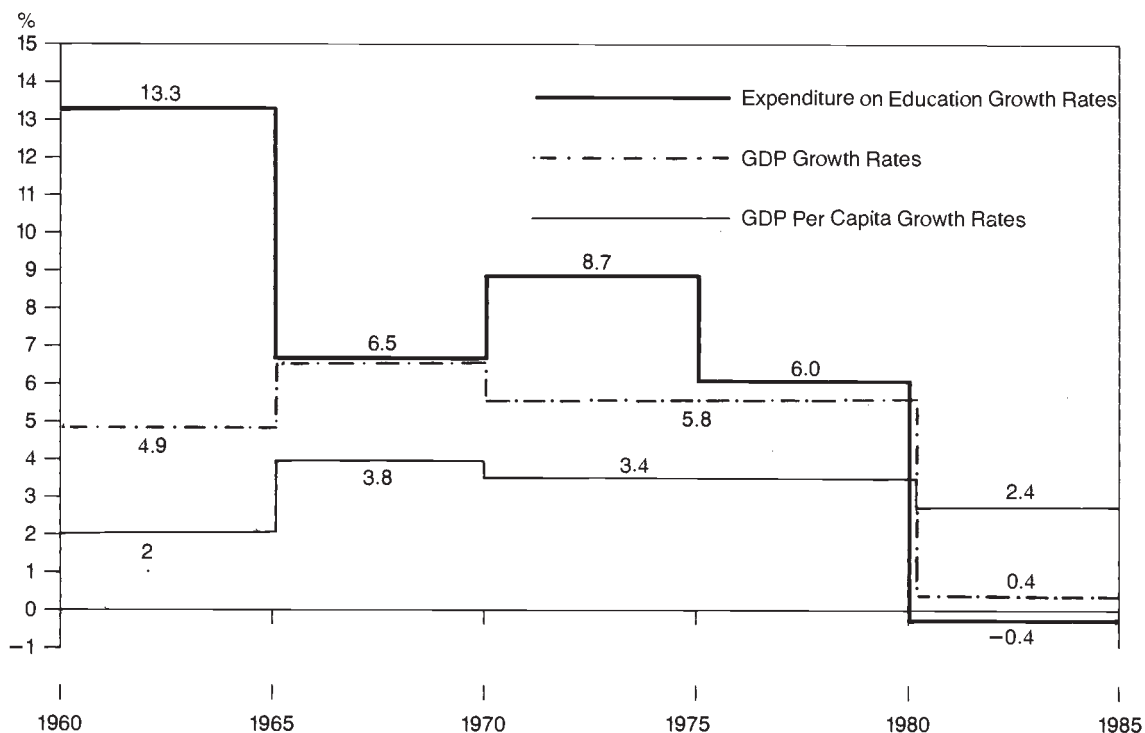
	1965	1970	1975	1980
Primary	62.4	57.4	51.6	50.9
Secondary	23.3	26.7	25.0	25.6
Higher	14.3	15.9	23.4	23.5

Source: Psacharopoulos *et al.* [1986:382].

As Table 7 makes clear, the share of primary education was reduced from 62 per cent in 1965 to 57 per cent in 1970 and with the onset of the recession, it was further reduced to 52 per cent in 1975. But it is

Fig. 2

Growth in GDP and Education Expenditure



precisely in 1975, when the share of primary education was to be reduced by nearly six percentage points compared to 1970, that the relative share of higher education increased quite significantly to nearly a quarter (from 16 per cent in 1970), supporting our hunch that under conditions of financial stringency primary education suffers more than higher education, and that higher education flourishes in general at the cost of primary education. Thereafter however, the relative shares of all levels of education remained relatively stable.

Effect on Quality

During periods of budget squeezes, it is quite likely, as argued earlier, that the quality of education gets traded off in the quality-quantity choice. While detailed data on quality indicators of education are not available, the scanty evidence at hand does support our hypothesis. First, let us look at the temporal changes in per student expenditure by levels of education given in Table 8. The figures in the table may give a quick impression that 'primary-level spending seems to have been the most immune from cutbacks' [Heller and Cheasty 1984:1042]. But we have already seen in Table 7 above that this is not so. In fact, given (a) the rigidity of teacher costs, (b) the

high proportion of teacher costs in the total recurring costs at primary level, and (c) the near saturation of enrolments at primary level (the rate of growth is less than the rate of growth of population in the region), recurring expenditure per student could not be reduced significantly. On the other hand, at higher levels of education, the excess demand that exists [see Schiefelbein 1987:56-59], could be met only by reducing expenditure per student under conditions of resource scarcity, and thus sacrificing quality to quantity.¹³

Table 8

Unit Costs of Education: Latin America (as a ratio of GNP per capita)

	1965	1970	1975	1980
Primary	0.10	0.10	0.09	0.09
Secondary	0.20	0.19	0.16	0.26
Higher	1.41	1.00	0.83	0.88

Source: Heller and Cheasty [1984:1042]; Mingat and Tan [1985:304]

A careful examination of the UNESCO data on education expenditure reveals that while expenditure on items such as teachers' salaries might not be reduced, provision of physical resources (textbooks per pupil, other teaching materials) might diminish. In a good number of Latin American countries one can note a steep decline in the percentage of current expenditure spent on teaching materials during the 1970s: from 11 per cent in 1970 to 0.8 per cent in 1980 in Ecuador, from 16 per cent to 5 per cent in Argentina during the same period, and from about 3 per cent to 1 per cent in Venezuela. On average, in 1980 less than 4 per cent of recurring expenditure was invested in teaching materials. It is well known that elasticity of substitution between different factors of the education production function is in general quite limited. Buildings cannot be substituted for teachers, and teachers cannot substitute significantly for teaching materials. Hence a steep decline in the proportion of expenditure on items such as teaching materials results in a fall in the quality of schooling.

As Heller and Cheasty [1984:1045] found, in 83 per cent of the countries in the region non-wage expenditure per student in secondary education declined during 1970-78; and the corresponding proportion for higher education is 100 per cent, while during 1965-70 in only 17 per cent of the countries do we find a decline in non-wage expenditure per student at secondary level, and in 50 per cent of countries in higher education. Similarly, the percentage of countries where there was an increase in the class size per teacher increased significantly during the 1970s (1970-78). It increased from 57 per cent during 1965-70 to 78 per cent during 1970-78 at secondary level and from 70 per cent to 80 per cent in higher education during the same period. In quite a few countries, the output-input ratios in universities declined. For example, in Mexico university graduates as a ratio of enrolments declined from 21.32 per cent in 1960 to 9.36 per cent in 1985, and in Venezuela from 10.69 per cent to 5.62 per cent during the same period. Thus, to an extent these variables reflect the quality of education, it is clear that the 1970s were also characterised by a deterioration in the quality of education in the Latin American region. That the positive, though small, growth in enrolment is accompanied by a decline in quality indicates that during periods of financial squeeze, quality is traded off for quantity.

6. Summary

In this article we have postulated that although under a normal economic environment, resource allocation

¹³ Enrolments in higher education could be increased, despite financial squeezes, thus by reducing the per student expenditure and probably partly by increasing the role of private sector. The private share in enrolments in higher education increased considerably from 15.4 per cent in 1960 to 34.4 per cent in 1980. See Levy (1986).

to education may not be influenced by economic conditions, a deterioration such as the recent world recession does adversely influence growth. Further, we hypothesised that under worsening economic conditions, primary education suffers more than higher education. It is also our hunch that under such conditions, popular socio-political pressures may cause educational quality to be traded off for quantitative expansion. In this context, the available data on the Latin American and Caribbean region have been quickly examined. Subject to the well-known weaknesses that aggregate regional data may suffer from the preliminary analysis attempted here generally supports our hypotheses. Detailed examination with the help of country-wise data may be more useful, and may provide more interesting detail, but could well lead to the same conclusions.

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