IV Case Studies in Cost Sharing: Tanzania

A. Introduction

The case of Tanzania provides a good contrast with that of Ghana, although both countries are dependent on foreign aid: aid dependency in Tanzania may even be stronger than in Ghana.[111] An important difference between the countries is their size: the population of Tanzania is about 28 million compared with Ghana's 16 million, and Tanzania is four times larger than Ghana. The provision of education services is strongly affected by factors such as population density and communications distances. There are also important differences between anglophone West Africa and East Africa in their historical experiences.

[111 See Doriye J. & M. Wuyts, *Aid, Adjustment and Sustainable Recovery*, Institute of Social Studies, The Hague, March 1992, for a powerful analysis of Tanzania's aid dependency and the ineffectiveness of aid. Also Agrawal N. & al, *Structural Adjustment, Economic Performance, and Aid Dependency in*

Tanzania, Policy Research Working Paper WPS 1204, World Bank, October 1993: this paper suggests that adjustment had been successful in Tanzania but accepts that the effectiveness of aid had been very low in spite of its large volume.]

Another common feature is the influence (or attempted influence) of lenders and donors on education policy. To some, Tanzania is seen as a political economy laboratory, and over the recent years the fervency of donors and lenders in promoting (on paper at least) a privatised education system matches the same fervency of 15 years previously in support of a somewhat different type of system. In many respects the experimentation of the World Bank and the donors who support the Bank's approaches is a classic example of the neo-liberal package described by Colclough.[112]

[[112] Colclough C. & J. Manor, *States or Markets? Neo-liberalism and the Development Policy Debate*, Clarendon Press, 1991, pp 197-213.]

In both countries lenders and donors have made strong efforts to drive policy, though to my knowledge there are no recent examples in Ghana of Bank authorship of government documents as was the case for the Tanzanian social sector policy. Ghana, however, implemented in the 1980s many of the measures that have thus far eluded Tanzania: for example, a student loans scheme, a textbook fund, and elimination of government expenditures on boarding costs and school food. The effect of those measures has not been fully evaluated, but may not have had the intended results, and it may in the longer run be to Tanzania's benefit that many of the BWI policies have been resisted in spite of the heavy Bretton Woods pressures.

The main difference between the countries in the context of cost sharing is the rapid rise of private secondary schools in Tanzania as a result of liberalisation policies and a history of minimal access to secondary education. Private schooling is the most expensive form of cost sharing for individuals, and it properly forms a significant part of analysis in a study such as this one when it becomes a major plank in government policy. In Tanzania, as

elsewhere, the World Bank has vigorously advocated the expansion of private secondary schools as well as fee increases in government schools on the basis of very little evidence and a good deal of dogma, and has also constructed arguments for cost reductions in the state system on the basis of its perceptions of private school performance.[113] The Bretton Woods emphasis on cost cutting and public expenditure reductions had a cruel effect on education expenditures and Tanzania is one of the lowest spenders on education, expressed as a percentage of GDP.

[[113] For a similar criticism related to the health sector, see Mills A, *Improving the Efficiency of Public Sector Health Services in Developing Countries: Bureaucratic vs Market Approaches*, Health Policy Unit, London School of Hygiene and Tropical Medicine, p 7: 'In the two, recent reviews of developing country health policies (World Bank 1993), it is remarkable how many reforms are proposed, but how little detailed evidence can be put forward on the impact of past reforms in terms of

quantitative measures of efficiency or equity.']

This case study is based on work undertaken in Tanzania between 1992 and 1996, including a specially prepared survey which took place in August 1994.[114] Other sources of information on households and schooling are taken from two large scale surveys, one in 1991 by Cornell University and the Economic Research Bureau (ERB) of the University of Dar es Salaam and one by the World Bank in 1993/94.

[[114] The survey work for this chapter was undertaken with the assistance of TADREG, and researchers included Brian Cooksey, Stella Bendera, Abel Ishumi, P. Lipembe, George Malekela, Emmanuel Nkumbi, Alice Rugumyamheto, Joseph Rugumyamheto, Fred Sichyiza, John Sivalon, and Fidelis Wamara who entered the raw data. I was also assisted by E. E. Moshi, who sadly died before the work was completed: he was a fine man and a great Tanzanian educator. Lucy Stevens and Samer Al-

Samarrai assisted with data analysis.]

B. Structure of the Education System

Structure and Curriculum

Tanzania, unlike Ghana, has not changed its education structure over recent years to expand the basic education cycle. Apart from pre-school education, which is not publicly provided, though there is a policy to do so[115], there are 7 years of primary education (up to Standard 7, when there is an examination), followed by four years to Ordinary Level (O Level, Form 4). Those who are permitted to proceed beyond O level take a 2 year Advanced Level (A Level, Form 6) course, followed by university.

[115 *Tanzania Education and Training Policy*, MOE, March 1995, p 10.]

As with Ghana, there has been some concern about the size of the curriculum. The primary curriculum was to have been reduced

from 13 to 7 subjects, but the reform was postponed. However, unlike Kenya, not all subjects are examined, and the Standard 7 examination covers only Maths, English and a General paper. Three quarters of the teachers in my survey agreed that secondary curriculum reform was needed.

Enrolments and Staffing

Until the liberalisation and economic reform programmes education policy emphasised primary education, and entry to post-primary education was restricted. Table 23 shows the trends.

The table shows that apparent enrolment ratios were rising slowly for primary education although the enrolment of children of school age only was constant. While primary enrolments rose by 18 per cent between 1989 and 1995, secondary enrolments rose by 48 per cent, with over half accounted for by private schools. The proportion of private enrolments fell for the last three years or so of the period as enrolments grew in the state schools.

Table 23: Enrolments in Tanzanian Primary and Secondary Education

	1990/1	**1991/2**	**1992/3**	**1993/4**	**1994/5**	**1995/6**	**1**
Primary Enrolments (1)(3)	3,379,000	3,507,394	3,599,580	3,732,493	3,793,201	3,872,473	3
Apparent Enrolment Ratio (2) (3)	73.5	74.4	74.2	74.9	77.9	77.6	
Net Enrolment Ratio (2) (3)	54.2	53.8	54.2	53.7	55.2	55.4	
Primary Teachers (1)(3)	96,850	98,714	101,306	101,816	103,900	105,280	1
PTR	34.9	35.5	35.5	36.7	36.5	36.8	3

PTR	54.0	55.5	55.5	56.7	56.5	56.8	5
Secondary Enrolments (1)(2)(3)	145,242	166,812	175,776	180,899	186,246	196,375	1
of which private (per cent)	57.4	55.7	55.2	58.2	55.2	53.1	
Secondary Teachers (2)(1)(3)	6,930	8,649	8,926	9,568	10,928	11,158	1
Apparent Enrolment Ratio						5.1	
PTR	21.0	19.3	19.7	18.9	17.0	17.6	1

Notes and Sources: From MOE statistics. (1) *Basic Education Statistics in Tanzania (BEST): Regional, 1994*, MOE March 1996. (2) *BEST 1989-1993*, MOE June 1994. Most Tanzanian education

statistics differ between sources. The population base for the AER is extrapolated from the 1988 census. (3) *Basic Education Statistics in Tanzania (BEST), 1995*, & 1996, MOE 1996 & 1997

As with Ghana, survey data provide alternative enrolment ratios, and reveal enrolment ratios higher than those given in the normal education statistics which use school registrations and population extrapolations. These are shown in Table 24. The data show that girls' enrolments are relatively high at most income levels, at both primary and secondary school. Secondary enrolment ratios are very low indeed: the high proportion of private enrolments is placed into context, because while it is to be expected that a section of the population will have sufficient income to purchase secondary education, it is highly unlikely that a figure of 50 per cent would be maintained as enrolments rise. A further notable conclusion from the table it is evident difficulty faced by urban children in gaining access to primary education, particularly in Dar es Salaam.

Table 24: Primary and Secondary Enrolment Ratios: Tanzania

1993

	Lowest Quintile		2nd Quintile		3rd Quintile		4th Quintile		Top Quintil	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Femal**
Apparent Enrolment Ratios										
Primary School										
Dar es Salaam	n/a	n/a	64	60	79	66	78	80	74	72
Other Urban	79	94	88	91	90	103	92	86	88	92
Rural	77	74	75	73	76	96	82	75	90	87
All Tanzania	77	76	77	76	79	97	85	79	87	86
Secondary School										
Dar es	n/a	n/a	n/a	16	10	3	14	21	23	21

Dar es Salaam										
Other Urban	1	2	8	13	6	10	17	22	31	28
Rural	3	2	6	3	14	5	12	6	15	7
All Tanzania	3	2	7	5	11	6	14	12	23	17
					Net Enrolment Ratios					
Primary School										
Dar es Salaam	n/a	n/a	53	41	47	46	49	63	51	53
Other Urban	54	60	57	70	59	68	62	68	69	68
Rural	50	52	52	53	53	62	51	54	66	65
All Tanzania	50	53	53	56	54	63	54	59	65	65
Secondary School										
Dar es	n/a	n/a	n/a	16	7	0	9	19	18	19

Salaam										
Other Urban	1	2	8	12	5	6	11	16	22	24
Rural	2	2	3	3	9	4	9	6	7	5
All Tanzania	2	2	4	5	8	4	9	10	15	14

Notes and Sources: From Social Sector Household Survey. Note that the sample sizes for secondary students were low, to the point of insignificance in some cases, and margin of error in others.

Like Ghana, the distribution of the PTR in Tanzania between regions varies considerably, as does the number of pupils per stream. The average number of primary teachers per stream (class), however, is usually close to 1, with some exceptions, and the national average is 1. The primary PTRs are also considerably higher than Ghana, while the apparent primary enrolment ratio is

similar, implying there will be considerable difficulty in raising the PTR without raising enrolments. Where there is a significant mismatch between the two ratios there exists an excess or deficit of teachers against the norms of one teacher per stream.

It can be seen in Table 25 that the variation around the average is mainly the result of higher levels of staffing per stream in the urban areas and in some cases a higher density of enrolment, resulting in larger average stream sizes. While class and school sizes are larger in urban centres, the PTR is smaller, reflecting underutilised teachers. The PTR exceeds class sizes: to have lower class sizes would require an even greater imbalance between the PTR and stream size (increases in the aggregate pupil teacher ratio do not necessarily achieve larger classes; neither is the opposite automatically true). The efficient disposition of teachers is a critical issue in considering cost sharing, because where the disposition is not efficient parents are made to pay more than they otherwise would.

Table 25: Primary Enrolments and Teachers by Region:

Tanzania 1994

Region	Enrolments	Teachers	PTR	Streams	Teachers/Stream	Pupils/St
Arusha	234,518	5,557	42.2	6,039	0.9	38.8
DSM	231,437	5,575	41.5	5,304	1.1	43.6
Dodoma	184,671	5,486	33.7	4,874	1.1	37.9
Iringa	232,985	5,992	38.9	6,987	0.9	33.3
Kagera	201,363	6,092	33.1	5,259	1.2	38.3
Kigoma	134,932	3,784	35.7	3,620	1.0	37.3
Kilimanjaro	242,493	8,022	30.2	6,700	1.2	36.2
Lindi	85,001	2,782	30.6	2,722	1.0	31.2
Mara	193,559	5,302	36.5	5,591	0.9	34.6
Mbeya	274,229	7,805	35.1	7,932	1.0	34.6
Morogoro	196,735	5,614	35.0	5,543	1.0	35.5
Mtwara	129,996	4,004	32.5	4,346	0.9	29.9
Mwanza	312,340	7,458	41.9	8,161	0.9	38.3

Pwani	99,039	2,620	37.8	3,180	0.8	31.1
Rukwa	113,934	3,138	36.3	3,198	1.0	35.6
Ruvuma	138,426	4,736	29.2	4,064	1.2	34.1
Shinyanga	284,399	5,700	49.9	8,391	0.7	33.9
Singida	133,833	3,556	37.6	3,575	1.0	37.4
Tabora	151,058	4,393	34.4	4,351	1.0	34.7
Tanga	218,793	6,284	34.8	6,106	1.0	35.8
National	3,793,201	103,900	36.5	105,943	1.0	35.8

Source: Estimated from BEST 1994

Higher Education. The Tanzanian higher education system is fragmented with institutions which duplicate each other's activities. The higher education system is characterised by low student teacher ratios, small institutions, and low capacity utilisation.[116] As in many centrally planned economies, sectoral ministries and agencies established their own training institutions: this has the

effect of making proper analysis very difficult. The dominant institution is the University of Dar es Salaam with some 3,000 students, with an average student/staff ratio of 4.6. There has been considerable discussion about reforming the sector.

[116 For some detail see Omari I, P. N. Materu & T. Mteleka, *Rationalisation of the Tertiary Education and Training Sector in Tanzania*, Ministry of Science, Technology and Higher Education, Draft, March 1996.]

In conclusion, apparent primary enrolment ratios may have risen slightly, while the net enrolment ratios are stagnant. The secondary enrolment ratio is low, and there is less likelihood of poorer families being able to place their children in secondary school. Those enrolment trends provide important background to any analysis of cost sharing.

C. The Economy, Public Finance and the Education Sector

As with Ghana, the overall economy and public finances have had

a very significant impact on the education sector and the discretionary resources available. Weaknesses in public finance management reduce the feasibility of making budgetary reallocations.

Figure 5: Shares of Government Expenditure on Education in GDP and Total Budget, Tanzania 1990-1996

Notes and Sources: As previous tables.

National Income and Public Expenditures

Figure 5 depicts the trends over recent years. The left hand axis of the Figure 5 measures public expenditures and the right hand axis measures national output. The four lines plot trends in GDP, total government expenditure, discretionary government expenditure (after items such as pensions and debt payment are subtracted), and education sectoral expenditure. The shaded area in the chart illustrates the gap between total government expenditure and total government discretionary expenditures.

The chart shows that there have been fluctuations in the level of non-discretionary expenditures, but some of these fluctuations may be accounted for by poor data, and some by deferral of debt payments: it can be seen that the budgeted 1996 amount is returning to the more normal level of about one third of the budget. In other words, one third of all government recurrent expenditure is not allocated to expenditures on services and other items, but to debt payment.

Table 26: Shares of Government Expenditure on Education in GDP and Total Budget, Tanzania 1990-1996 (Actual and estimated expenditures in million shillings at current and constant 1994 prices)

Current Prices	**1990/91**	**1991/92**	**1992/93**	**1993/94**	**1994/95**	**1995/96**
GDP	935,074	1,130,596	1,267,432	1,635,470	2,284,600	2,998,27
Total	161,224	199,670	250,942	263,226	386,573	470,014

Government Recurrent Expenditure						
Government Exp/GDP	17.2%	17.7%	19.8%	16.1%	16.9%	15.7%
CFS (1)	49,817	59,165	68,166	33,826	109,376	160,690
CFS % recurrent expenditure	30.9%	29.6%	27.2%	12.9%	28.3%	34.2%
Discretionary Recurrent Expenditure(2)	111,407	140,505	182,776	229,400	277,197	328,805
%GDP	11.9%	12.4%	14.4%	14.0%	12.1%	11.0%
% Total	69.1%	70.4%	72.8%	87.1%	71.7%	70.0%
Education Recurrent (see notes)	21,880	27,587	33,055	46,782	78,351	78,587
as % GDP	2.3%	2.4%	2.6%	2.9%	3.4%	2.6%

as % discretionary recurrent exp	19.6%	19.6%	18.1%	20.4%	28.3%	23.9%
as % total recurrent exp	13.6%	13.8%	13.2%	17.8%	20.3%	16.7%
1994 Constant Prices						
GDP	1,753,264	1,729,093	1,602,451	1,635,470	1,746,280	1,823,47
Total Government Recurrent Expenditure	416,004	422,115	429,610	352,708	386,573	373,905
Discretionary Recurrent Expenditure (2)	287,462	297,037	312,911	307,383	277,197	261,570
Education Recurrent	56,457	58,321	56,590	62,685	78,351	62,517
Memo item:	100	123	148	188	245	308

deflator (3)						

Notes and Sources: From 1996 *Public Expenditure Review (draft)*, which was undertaken by World Bank staff and consultants. I have chosen to use the draft 1996 PER data to provide an up-to-date a picture as possible, and to make the figures in the table consistent with each other. However, the data are very misleading, in that the 'actual expenditure' figures are drawn from the Estimates Books and not the appropriation accounts. The 1993 and 1995 data are particularly suspect. Education expenditure in 1993 was actually TSh 40 million. The 1995 data may contain expected counterpart funds which were neither transferred to the Treasury nor spent, but for some reason remained in the accounts. (1) CFS = Consolidated Fund Service, which is mainly made up of debt costs. (2) Total recurrent less CFS. (3) Deflator from IMF tables.

The data, explained in the notes to Table 26, are also not reliable: they are drawn from the 1996 PER undertaken by World Bank

staff. Nevertheless, apart from the 1994/95 estimated expenditures which are plainly wrong, it does appear that Tanzania has been under spending on education, with total recurrent expenditures hovering at about 2.5 per cent of GDP, and 20 per cent of the discretionary budget, which is itself under 20 per cent of GDP. As in the case of Ghana, it must be concluded that there is a strong case for increased education expenditures.[117]

[[117] Cf the World Bank's *Social Sector Review*, para 36 (in the draft): '...spending is already high for such a poor country' (a curious sentiment when it is intended as a justification for higher household contributions!).]

D. Trends in Recurrent Education Expenditures in Tanzania

Total Expenditure Trends

Table 27 sets out recent trends of public expenditure on education in Tanzania by sub-sector, in both current prices and constant

prices (1994 equivalent shillings). The trends are shown graphically in Figure 6. There appears to have been a steady increase in total primary expenditure in real terms over the period, while secondary expenditures, having risen, are on a falling trend.

Table 27: Trends in Government Education Expenditures, Tanzania 1990-1996 (Actual expenditures in '000,000 shillings at constant 1994 prices)

Current prices	**1990/91**	**1990/91**	**1991/92**	**1992/93**	**1994/93**	**1994/95**
Primary	10,284	13,104	16,693	23,859	49,174	51,602
Secondary	4,376	4,828	4,793	6,783	7,533	6,608
Teacher Education	1,750	1,931	1,653	2,105	2,013	1,458
Higher & Technical	3,282	5,242	6,611	9,824	15,922	16,836
Other	2,188	2,483	3,306	4,210	4,524	2,596

Total	21,880	27,587	33,055	46,782	79,166	79,100
Constant 1994 prices						
Primary	19,283	20,041	21,105	23,859	37,587	31,383
Secondary	8,205	7,383	6,060	6,783	5,758	4,019
Teacher Education	3,282	2,953	2,090	2,105	1,539	887
Higher & Technical	6,154	8,016	8,358	9,824	12,170	10,239
Other	4,103	3,797	4,179	4,210	3,458	1,579
Total	41,026	42,191	41,793	46,782	60,512	48,107

Notes and Sources: Ministry of Finance. Higher education does not include interest rate subsidies for the student loans scheme. The data are not consistent with the PER.

Figure 6: Trends in Government Education Expenditures, Tanzania 1990-1996 **(Actual expenditures in '000,000 shillings**

at constant 1994 prices)

On the other hand, higher and technical education expenditures rose as the post secondary sector faced the need for rationalisation. In real terms total expenditures on education rose by about 20 per cent between 1989/90 and 1993/94. They appear to have risen by a further third in 1994/95, but those data require further investigation, particularly in view of the 1995/96 expenditure. The total real increase over the six years of the period was under 10 per cent.

Taking into account the enrolment trends, crude average expenditures for primary and secondary education can be derived. These are shown in Table 28 and shown in Figure 7.

Table 28: Average Expenditures per Student, Tanzania
Tanzanian Shillings

	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96

Current Prices						
Primary	3,044	3,736	4,637	6,392	12,964	13,325
Secondary	30,129	28,941	27,268	37,498	40,447	33,650
1994 Prices						
Primary	5,707	5,714	5,863	6,392	9,909	8,104
Secondary	56,492	44,261	34,475	37,498	30,916	20,465

Notes and Sources: Budget and enrolment data as previous tables

Secondary average expenditures fell sharply, even though the pupil teacher ratio also fell, reflecting the increase in enrolments as well as measures to reduce expenditure on items such as food. Primary averages were maintained. Over the period, the ratio of secondary average expenditures to primary average expenditures per pupil fell from 8 to 3.6.

Figure 7: Per student Government Expenditures for School Education, Tanzania 1990-1996 **(Actual & Budgeted TSh at**

constant 1994 prices)

In conclusion, there were strong pressures on education expenditures which resulted in falling secondary education expenditures and slowly rising primary expenditures. Education took a lower proportion of national income compared to other countries. Public sector reforms should release considerably more resources into the discretionary budget, and this weakens the case for higher dependence of the sector on cost sharing.

E. Distribution of the Benefits from Public Expenditure

From the 1993/94 household survey it is possible to compute a Lorenz curve for the distribution of public expenditures on education between consumption quintiles. While the sample size for primary children was large (over 4,300), there were less than 400 secondary children in the sample and only 5 government tertiary students. These samples of course represent the low enrolments at these levels, but also reduce the reliability of the benefit incidence tables. The Lorenz curve is shown in Figure 8.

Figure 8: Benefit Incidence of Public Expenditures on Education in Tanzania, 1992/93

Notes & Sources: Computed from Grosh M. and L. Forgy, *Incidence of Selected Social Services in Tanzania*, mimeo, April 1994, and Tanzania: *Social Sector Review*, draft April 1995, table S.6, p xxvi. The sample sizes for post primary education were small.

Primary education expenditures are mildly progressive, while secondary expenditures are skewed in favour of the higher income groups. University education is shown to be entirely benefiting the higher income group, but this may reflect the sample size. Compared with Ghana, the distribution of the benefits of public expenditure on education in Tanzania seems to be less progressive. While the history of the country would suggest that the incidence of primary education expenditures was progressive, the fall in enrolments which occurred during the 1980s and the failure of poorer people to go to school, particularly in urban areas, must be influencing the pattern. In many respects the

incidence of secondary education benefits is to be expected, and, indeed, given the absolute low enrolments, it indicates that the distribution of secondary opportunities is not unacceptably regressive. How far this has changed over recent years is unknown, and the effect on the poor of phasing out catering subsidies remains to be seen.

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F. Household Expenditures and Cost Sharing in Education

There has been one survey specifically designed to investigate the use of social services (health, education, water supply), financed

by the World Bank: this was the Human Resources Development Survey (HRDS) of 1994. For education, the survey suffered sample size problems, but yielded much useful information. A previous household survey was conducted by Cornell University in association with the Economic Research Bureau of the University of Dar es Salaam. The World Bank and Cornell/ERB surveys used the same national sampling frame.

My survey, undertaken in August 1994, covered 18 government secondary schools in 14 districts, in which 863 students completed questionnaires, and 15 private secondary schools in 10 districts, involving 942 students.[118] A total of 294 parents were interviewed, 184 with at least one child in the private schools and 110 with at least one child in the state schools. The parents with at least one child in private school reported details on expenditures on a total of 600 children, while those with at least one child in state schools reported details of expenditures on 642 children. In addition, we administered a simple test in English and Maths. As with the Ghana survey, the sample cannot be

considered representative as it was school-based, and not chosen from a national sample. In addition, 429 teachers from government schools were interviewed and 217 teachers from private schools.

[118 The private school sampling was problematic as there was some resistance to the survey teams.]

The Tanzanian Household and Cultural Issues Related to Cost-Sharing

Tanzanian households differ in their characteristics from Ghanaian households, although of course there are similarities. The Marriage Act of 1971 and the laws of inheritance put a strong emphasis on paternal responsibility, and matrilineal kinship structures are gradually disappearing.[119] One of the most significant developments has been the 'transformation of the rural household from a unit of production into an income-sharing unit',[120] which has resulted partly from the decline in formal paid employment. The 'second economy' has been expanding rapidly

as people have responded to the pressures occasioned by economic changes.[121] Schooling competes with income earning, as is shown in the HRDS data, which report a significant number of hours worked by children out of school: boys of 7-9 worked about 20 hours per week and girls for about 30 hours, though these figures may be doubted (see below).[122]

[[119] See Omari C. K, *Tanzania Household and Community Structures and Dynamics*, mimeo, University of Dar es Salaam Sociology Dept, 1994. But see also Booth D. & al, *Social, Economic and Cultural Change in Tanzania*, SIDA, 1993, pp 28 ff for an account of the erosion also of patriarchal systems.

[120] Mbilinyi M, *Big Slavery: Agribusiness and the Crisis in Women's Employment*, DSM University Press, 1991, p 9 23-24, quoted in Booth op cit. p 29,

[121] Maliyamkono T. L. & M. S. Bagachwa, *The Second Economy in Tanzania*, James Currey, 1990.

[122] See Mason A. D. and S. R. Khandker, *Household Schooling Decisions in Tanzania*, World Bank Poverty and Social Policy Dept, July 1995, p 15.]

It appears that parents take more responsibility for school charges than in Ghana, where frequently the child has to seek money from several sources and from parents who do not live together. In the World Bank household survey 65 per cent of the children in the sample lived in the same household as their father: 80 per cent of the sample lived in the same household as their mother.

In my sample of private school students, 40 per cent gave the source of their school fees as their fathers, and 25 per cent as both parents (6.5 per cent as mother): thus most of the sample receive their fees from expected sources. Nearly 13 per cent gave

their 'uncles' as the source. In the HRDS less than 4 per cent of the households reported help with expenses from outside the immediate household.

The average number per household of children under 15 in the HRDS sample across the country was 2.8, with the poorest 20 per cent averaging 3.4 children under 15, out of an average household size of 6.1 (7.2 among the poorest). Over a third of the households with 5 children or more were situated in the poorest 40 per cent of the population. Just under 45 per cent of the 625 age group were enrolled in primary or secondary school, implying a household enrolment ratio for that age group of under 50 per cent. Poorer families have lower household enrolment ratios and more children, which means that there is a considerable burden on them in financing children in school, particularly secondary school. In my samples of secondary school children, the median number of full siblings was 6: most of the sample ranging between 4 and 8. Two thirds of the sample had siblings in primary school. While a quarter of students enrolled in government schools had siblings in secondary schools, a little over half the students in private schools

had siblings in secondary school.

The Cornell-ERB survey estimated household enrolment ratios for both the 6-12 and the 13-18 age groups. These are shown in Table 29. Of primary school age children less than one third were enrolled in the poorer groups. The secondary data are a little surprising and may be the result of small sample sizes, though they are similar to the HRDS data, which had the same problem of sample size.

Table 29: Household Enrolment Ratios in Tanzania, 1991

	All Tanzania	Rural	Urban Non-DSM	DSM
Primary				
Very poor	30.9	31.3	26.5	36.3
Poor	37.4	37.8	32.5	38.3
Non-poor	45.8	44.3	46.6	58.1
Secondary				

Very poor	45.4	44.3	53.6	41.9
Poor	55.6	55.7	58.1	47.2
Non-poor	52.2	54.4	45.1	49.2

***Notes & Sources*: *Households, Consumption & Poverty in Tanzania: Results from the 1991 National Cornell-ERB Survey*, August 1993, table 6.2.1. The ratios are for those households with children in school.**

As in the case of Ghana, families attach a good deal of importance to education. From my survey it is clear that other concerns apart from concerns for future employment are strong. For example, parents were asked what their children would gain from completing Form 4, and their answers are tabulated in Table 30.

Table 30: What do you think your son/daughter will gain from completing Form 4?

Question	Yes %		No %		Don't Know %	
	State	Private	State	Private	State	Private
Better job opportunities	42.7	56.9	31.8	16.7	25.4	26.4
Access to further education	80.0	72.9	6.4	8.3	13.6	18.8
Good behaviour	79.1	77.1	5.5	2.8	15.4	20.1
Better marriage prospects	30.0	27.8	25.5	26.4	44.5	45.8
Practical skills for life	66.4	93.1	18.2	2.1	15.4	4.9
Prestige of finishing form 4	42.7	38.9	30.9	38.9	26.3	21.2
Will learn to think for him/her self	84.5	86.1	7.3	1.4	7.2	12.5

It is perhaps dangerous to draw conclusions from such a

pattern of responses, but it is noticeable that the parents of children in private schools put significantly more weight on job opportunities and practical skills, although there is surprising pessimism about the benefits to be derived from schooling in the job market. The relatively low emphasis of parents whose children are in state schools on 'practical skills for life' is interesting, and may reflect the Foster thesis that there is a distinction between 'practical' skills and the skills needed to be a government employee. Overall the hope that education will enable children to think for themselves is most important, and good behaviour ranks high in expectations.

Household and Government Expenditures on Education

HRDS data show that household direct and indirect expenditures on education amounted to a little over half the level of government expenditures, or about a third of total (government plus household) expenditures. However, rural

households on average contributed the equivalent of about 20 per cent of government expenditures on their primary education provision.

Table 31 gives an indication of the relative expenditure per pupil. The table can only be taken as indicative, and shows both the balance of expenditures between families and the state, and the wide variations between urban and rural areas. Dar es Salaam families in the sample cited spend 10 times as much on their primary children as the poorest rural family, and a little more than the government.

Table 31: Government and Household Financing of a Primary Pupil, Tanzania 1993

Item	Government	Households (3rd Quintile)				Lowest Rural Quintile
		Rural	Urban	DSM	All	

			(excl DSM)			
Teaching and private tutoring	7,357	30	540	760	140	0
Materials	300	440	900	1,500	650	400
Maintenance	0	in kind and through contributions				
Uniforms		430	1,800	3,400	1,400	400
Fees & Non-fees		360	800	2,000	480	270
Board &c		100	15	20	70	0
Transport		55	90	2,000	80	0
Other		60	320	1,000	110	40
Totals	7,657	1,475	4,465	10,680	2,930	1,110

***Notes and Sources*: Household data derived from HRDS 1993. Government expenditures from dividing total enrolments by**

1993/94 actual expenditures. These household expenditure data are almost certainly underestimates.

Education Expenditures within Households

Both the HRDS and the Cornell-ERB published results combine cash and non-cash consumption expenditures, and when this is done the apparent percentage expenditures on education appear to be low. For example the HRDS cites education as accounting for 1.4 per cent of the expenditures of the average household, which seems low until it is understood that some 15-30 per cent of the total expenditures are non-cash.[123] This is mainly the result of growing own food, to which the surveys impute a cash equivalent value, and in rural areas between 40 and 50 per cent of total food consumption is from own production.[124] The Cornell-ERB study showed even lower percentages, fractions of 1 per cent.

[[123] HRDS p xix and pare 28 p 37. The average ratio of cash to non-cash expenditures in the HRDS is 86 per cent with a standard deviation of 18: rural households have a mean ratio of 77 per cent, SD=19.

[124] World Bank, *Tanzania: A Poverty Profile*, 1993, p 26.]

A better way of using the data for our purposes is to take out imputed income. The average expenditure per household on food across the country is a little over 71 per cent: 61 per cent in Dar es Salaam. Non-food expenditures therefore seem to be a lower proportion of total expenditures than in Ghana, perhaps reflecting deeper general poverty in relation to prices. On average, household expenditures on education, based on HRDS published data, were 5 per cent of non-food expenditures (which would be mainly cash). This is a little lower than the Ghana average (5.7 per cent). Nevertheless, although the Social Sector Review emphasises the low level

of household expenditure on education, as a percentage of cash discretionary expenditures (assuming food as non-discretionary for most households, and therefore a low likelihood of substitution between food and education) Tanzanian households spend only a little less than Ghana. In Dar es Salaam the average percentage share of education expenditure in non-food expenditures was 3 per cent, possibly reflecting high costs of other items, and partly the result of higher incomes of the better off segment of the sample. Although comparisons are difficult, one possible conclusion is that on average there is some scope in households to increase private expenditures on education, although the Social Sector Review assertion that household expenditures on education were 'low' is misleading: surveys show that the people will pay more but not for what they get at present.

Tanzanians, according to the HRDS average data, spend nearly 2 per cent of (cash + imputed) household income on

health. This seems to conform with the Ghanaian pattern where expenditures on health take a larger share than those on education: whether the relative shares have switched over the last few years or not is not possible to determine. However, it is likely that health expenditures are less discretionary than education expenditures, and that households will reduce education expenses if faced with higher health costs.

Table 32 summarises the main items of expenditure per primary child from my samples of parents and total average expenditures per child. The table distinguishes between parents who have secondary school children in private schools, and those whose secondary school children are in state schools, in order to see whether there is any variation in their patterns of expenditures. The fee element of TSh 200 is the 'UPE' contribution, which were collected by the schools but in many cases were not retained in the schools. Although most parents appear to have paid their fee, this

was not universal. The fees were collected in the district headquarters, and perusal of the accounts of two districts showed average contributions of TSh 57 and TSh 111 respectively.[125] Other evidence showed a considerable rise in contributions when the schools were permitted to retain fees.[126] At the time of the survey, in addition to the UPE contribution, parents paid - or were supposed to pay - a one-off registration fee of TSh 500, some TSh 300-500 for school projects, as well as the larger items such as uniforms.

[[125] Penrose P, *Review of Public Expenditures in the Education Sector*, Commission of the European Communities, July 1992, p 21.

[126] World Bank, *Teachers and the Financing of Education*, Population and Human Resources Division, December 1991 (draft), p 50.]

Table 32: Primary Pupil Household Expenditures, Tanzania 1994

Tanzania Shillings

	Parents of Government Secondary Students					Parents of Privat		
	Fees	Uniform & Shoes	Books & Materials	Other	Total	Fees & Tuition	Contributions	Un & Sh
All sample								
Mean	264	4,928	2,502	4,091	8,686	234	479	4,4
Median	200	4,000	1,500	3,000	6,800	200	500	4,0
Maximum	1,000	20,000	20,000	11,000	36,400	1,500	1,715	13,
Minimum	200	750	200	100	200	200	32	10
Number	178	188	183	179	191	295	252	33
Urban								
Mean	293	4,593	2,517	4,841	9,139	226	447	5,6

Mean	200	4,000	2,017	4,041	5,100	220	447	3,0
Median	200	3,900	1,750	5,000	7,100	200	400	5,0
Maximum	1,000	18,000	20,000	11,000	36,400	800	1,700	13,
Minimum	200	750	600	700	200	200	32	200
Number	68	66	64	68	70	92	78	93
Peri-urban								
Mean	262	6,962	3,204	2,366	9,611	306	595	4,3
Median	200	4,000	3,000	1,000	8,400	200	500	4,0
Maximum	700	15,000	6,000	22,000	26,000	1,500	1,600	12,
Minimum	200	1,500	200	200	200	200	120	500
Number	29	29	27	25	29	65	46	91
Rural								
Mean	240*	4,532	2,285	3,999	8,050	205*	457	3,8
Median	200	3,000	1,200	3,000	6,250	200	500	3,3
Maximum	500	20,000	15,000	10,000	25,250	440	1,715	12,
Minimum	200	1,000	300	100	1,000	200	50	100

Number	81	93	92	86	92	138	128	147

***Notes & sources*: In this table as in all other tables from survey, I have omitted zero value cases on the grounds that (a) the sample is not representative; and (b) I wish to show what is paid by those who actually pay. *mean/SD>=2**

Although the sample does not in general yield statistically significant results, it is interesting that the variations around the means of the expenditures reported by parents with children in private schools is smaller than those reported by the parents with secondary school children in state schools, and that a number of the private school parent means are in fact statistically significant. The variation in payments by state school parents seem to be generally higher (and not always easy to explain, and possibly due to data or reporting errors, as well as the smaller government school sample size). The implications of the data would be usefully explored with larger samples. Do parents with secondary school

children in private schools pay more or less than those with children in state schools once income is controlled for? Do they purchase more or fewer books and materials?

These data may be compared to those of the HRDS, which cites the average expenditure per pupil as ranging from TSh 2,948 to TSh 9,976 with an average of TSh 3,842. Those data are taken from the draft Social Sector Review which is based on a cleaned data set. Table 33 shows expenditures derived from the original set: the main difference between the two sets are found in the highest quintile, and the amounts are a little higher than the final data set.

Table 33: Household Expenditures on Primary Education, 1993

Consumption Quintile	Total Household Expenditure-	Expenditure/primary pupil	Average enrolment

	Primary		
1	5,085	2,132	2.4
2	7,396	2,782	2.7
3	9,138	3,419	2.7
4	9,744	4,002	2.4
5	23,305	10,118	2.3

***Notes & Sources*: HRDS, uncleaned data set**

Table 32 shows minimum expenditure of TSH 1,040 with high maxima, but with two thirds of the sample ranging between about TSh 4,000 and TSh 15,000. It appears from these data that my sample falls in about the 4th quintile of the HRDS on average, although my survey took place a year after the HRDS and costs were rising. Nevertheless, the HRDS estimations seem low, for example, the data in Table 31. One reason may be that there were many households reporting enrolments in school but not reporting expenditures: this is

evident in the data set.

School uniforms followed by books and supplies make up the biggest private expenditures, with uniforms comprising half the total. It is notable that the costs of primary school are constant between localities, and that the median expenditures do not change much except perhaps being a little lower in the rural areas. In contrast with Ghana, food expenditures do not figure highly. The households in my sample pay very similar amounts in indirect and direct expenditures for each pupil to those paid by the government. In terms therefore of cost *sharing* there seems to be a 50-50 split, but there is relatively little cost *recovery*.

How far do the direct and indirect costs of secondary schooling affect primary enrolments? The sample was not representative enough to explore the hypothesis that the higher the costs of secondary education the less parent spend on primary education. The median total expenditures

by parents with secondary school children in more expensive private schools on their primary school children were higher than those of parents with children in government secondary schools, except in the case of pert-urban parents. Other evidence from the HRDS shows that, as expected, higher income families spend more on education that lower income families, and that there are other variables which influence expenditures: the data would need to be controlled for these factors, and a representative sample would be needed.

Analysis of the HRDS data set showed that there may be a relation between the supply of schools and expenditures, and between access to government secondary schools and primary expenditures.[127] An increase in the supply of primary schools per head of total regional population is associated inversely with the amount spent by a family on a primary student, and the same effect is observed in the case of secondary schools. One possible explanation for this is that families send more children to school when more

schools are available, and that their budget constraints limit the amount that can be spend on each child. Another reason might be that costs of schooling are reduced when more schools are available: for example, there would be lower travel costs.

> **[[127] Deolalikar A. B, *The Demand for Schooling Quantity and Quality in Tanzania: A Note*, mimeo, April 1994. The conclusions of this paper need to be analysed further: many of the coefficients were low.]**

At a regional level, there is an inverse relationship between the number of government owned secondary schools in a given region and expenditure per child, reflecting the lower costs of state schools. In addition, it seems that families respond to the lower costs of secondary education with increases in their expenditures on their primary school children. In other words, because of these substitution effects operating at the household level, primary school

children benefit as much from reduced secondary costs which result from increased availability of government secondary schools as do secondary children. On the basis of a different sort of analysis, this conclusion is consistent with that of Lavy in Ghana, that the increased supply of secondary schools is associated with increased primary enrolments.

It does not appear that the costs of primary schooling are generally a major barrier to entry, although to the poorest will always be hard pressed to find even small amounts of money. One analysis of the HRDS data suggests that neither cost nor distance is a significant factor, but that supply constraints are. As far as opportunity costs are concerned the same study suggests these are significant for girls: imputing a 'market' wage to girls' time yields the result that school attendance is negatively related to the 'value' of their time. However, the opposite result was obtained for boys. The HRDS data are not compatible with my own survey of

secondary school students: whereas for the age range the HRDS records about 9 hours a week worked by school children when not in school (9 for boys and 10 for girls), in my survey both sexes reported about 4 hours work, slightly less for girls. The HRDS data are time log data, whereas my survey indicates how much the children think they work. Nevertheless, there are features of the study's approach that bear examination.[128]

[[128] Mason A. D. and S. R. Khandker, *Household Schooling Decisions in Tanzania*, World Bank Poverty and Social Policy Dept, July 1995. The FAST survey, a rapid survey carried out at the time of the HRDS by the World Bank, shows much longer hours worked by girls - up to 20 per week. The authors calculate 'opportunity time' as the difference between total hours worked by children not in school and total hours worked by children in school.

A reduced out of school work time would increase 'opportunity cost' as defined by Mason and Khandker, which would then dominate all other costs. Their approach results in opportunity costs being measured against an 80 hour week! It can be therefore of little surprise that the authors find that 'opportunity costs' are the biggest single component of household costs.]

One important survey was clear in its conclusions on the disenchantment of parents with primary school:

A small minority (57 percent) of household heads disagreed with the statement: '*Parents should contribute more towards their children's education*'. A similar proportion (59 per cent) disagreed with the statement: '*People like me cannot afford to send their children to school these days*'. But a large majority (82 percent) agreed with the statement:

'*More parents would send their children to school if they thought their children would benefit from schooling*'.[129]

[[129] TADREG, *Parent's Attitudes Towards Education in Rural Tanzania*, TADREG Research Report Nr 5, November 1993, p 21. The following pages make sobering reading, as they chronicle the frustration of parents with their schools: 'wanadai pesa kila siku ila matumizi hayajulikani - every day they want money but we never know what it's used for'; 'if they could give us the quality of education of colonial times we would be ready to pay for it by working as casual labourers'. The survey provides shocking insights into the reality of Tanzanian schools, including forced labour by pupils.]

These opinions are consistent with the financial data, which appear to indicate that there is some scope for increasing

household expenditures, and with the stagnant enrolment ratios, which indicate that there is continuing resistance to attending school. They also highlight the need for rapid improvements in the quality of sector management, and suggest that there is small likelihood of increasing enrolments until the public sector is able to operate more accountably and efficiently. the willingness of parents to pay more for education will depend on the ability of the state to improve quality, which will require higher expenditures and other measures.

Another small study of primary school cost sharing (1993) in two wards of Dar es Salaam[130] estimated the average cost to parents of sending a child to primary school at about TSh 5,000, which was equivalent to one month's minimum wage in the areas. The showed that some parents send no children to school because of cost. Other factors intrude:

> **I have two girls, neither of them is going to school.**

The first one (14 years old) was in standard five when she was expelled from the school when she got pregnant. The second one studied up to standard two only. I felt she was costing me too much and was wasting my money. She is stupid, does not understand anything in class...

[[130] Sumra S, *Primary Education and the Urban Poor: A Study of Parental Attitudes Towards Schooling in the Buguruni and Vinguguti Wards in Dar-es-Salaam*, PLAN International, 1993. See also Sumra, S. *Democratising School Management: Making Community Participation a Reality in Primary Schooling in Tanzania*, Faculty of Education, UDSM, 1993, paper prepared for the TADREG workshop on 'Quality and Equity Issues in Tanzanian Education Policy & Practice: Insights from Recent Research', DSM, December 1993.]

The common answer to this type of problem is that a system of exemptions can be set up. Such systems have limited success in health provision, where in principle they are easier to administer, but are rarely feasible in education systems, particularly in countries with weak administration systems. One successful example of community based means testing occurred during the Zambian drought, but it does not appear to have been extended to formal schooling in 'normal' circumstances, though in Zambia principals informally exempt children in many cases.[131] In Tanzania parents may apply for exemption to their village governments which in turn apply to the district office, which invariably approve the exemption. However, this involves the state taking responsibility for the fees, which it is rarely capable of doing. Furthermore, in a system in which government accounts and collection systems for fees are weak[132] and accountability structures barely in place, it is unrealistic to expect an exemption system to work.[133]

[[131] Booth D, J. Milimo, G. Bond, *& al*, *Coping with Cost Recovery in Zambia*, SIDA, 1994. Headmasters do not enforce payment when they believe that children may drop out for good, but one school is cited in the study where all children were sent home. See also Penrose P. & al, *Evaluation of the EU Structural Adjustment Support Programme in Zambia*, Evaluation Unit' DGVIII, Brussels, August 1996, Vol. II, chap 6.

[132] Andrea G. S. S. *Financing Education and Health at Local Government Level: A Comparison of Dodoma Rural District and Morogoro Municipal Councils*, Working Paper Nr 2, Local Government Support Unit, Prime Minister's Office, DSM, Feb 1996. An additional problem was/is the reliance of local government for general operating funds on collections from education fees, which has to some

extent been stopped but not entirely.

[133 See *Post-Primary Education and Training in Tanzania: Investments, Returns and Future Opportunities*, World Bank, draft, 1996, for the astonishing recommendation that records should be kept of the 'wealth' of all students as they enter primary school and pass through the system, in order to enable systematic means testing. Such centralised planning would not have been considered in the days of central planning...]

Secondary School

Table 34 shows the actual expenditures reported by parents of students in both government and private secondary schools.

Table 34: Household Expenditures on Form 4 Students,

Tanzania 1994

Tanzanian Shillings

	School Fees	Caution Money	Transport	Rent	Food	Uniform & Shoes	Books & Materials
State Schools							
mean	5,235*	758	9,004	4,591*	6,797	11,168*	6,095
median	5000	500	6000	4000	5000	9250	5000
minimum	2,000	300	1,000	2,000	600	1,800	500
maximum	20,000	5,000	35,000	8,000	24,000	30,000	30,000
N	100	19	23	11	35	100	101
Private Schools							
	School Fees	***Contribution***	**Transport**	**Rent**	***Tuition***	**Uniform & Shoes**	**Books & Materials**

mean	29,135*	4,136	3,718	3,196	11,667	8,278	7,452
median	30000	2500	3000	4000	9000	5000	5000
minimum	3,000	300	400	200	1,600	800	1,000
maximum	85,000	30,000	20,000	7,000	54,000	36,000	99,000
N	179	109	33	15	165	65	173

***Notes & Sources*: *=mean SD>=2**

Households face considerably greater costs for children in secondary schools than for those in primary schools. There are two features of the Tanzania system which are unusual. First, there is a very low secondary enrolment ratio, and second, there is a high proportion of secondary school students attending private schools. The latter fact is to be expected with such low enrolment ratios, as those who are able to pay will do so when state provision is not available.

Table 35: Schedule of School Fees, Tanzania

Tanzanian Shillings

	Government		Private		
	Day	Boarding		Day	Boarding
1993/94	5,000	8,000		26,000	38,000
1994/95	5,000	8,000		30,000	40,000
1995/96	8,000	15,000			
1996/97	20,000	40,000	Wazazi	60,000	90,000
			Trusts	90,000	150,000
1997/98	30,000	60,000			

***Notes and Sources*: MOE. Wazazi = parents' association (CCM). Figures vary for Trusts and those cited are upper limits. Government has set ceilings on private school fees of 80,000 and 110,000 for day and boarding schools respectively**

Table 35 shows the levels at which fees were set and the planned rises in government school fees. In 1994 fees for state day students were TSh 5,000, and TSh 30,000 for private school day students. Most of the sample students were day students: there were 53 boarders in the private sample, none in the government school sample. Fees for private school boarders were TSh 40,000 and TSh 8,000 for government schools.

Private schooling cost parents twice as much more a year as did government schooling. Private school students were required to make significant contributions towards the school building, and on average spent more on books and clothing, though the medians are similar. A little under a third of the sample incurred tuition costs as well. These data compare with the national average expenditure per secondary pupil reported in the HRDS of TSh 41,438, with a range of TSh 39,500 to 56,200 between the lowest and highest quintiles. Again, there may have been some under

reporting, and the non-representativeness of my sample (which is only Form 4 students) can be contrasted with the small but national HRDS sample. Table 36 gives the HRDS data.

Table 36: Household Expenditures on Secondary Education, Tanzania 1993

Tanzanian Shillings

Consumption Quintile	Total Household Expenditure	Expenditure per pupil	Average enrolment
1	43,459	39,577	1.1
2	42,074	39,577	1.1
3	75,456	35,071	2.2
4	60,798	40,171	1.5
5	90,081	56,212	1.6

***Notes & Sources*: HRDS, uncleaned data set**

These average expenditures represent about 10 per cent of average cash non-food expenditures of households (not adjusted for adult equivalence). Although the HRDS emphasises the low income-expenditure ratios of Tanzanian households, where households have secondary school students enrolled, this does not apply. In other words, another strong reason for low expenditures on education is the lack of access to secondary education.

Although the sample sizes become smaller, it is of interest to compare the urban, pert-urban and rural averages. These are shown in Table 37. Schools around towns appear to be much more expensive than either town or rural schools. This is partly because a greater part of the private school pert-urban sample was boarders, and material costs seem to have been higher. Rural parents' private school costs were a slightly smaller multiple of urban and pert-urban parents' costs.

Table 37: Form 4 Expenditures by Location, Tanzania 1994
Tanzanian Shillings

	State Schools			Private Schools		
	Urban	**Peri-Urban**	**Rural**	**Urban**	**Peri-Urban**	**Rural**
Mean	25,532*	40,963	33,151*	64,687*	69,593*	54,498*
Median	23,450	27,506	28,500	61,000	63,500	53,000
N	46	20	41	47	52	79

***Notes and Sources*: . *=mean/SD>=2**

Table 37 is based on the sample of parents. My survey also covered students, and the students at government schools answered questions on expenses. Table 38 shows their reported expenditures. The median expenditure of nearly TSh 39,000 is higher than that reported in the previous tables, and approaches that of the HRDS (which is still

possibly an underestimate because of the fact that half the country's secondary students are in private schools[134]). The parents questionnaires did not capture all the expenditures, and the students questionnaire was fuller.

[[134] The HRDS sample had only 80 private school pupils out of a total secondary sample of 380.]

Table 38: Government Secondary School Student Expenditures, Tanzania, 1994
Tanzanian Shillings

	School fees	Caution money	Exam fee	School travel	Rent	Food	Uniform	Textbooks	B
mean	6,307*	599	5,482	6,849	7,796	7,934	9,962	6,345	4,
stdev	1,736	993	1,191	8,587	7,277	8,697	7,369	6,500	4,
median	5,000	500	5,600	4,000	6,000	5,000	8,000	4,000	3,
percent	12.9%	1.3%	14.4%	10.3%	15.4%	12.9%	20.6%	10.3%	7.

N	752	347	774	504	137	291	761	472	82

***Notes & Sources*: 95 per cent of the surveyed students were form 4 students, and 5 per cent form 1 students. 53 per**
Table 0: 53 cent were day students. *=mean/SD>=2

About half of the government students were in boarding schools. Expenditure per student for day and boarding students was identical, although the composition varied. Whereas boarders paid higher fees and also incurred twice as high transport costs, day students paid more for food and for learning inputs. The median figures are shown in Table 39.

In 1994 the average expenditure by government for a secondary school student was around TSh 100,000. Parents contributed over TSh 20,000 in direct costs (fees, exam fees, and learning materials), not taking into account indirect and support expenditures such as uniforms and food. These are

national average figures and in some schools the ratios were higher and in others lower. Nevertheless, on average the cost recovery ratio was about 16 per cent (20,000/120,000).

Table 39: Government Secondary Day and Boarding Student Expenditures, Tanzania 1994

Tanzanian Shillings

	Day		Boarding	
	Median	**Number**	**Median**	**Number**
Fees	5,000	406	8,000	341
Caution Money	500	199	500	147
Exam fees	5,600	372	5,600	400
Travel	2,000	122	4,650	380
Food	6,000	209	5,000	76
Uniforms	10,000	400	7,000	358
Textbooks	5,000	276	4,000	197
Exercise Books	3,900	429	2,500	392

Exercise Books	5,900	429	2,500	392
Other	5,000	319	4,000	337
Total	31,670	455	31,200	402

***Notes & Sources*: Government school students survey**

Government School Finances

Financial data were collected from 14 out of the 19 government secondary schools visited. The school accounts showed money received from the government and from students. The government allocates money to secondary schools against travel, office expenses, maintenance, upkeep, 'special', catering, welfare and recreation, materials/laboratories, medical and other miscellaneous items. Salaries are managed from the central payroll but each head teacher receives a payroll statement. Table 40 shows the allocations per student and the average non-government revenue.

Table 40: Government Secondary School Budgets per Student: Tanzania 1993

School Type	Enrol	Government Allocation					Total from Students	Tot Sch Bud
		Total Allocation	Salaries	Salaries as % total	Catering	Catering as % total		
GB	437	159,529	19,679	12.3%	119,979	75.2%	11,018	170
MDB	416	154,307	31,608	20.5%	110,656	71.7%	15,422	154
BG	531	70,166	17,474	24.9%	49,271	70.2%	10,629	80,7
MD	849	63,759	13,937	21.9%	34,259	53.7%	5,767	69,5
MB	775	61,747	14,627	23.7%	32,412	52 5%	0	61,7
MD	581	58,452	14,128	24.2%	33,384	57.1%	10,762	69,2
MDB	543	53,181	7,395	13.9%	42,087	79.1%	6,949	60,1
MD	1,233	50,342	9,737	19.3%	38,142	75.8%	6,464	56,8
MD	222	40,273	15,722	39.0%	17,287	42.9%	5,450	45,7

MD	288	39,063	11,873	30.4%	21,823	55.9%	2,769	41,8
MD	287	37,881	9,481	25.0%	22,491	59.4%	1,780	41,7
MD	288	33,515	26,897	80.3%	n/a	n/a	7,094	40,6
MD	253	29,672	3,000	10.1%	22,577	76.1%	6,285	35,9
MD	926	9,379	2,675	28.5%	4,276	45.6%	4,912	14,2

***Notes & Sources*: School survey. M=mixed sex; G=girls; B=boarding; D=day**

As in the case of Ghana, comparing school data to student or parent reported data yields different average amounts. School accounts show payments of fees, exam fees, caution money and some have small other expenditures. However, the data in the previous tables and Table 40 are broadly consistent, particularly when the omission of zero values in the parent and student reported payments is taken into account: not all students pay. Were all students to pay the mean payment should be about TSh 10,000.

Schools are very vulnerable to non-payment of fees. The table shows considerable variation, and the percentage of total (government + non-government) expenditures accounted for by fees ranges from under 1 per cent to 25 per cent. It is reasonable to suppose that students from poorer families would be more likely not to pay the full fee, and that schools with a predominance of such students, not receiving compensating finance from government, would be adversely affected.

Most schools in the table are well under the average government expenditure per pupil calculated on the basis of enrolments and total expenditures, shown in Table 28. As we see below as well, it is difficult to reconcile the national and the institutional average expenditures, and there is good reason to believe that the way in which resources are allocated to schools, irrespective of the issue of catering costs, could be improved. The largest secondary school item is food, accounting for well over half most of the total

budgets and between 70 and 95 per cent of total non-salary allocations.

The survey also collected details of budget submissions which can be compared to actual allocations and yield an idea of underfunding. School requests are cut drastically, leaving little money for administration and other expenses. Many teachers' travel allowances are years in arrears (as the teachers' survey confirmed), and it is clear that schools do not have enough money to operate. Thus, although the rise in fees shown in Table 35 may offset some of the effects of inflation (which at the school level would depend on the effect of the rise on total revenues), when the level of underfunding in schools is taken into account, there will still be a considerable funding gap. Even the food budget, although it takes up a large proportion of expenditures, is insufficient in most schools. Schools tend to close when they have run out of food: expenditures may seem on paper to be getting under control, but only at the expense of a non-

functioning system.

The common prescription is that students should pay for their own food, as is the case in Ghana. However, Ghana has a scholarship scheme for students from the poorer north, and a better distribution of day secondary schools (though these are seriously under enrolled). The proliferation of private schools in Tanzania is unlikely to continue in the absence of innovative but perhaps unrealistic funding mechanisms. Moreover, the cost of food may well have contributed to the decline in secondary enrolments in Ghana, and any policy of reducing food budgets in secondary schools should be carefully thought out before introduction. The first step should be to reduce the costs to the school by changing the tendering regulations: both the government and parents paid more than they needed to pay. Most school heads would be able to procure food in local markets and much reduced prices, and would also be able to equalise across seasons through storage of preservable foodstuffs.

Some calculations have shown that the reduction in cost can be significant. Secondly, students in many schools will undoubtedly drop out if they have to finance the full cost of catering, and ways would need to be found of identifying vulnerable schools if not vulnerable students.

Boarding and Day Schools

The issue of boarding has similarities to that of catering, in that it is also in the sights of the Bretton Woods rifle. Catering and boarding are considered to be symptoms of 'inefficiency'. Table 40 confirms that boarding schools tend to be more expensive per student than day schools, but it also shows that some boarding schools turn in lower average expenditures than day schools. While it is likely that on average boarding schools may have higher average costs, it is not automatic, and the 'de-boarding' policy seems to have been pushed through on the basis of no real evidence or analysis.

The rationale for boarding in Tanzania lay in the politics of national unity. It also lies in the fact that boarding schools perform better than day schools. Boarding schools have been the only way in which rural students can gain secondary education. In 1993 (based on HRDS data) secondary students were more or less evenly divided between day and boarding, but 70 per cent of boarders came from rural areas: urban households enjoy the proximity of day schools.

It is not axiomatic that boarding schools are more expensive per pupil than day schools, and they certainly do not need to be. Table 41 shows some comparative costs, as well as a summary of the push and pull factors which affect costs. The costs seem lower than the averages in Table 40, and may be slight underestimates because they are from different sources.

Table 41: Comparative Costs of Government Boarding and

Day Schools, 1994
Tanzanian Shillings

School	Type	Exp/Student	Enrolment	Pupils/Stream	% Grad Tchers	Av Tchr Sal/mth	Av T lo
Galanos	Ag Board	35,368	540	34	21%	28,000	16
Shinyanga	Tech Board	21,975	601	35	35%	27,000	23
Bugene	Comm day	23,905	266	33	6%	27,501	17
Mtwara	Fundi board	31,527	542	45	3%	27,380	26

***Notes & Sources*: Calculated from MOE payroll sheets (July 1994), and school statistical returns Non-teaching expenditures are budgeted expenditures, not actuals. School**

debt is also not included.

The lowest expenditure per student is in a 'technical' boarding school, which at the same time manages more material expenditures and has a higher proportion of graduate students than the day school in the sample. Part of the reason for the lower expenditure is that teachers are used relatively efficiently, even though there is a higher ratio of non-teaching to teaching staff than the other schools, and there is high enrolment. The main reason is that there is *both* a higher PTR and a reasonable average enrolment per stream. It may be that it is easier to make boarding schools more efficient because they can use their resources to the full, and are not dependent on catchment areas for their pupils.

Another interesting feature of the table is (as in Table 40) that the average expenditures when computed on the basis of school data are much lower than the national average,

even if it is assumed that they are underestimates. Indeed, against these figures, the direct expenditures of students exceed those of the government. The arguments against government support to boarding schools may not be based on very sound evidence and principles, and in Tanzania there was no systematic effort to amass data on which to decide appropriate policy.[135]

[[135] A good example of the application of orthodox dogma is to be found in *Post-Primary Education and Training in Tanzania: Investments, Returns and Future Opportunities*, World Bank, draft, 1996. On the basis of a superficial and incomplete analysis of 5 schools, 4 of which are in Dar es Salaam, the report advocates new secondary school policies which include the abolition of 'student welfare costs' (as they are called in Bretton Woods jargon) as well as higher fees, and extols the virtue of private

schools with only passing mention that 'not all private schools are functioning well'. The report also provides an example of the approach of not distinguishing between direct and indirect expenditures.]

In a number of countries, including Kenya[136], it appears that boarding schools have powerful positive effects, or at least that the students they attract already possess or acquire certain characteristics. The positive effects include attitudes towards future education and self-evaluation. Table 42 illustrates these effects. Boarders have both higher aspirations and higher academic self-evaluation than day students: for example 53 per cent of male boarders aim for university (though 43 per cent think they are capable of getting there) while 46 per cent of day students share that aim. Boarding girls aim higher than day girls: one quarter of the sample of females in government schools aim for university in contrast with 15 per cent of day students.

Boarders in government schools have higher expectations and self-valuation than those in private schools: 43 per cent of the boarding boys believe themselves capable of reaching university compared with 25 per cent of the private boarders. Girls have much lower expectations than boys. Exceptions to these generalisations include day girls' expectations of level of teaching qualification.

[[136] See Karani F. A. *& al, Cost and Financing of Education in Kenya. Study 2 - Access, Quality and Equity in Secondary Education*, MOE, Nairobi, Dec 1995. Boarding schools in the sample perform better than other schools. Also, 'public secondary schools offer a significantly better quality of education than the private schools' (p 110). Government expenditure per student is reported to be 24 per cent higher in boarding than day schools. In spite of the evident advantages of boarding schools, this report recommends, as is the fashion, the reduction of the

number of such schools. It also recommends more private schools. The study was financed by the World Bank.]

Table 42: Expectations of Secondary Students, Tanzania
per cent

	Government Schools								Private Schools						
	Academic aspiration				Academic level capable of				Academic aspiration				Academic le capable c		
	Boarder		Day		Boarder		Day		Boarder		Day		Boarder		D
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
Form 4	4	6	6	5	8	6	7	9	6	11	9	8	7	12	8
Form 6	15	30	20	19	24	31	19	23	30	26	30	25	29	26	32
Teacher Grade A	10	20	14	48	9	25	17	44	17	32	22	53	21	36	27
Degree level	15	13	11	11	12	8	13	10	10	7	7	4	12	5	8

University Degree	53	25	46	16	43	22	39	12	30	18	25	6	25	17	18
Other	3	6	4	1	4	8	5	2	7	6	7	4	6	4	7
Total	100	100	101	100	100	100	100	100	100	100	100	100	100	100	100

***Notes & Sources*: Students survey**

Strong conclusions perhaps should not be drawn from the data cited above, though they are consistent with parental attitudes in Ghana and, indeed, elsewhere: parents see boarding schools as the route to greater success. One reason is that government and boarding schools (or mixed day and boarding) perform better in examinations. In Tanzania the top performing schools are catholic seminaries (which are all mixed boarding/day), and government schools, which are mainly but not exclusively mixed boarding/day. In the list of schools ranked among the top 25 per cent in the CSEE (Certificate of Secondary Education) there is one

private school. There are many factors which need to be taken into account to standardise these comparisons, including the quota system whereby students are allocated on regional grounds, exam selection and parental background. A more appropriate measure of performance would be of value added, but it is probably nevertheless fair to assume that the rankings are for the most part reasonable indicators of quality, if unfair in certain cases.

Private Schools

Private schools represent an important source of access for rural and poorer households to secondary education, in the same way that boarding schools do. Of the 70 per cent of boarders who come from rural areas, about half are in private schools (HRDS data), and overall about 60 per cent of rural students attend private schools. In Dar 78 per cent of secondary students attend day schools, and of that number about three quarters attend private day schools.

Table 43 sets out revenue and expenditure data for a selection of private secondary schools. The sample of 10 private secondary schools is not representative in the sense that conclusions relating to all private schools cannot safely be drawn from it: underlying the data there are individual circumstances and complex factors which determine how each school survives. The schools in many respects are among the better private schools (not including seminaries) in that they keep reasonable records and were prepared to be transparent: several schools in the survey could or would not provide details.

The table sets out the components of their revenues, which are mainly made up from fees; various collections and levies which include funds for buildings, furniture and payment the examinations; transfers from their owners such as the CCM parents association (Wazazi); transfers from the NETF; 'self-reliance' projects which are mainly but not exclusively agricultural[137]; assistance in kind (not included in the table);

and cash assistance from foreign aid agencies.

[[137] And it is not always clear how far these transfers are after expenses or gross.]

The wide variation in their average expenditures per student is striking, and the conventional measures of efficiency such as the pupil/teacher and pupil/non-teacher ratios also vary. The average ranges from TSh 29,000 to TSh 117,000, and the higher average expenditure schools receive considerable donations from foreign aid agencies. The schools do not seem to be any less expensive per student than the government schools analysed in Table 41, and the most expensive schools compare to the overall government expenditure per secondary student.

Table 43: Finances of Selected Private Secondary Schools, Tanzania 1994

Tanzanian Shillings

	School 1	School 2	School 3	School 4	School 5	S
	BDMA4	BDMA4 (1)	DMA4	BDMA4	HMA4 (2)	E
Revenues						
Enrolments - Day 1-4	124	215	285	393	200	1
5-6						
Boarding	162			20		2
5-6						
Staff- Teachers	17	16	21	12	12	1
Non-teachers	16	8	9	5	3	1
Fees/student- day 1-4	30.000	22.000		15.000	22.000	3
5-6						
- boarding 1-4	40,000			17,500		4
5-6						
Other		500	300	300	500	

charges/student day						
Registration/student				200		8
Building Fund/day student						2
boarder						
Desk Fund/Student						3
Total Fees	10,200,000	4,730,000	5,495,000	6,245,000	4,400,000	1
Registration		107,500	14,100	20,600	40,000	9
Other charges			18,900	30,900		
Building Fund	5,000					3
Desk Fund						6
Levies			76,558		823,000	
Transfers			399,500			1
NETF	2,330,561	3,000,000			100,000	
Self reliance	4,045,558	1,693,600	478,749		100,000	1

projects						
Borrowing	2,268,542		345,326	283,110	296,000	2
Foreign Aid		9,095,000			100,000	1
Total	18 849,661	18,626,100	6,828,133	6,579,610	5,859,000	2
	School 1	**School 2**	**School 3**	**School 4**	**School 5**	**S**
	BDMA4	**BDMA4 (1)**	**DMA4 (1) (2)(3)**	**BDMA4**	**HMA4 (2)**	**E**
Teachers salaries & allowances	2,813,160	7,308,725	4,544,810	2,622,960	2,483,040	3
Non-teachers salaries & allowances	1,742,136	793,522	775,280	611,040	303,600	1
Materials		2,500,000	1,400	412,903	146,000	1
Consumables	4,423,489	2,061,219	313,586	118,439	184,290	3
Welfare	5,304,355	326,000	430,245	454,875	1,506,792	3
Transport		312,000	585,749	459,375	165,206	7
Rent			94,240		61,400	4

Building		6,052,159	326,250	146,375	741,000	8
Equipment		1,400,000	122,718			6
Other		4,512,374	1,077,469	372,287	272,166	6
Total	14,283,140	25,265,999	8,271,747	5,198,254	5,863,494	3
Expenditure/student	49,941	117,516	29,024	12,587	29,317	1
Pupil/Teacher Ratio	17	13	14	34	17	1
Pupil/Non-teacher Ratio	18	27	32	83	67	2
% Untrained teachers	29	19	33	50	50	6
Average cost/teacher/month	13,790	38,066	18,035	18,215	17,243	1

Notes & Sources: (1) has foreign teachers

(2) gets assistance in kind from foreign aid

(3) 163 students on 15000 & 122 on 25000

(4) 430 students @20000, 94 @ 30,000

B=Boarding
D=Day
H=Hostel
M=Mixed
A=Agric
4=Forms 1-4
6=Form 6

A feature of private schooling in Tanzania is the interest taken in it by foreign aid agencies. In order to encourage the expansion of private schools agencies have been trying to develop improved financial support systems, such as the National Education Trust Fund (NETF). They also provide teachers, cash, materials and equipment to private schools, as the table shows. One prominent organiser of private schools, some of which are represented in this survey, did not think it possible for private schools to be viable without additional assistance, as parents could not pay full cost fees.

Costs in the schools are kept down with some exceptions by the recruitment of unqualified teachers (several of the schools also have foreign volunteer teachers). Many have low pupil-teacher ratios, identical to the national average (Table 23). They vary widely in the number of non-teaching staff. The table suggests that private schools are not more 'efficient' in the sense of higher PTRs and lower pupil/non-teacher ratios. On the question of whether 'parents who send their children to private schools get value for money' 42 per cent of my sample of teachers in private schools agreed (36 per cent disagreed), as did 60 per cent of state school teachers.

I surveyed teachers' backgrounds and opinions from private and state secondary schools in order to gain more insight into issues of school quality. The average age of state school teachers in the sample was 33 and that of the private school teachers was 30, and the older state teachers had on average one more dependent (5) than the private teachers. In

the private schools 29 per cent of the sample (of 217 teachers) were untrained, 47 per cent held diplomas, and the highest academic qualification of 50 per cent of the sample was A Level. In the government school teacher sample (of 429 teachers) only 4 were untrained and 89 per cent were diploma holders: 83 per cent had A Level as the highest academic qualification. Over two thirds of the private school teachers had never taught before, and their median years teaching experience was 5, compared with the state school teachers' median years experience of 7. Teachers in private schools on average teach 21 periods per week, compared with 17 periods per week for state teachers. Both sets of teachers spend similar time in preparation, about 10 hours per week, slightly more for state teachers. State teachers spend a little more time marking (a median of 6 hours compared with 5 hours in private schools). Both sets of teachers set similar amounts of work for their students, with private school teachers setting marginally more homework and tests than state teachers. For some reason 90 per cent

of the private school teachers reported that they undertook continuous assessment as opposed to 78 per cent of state teachers.

The teachers were asked to make assessments about the English language capabilities of their students. The comparative responses were striking in that in both types of school language capability was judged to be similar, with 40 per cent of the students assessed as writing and speaking English 'of a satisfactory standard': state teachers reported marginally better standards. These perceptions are not reflected in the test scores shown in Tables 44 and 45. However, state teachers had a lower opinion of secondary education than private teachers, with three quarters agreeing that 'students don't learn much in secondary school these days' as opposed to a little over half the private school teachers agreeing with the same statement. Three quarters of both samples did not feel that the quality of education was improving. Teachers in both types of school shared similar

opinions on the supply of textbooks: 44 per cent in both private and state schools considered textbook supplies to be good or adequate. Private school teachers appear to experience more discipline problems than state school teachers.

Private school teachers were less well paid than state teachers, reflecting both the qualifications differential and the greater discretion of employers. Their median monthly salary was TSh 16,000, TSh 9,000 less than their state colleagues at TSh 25,000. However, they were usually paid more or less on time, compared with the experience of 53 per cent of the state teachers who reported that their salaries were never paid on time. Also, half the private teachers had free accommodation (which most did not like very much), whereas nearly all the state teachers received no such benefit. All teachers thought they were underpaid, and said that about twice their current salary would be reasonable: all teachers professed to be discouraged by their incomes and

prospects. More private teachers (49 per cent) considered teaching to be a respected profession than state teachers (37 per cent).

The profile of the teaching profession built up in the survey responses is of a profession which is demoralised[138] irrespective of whether they teach in private or public schools. Private school teachers tend to be younger, less experienced and untrained.[139] They are also paid less and work more hours, and it is from this fact that the apparent cost advantage of private schools is derived for given pupil/teacher and teaching/non-teaching staff ratios. They seem to share common attitudes and problems, and themselves do not perceive that private schooling is of itself an advantage.

[[138] See also a survey of teachers carried out in 1991, Cooksey B. *& al*, *A Survey of living and*

***Working Conditions of Primary and Secondary School Teachers on Mainland Tanzania*, 1991, and Malekela G. A, *Teacher Quality and Motivation*, UDSM Dept of Educational Foundations, paper prepared for the TADREG workshop 'Qualify and Equity Issues in Tanzanian Education Policy and Practice: Insights from Recent Research', December 1993.**

[139] The poverty of inservice training in Tanzania, for which no government money was allocated during the period under discussion, is indicated by the fact that of both samples around half had had no such training.]

School Performance

Private schools consistently dominate the bottom rankings of examination performance, where they are the only type of

school represented.[140] My survey included simple tests in English and mathematics. The results of the tests are given in Tables 44 and 45.

[[140] Ndabi D. M. & S. A. C. Waane, *School Quality and Performance*, paper prepared for the TADREG workshop on 'Quality and Equity Issues in Tanzanian Education Policy & Practice: Insights from Recent Research', DSM, December 1993]

Table 44: English and Maths Test Results
state and private schools

	PUBLIC			PRIVATE		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**
English test						
Mean	10.31	9.01	9.75	9.22	7.82	8.49
Standard deviation	2.55	2.81	2.75	2.54	2.59	2.66

Number of observations	481	374	858	444	467	914
Mathematics test						
Mean	14.9	12.45	13.83	11.45	8.77	10.07
Standard deviation	4.23	4.40	4.46	4.43	3.83	4.35
Number of observations	480	373	856	444	465	912
Combined Score						
Mean	25.22	21.46	23.59	20.66	16.58	18.56
Standard deviation	5.80	6.38	6.33	5.72	5.27	5.87
Number of observations	480	373	856	443	465	911

***Note*: The English test is out of a maximum of 15 whereas the mathematics test is marked out of 24. The mathematics and English scores are combined for the combined score. Male and female observations do not add up to the total because**

there are some observations with missing observations for the sex of the respondent.

They show that state schools scored better, with girls and boys sharing evenly in the score differentials. Although the sampling could bias the results in the sense that like may not be compared with like, and other factors may need to be controlled for, it can be concluded that there is no axiomatic performance advantage in private schools as is often argued, just as there is no axiomatic efficiency benefit. Within the state school system, boarders performed better in the tests than day students, although the small margin does not strongly support the view that boarding schools have better cognitive results than day schools. However, within the private school system the performance of boarders was no different from that of day students.

The data are shown in Table 45, which also suggests a high differential in cognitive outcomes between state boarders

and private boarders, with state girl boarders accounting for the largest part of the difference. Further more carefully controlled research on this area would be of considerable interest in informing policy towards boarding schools (as well as private schools).

Table 45: English and Maths Test Results
state and private schools

Public Schools						
	Boarders			**Day Students**		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**
English test						
Mean	10.85	9.71	10.37	9.80	8.47	9.20
Standard deviation	2.47	2.48	2.53	2.53	2.95	2.81
Number of observations	234	165	401	247	208	456
Mathematics test						

Mean	15.87	13.60	14.94	13.97	11.52	12.85
Standard deviation	4.07	3.97	4.17	4.17	4.52	4.49
Number of observations	234	165	401	246	207	454
Combined Score						
Mean	26.72	23.31	25.31	23.79	19.98	22.06
Standard deviation	5.55	5.52	5.77	5.68	6.66	6.43
Number of observations	234	165	401	246	207	454
Private Schools						
	Boarders			**Day Students**		
	Male	**Female**	**Total**	**Male**	**Female**	**Total**
English test						
Mean	9.48	7.96	8.69	8.92	7.63	8.25
Standard deviation	2.54	2.63	2.69	2.52	2.56	2.63
Number of	235	251	486	202	208	412

Number of observations	236	251	486	202	206	412
Mathematics test						
Mean	11.39	8.90	10.10	11.52	8.63	10.06
Standard deviation	4.45	3.60	4.21	4.44	4.12	4.53
Number of observations	234	251	485	203	206	411
Combined Score						
Mean	20.88	16.86	18.80	20.41	16.25	18.29
Standard deviation	5.72	5.10	5.77	5.72	5.52	6.01
Number of observations	234	251	485	202	206	410

***Note*: The English test is out of a maximum of 15 whereas the mathematics test is marked out of 24. The mathematics and English scores are combined for the combined score. Male and female observations do not add up to the total because**

there are some observations with missing observations for the sex of the

Higher Education Loans

Students in universities used to receive a range of allowances. Table 46 shows the allowances for UDSM students in 1992/93.

Table 46: Student Allowances, University of Dar es Salaam, 1992/93

Description	Amount TSh
Field Allowance	1,500
Book Allowance - 1st year	15,000
Book Allowance - others	10,000
Special requirements	18,000
Stationery Allowance	4,000
Meal Allowance/day	500

Meal Allowance/day	500
Fares	variable

***Notes & Sources*: UDSM budget**

These allowances accounted for about half the university's allocation, though less of the actual expenditure. The government found it difficult to move away from this type of system because of student resistance, and a programme of transferring costs from government to students was initiated in 1991/92. In 1993 government announced in its policy statement that students would have to pay for boarding, tuition fees, textbooks and learning materials, membership fees for clubs, registration, graduation and examinations.[141] In 1994 a student loan scheme was introduced, intended to cover accommodation and food expenses. The system was in some ways an extension of the approach to fee exemption at school level, and was designed to assist those who could not afford to pay. It was introduced hurriedly, partly as a

response to pressure from foreign aid agencies, and not fully thought through.

[[141] MOE/MSTHE, *Tanzania Integrated Education and Training Policy*, August 1993.]

Tanzania has no equivalent of the Ghanaian SSNIT, and the option of recovering loans from social security and national insurance contributions is not present. Another difference between the Ghanaian and the Tanzanian system is that in the latter case the scheme is intended for those who cannot pay, and is thus an exemption-based scheme, and not universal. Students complete an application form which is partly on the British model, in which they declare their income. The form is approved by the District Commissioner (DC) in the student's home area. If the DC endorses the form, the application is invariably accepted. Nearly all students who apply are reported to have had their applications accepted.

Like Ghana, the terms of the loan are advantageous to the student, and involve the government in a substantial interest rate subsidy. The loan is interest free to the student, with a repayment period of 16 years after graduation. As the scheme has just started at the time of writing there has been no experience of recovery, and the institutional mechanism for recovery is in any case unclear.

Willingness to Pay

A large part of the HRDS was concerned with ascertaining willingness to pay for education. The survey employed a game approach, where respondents were asked first to allocate chips to the value of 20 shillings to five school characteristics, set out with drawings on a card. The characteristics were

a) well qualified teachers who teach children well
b) excellent headmaster who manages the school

well
c) enough supplies so each child has a desk and workbooks
d) clean building with toilets and a playground
e) emphasises academic study, no self-reliance work.

Once the respondents had placed their chips on the squares showing pictures of the above characteristics, their choices were ranked: what they were willing to spend most for was assumed to be the most important characteristic.[142] They were then taken through chains of questions to decide up to what amount they would be willing to pay to send their children to such a school. In other words, the exercise was an application of the orthodox economic principle of maximisation of utility subject to a hard budget constraint.

[[142] Rather than their perception of the most expensive: it was assumed that respondents would

naturally associate the most desirable options with their cost.]

There are several variables to consider when interpreting the results of the exercise. The first is household income, and the second is education of the bidder: both are correlated with each other. Unsurprisingly, better educated and higher income respondents were willing to 'bid' more for their ideal school. A second use of the data was to compare actual average expenditures per pupil to levels.

Table 47 shows the results of this exercise. The 20 per cent of the population with the lowest annual expenditure (cash and imputed) would be willing to pay an additional 65 per cent for better schools, while the 20 per cent with the highest annual consumption (the fifth quintile) would be willing to pay an additional 8 per cent. The rural population would be willing to pay more in addition to what they already pay than the urban areas, and in Dar es Salaam most of the population

evidently felt that they paid too much, and responded with bids less than what they already paid.[143] The total effect, were all these average additional expenditures to be made, would be an average increment of about TSh 1,000 per primary student across the country, or a 12 per cent addition to total (public plus private) education expenditure. While such an estimate is crude, the level of underfunding of the system is certainly greater than the incremental private contributions which might, according to these data, accrue from better quality provision, and almost certainly much less than the costs of improving quality.

[[143] See *Social Sector Review* (draft) for another way of looking at these data. An 'amazing' 22 per cent of the sample is reported to be willing to pay over TSh 25,000 for primary schooling, the maximum sum asked in the game. The surveyors found the result 'amazing' because they assumed that

respondents would 'sensibly (*sic*) make offers lower than what they would actually pay', an interesting example of cultural assumptions.]

Table 47: The Hypothetical Influence of Improved Quality on Per Pupil Primary School Expenditures, Tanzania, 1993 **Per cent**

Consumption Quintile	All Tanzania	Rural Tanzania	Urban, excl DSM	DSM
1	65	65	51	-11
2	65	68	48	3
3	61	73	43	-49
4	6	66	29	-29
5	8	30	21	-72

***Notes & Sources*: Calculated from original (uncleaned) HRDS data set: the effects of data cleaning would be mainly felt on**

the 5th quintile, but not significant for this table. See text for explanation of table.

These data suggest strong upper bounds on household willingness and ability to pay. Indeed, of the average total expenditure of a household (cited in the HRDS as TSh 579,555), assume that 75 per cent of that, or TSh 434,666, is cash expenditure, and take 5 per cent of total cash income as a reasonable amount to be made available to finance a secondary student: TSh 21,733 is half the current average (HRDS data). It is 15 per cent of average rural expenditures per adult equivalent. It is difficult on the basis of such data to see how more than a small fraction of the population will have the means of making significant contributions.

G. Conclusions

We may now consider the six questions with which we started this paper in the context of education financing in

Tanzania, in order to determine how governments and households have reacted to cost sharing policies.

a) Has cost sharing increased total resources available for education?
b) Has cost sharing enhanced efficiency of resource use?
c) Has cost sharing affected enrolments and attendance?
d) Has cost sharing improved quality of education?
e) What other effects have resulted from cost sharing in education?
f) Is a policy of cost sharing justified?

Has cost sharing increased total resources available for education?

Total real education expenditures rose until 1994/95, but then seemed to decline sharply, with an overall reallocation to

debt costs and possibly to other sectors. Primary education real expenditure rose and then appeared to fall, and average primary expenditures per pupil rose very slightly. Real total government secondary expenditures declined over the period we have analysed, and average expenditures declined sharply in response to rising enrolments: total tertiary expenditures were robust but may also have started to decline.

Government policy has been to allow the private sector to expand secondary access, and to concentrate on primary education. The existence of private secondary schools reduced pressure on the government to finance the expansion secondary access in the very short term, and permitted real expenditures on primary education to be maintained, even if they were mainly composed of salaries. In terms of macroeconomic policy the government bought time to allow the economy to improve in order to allocate more finance to education.

Tanzania underspends on education in terms of a proportion of national income when compared to other countries, and this may have been deliberate policy to force the private sector to pick up the 'excess demand': where Ghana allocates some 4 per cent of GDP to education, Tanzania allocates under 3 per cent (Kenya spends over 6 per cent of GDP, but Uganda well under 2 per cent). If the availability of foreign aid, on which the government depends for the provision of books and other materials, is taken into account, the combination of foreign aid financing and support for private school development has permitted lower government expenditures than might otherwise have been required. However, with a secondary school enrolment ratio under 10 per cent, strong fiscal pressure will be exerted on the budget whether or not primary enrolments rise, as demand for secondary schooling increases beyond the level which can be absorbed in a private system

It is likely that the demand for private schools is a result of

the absence of government school alternatives. While there may be a belief that private schools provide more efficient and effective education, it remains to be seen whether this view will be maintained in view of the generally poor performance of private schools (apart, of course, from the seminaries and high cost schools). There is no doubt that total expenditure would have been lower without cost sharing via private schools. Moreover, it does seem that there was some reallocation towards primary education, though it is not clear what benefits have ensued. However, there may be also a substitution effect as government sees the potential for overall education budget reductions partly arising from the perceived reduced demand for government finance for secondary education.

Cost sharing has increased total resources for education in the sense that it is unlikely that the government would have made those same expenditures in the absence of private expenditures. However, Tanzania's total public expenditure

effort is low because of poor revenue performance and weak budgetary management, as well as slow implementation of wider public sector reform. As in the case of Ghana, it must be hypothesised that the ability of the government to exact additional taxation outside the normal revenue systems to pay for education reduces the urgency of implementing reforms. Although it can only be conjectured, a growing normality of private financing for what are usually be considered as public goods must be one factor in consolidating the legitimacy of tax avoidance: for example, newspapers in Ghana and Tanzania frequently publish letters which question the value of paying taxes in the absence of the provision of adequate services. It is doubtful whether the present level of cost sharing is sustainable, at least if increased enrolments are an objective.

Has cost sharing enhanced efficiency of resource use?

Measured in terms of PTRs, primary sector financing has not

been inefficient in comparison with other countries, including Ghana, although that has little to do with cost sharing. Measured in the same way, the secondary sector was not as efficient, and the tertiary sector was the least efficient. The inefficiency of the private schools may indeed have resulted in an aggregate decline in the overall (public + private) efficiency of secondary school provision facing parents: they must accept inferior private schools in the absence of sufficient higher quality state provision, and the overall cost (i.e. the cost to society) of private schools they are obliged to use may be higher than the costs of the alternative but unattainable state schools. More evidence would be needed to substantiate that hypothesis.

The underfunding of the system makes it unlikely that there are significant efficiency measures available which would permit major reallocations to learning inputs. There is at present a strong belief that 'rationalisation' of the teaching force will permit such measures, and while this is true to

some extent, it is unlikely to be particularly significant because raising the PTR is probably more realistically a function of raising enrolments rather than reducing teacher numbers. In terms of allocative efficiency, the higher and technical education system takes some 20 per cent of the budget, but this is a reflection of the low level of total expenditure as much as of a 'high' share: tertiary education costs have high non-discretionary elements, and tertiary education spending would probably not increase in proportion to total spending were total spending to approach 4 per cent of GDP.

As in the case of Ghana, claims that cost sharing stimulates greater efficiency and equity in education provision are not supported by the Tanzanian evidence.

Has cost sharing affected enrolments?

Although total enrolments have risen, the secondary

apparent enrolment ratio has declined in Tanzania while the primary enrolment ratio is stagnant. Cost sharing has been the principal reason for the apparent increase in enrolments at secondary schools, but it is not possible to say whether secondary enrolments would have risen faster had cost not been a factor, both in the public and private sectors. Survey results indicate that some children do not enrol because of cost. Enrolments in state schools have probably suffered as a result of cost sharing, while the ability of the population to afford private education - at least in its present form - may be reaching its limit. Furthermore, as the state school fees equalise with private school fees a continuing decline in the demand for secondary places may be expected.

Cost may, however, be less of a barrier than other factors, such as quality of the school experience, which are in turn related to government financing, particularly at the primary level. Nevertheless, it may be that in spite of the positive role played by private schools in permitting secondary

enrolments to increase, costs are a critical factor in the low rate of increase of the primary enrolment ratio and in the decline of the secondary enrolment ratio.

Has cost sharing improved quality of education?

Tanzanian consumers of education seem to be expected to pay for a service which does not improve as a consequence of their payments. Although households pay considerable sums towards their children's schooling, it is commonly accepted that there has been little or no improvement in the quality of most schools. While cost sharing has had a role to play in quantitative improvements, the failure to bring qualitative improvements negates much of the purpose of the policy.

What other effects have resulted from cost sharing in education?

As in the case of Ghana, I have not analysed this issue in

detail. Given the status of rural and urban poverty in Tanzania it is hard not to believe that the funds which households devote to schooling could have been better applied elsewhere, given the low quality of schools.

Is a policy of cost sharing justified?

The principal problem facing Tanzanian education is the low level of public expenditure on education, less than 3 per cent of GDP. Unlike Ghana, the government of Tanzania has been slow to implement financial management reform and the progress of public sector management reform is slight. Only recently have serious attempts been made to improve revenue collection, but all aspects of resource management remain weak: Tanzania is still at the time of writing subject to cash budgeting imposed by the IMF after some four years. Moreover, the toll of the war with Uganda, and of security costs associated with the problems in Burundi and Rwanda, have demanded that resources be channeled into the armed

forces and the police. There is a high level of non discretionary expenditure in the budget arising from central government borrowing.

At the sectoral level, resource management is fragmented, and the institutions are weak. Financial management has not been a government priority, and the fungibility of aid has probably given the wrong signals to public sector managers. There are many who regard the activities of donors and lenders to education in the country over the last 25 years as having been fundamentally perverse; the high rates of application of foreign technical assistance as having deskilled and demoralised government staff except in so far as there are short term benefits to be gained; and the fungibility of aid finance as having permitted the government to avoid reform.

Tanzania is a good case study of a country with public sector resource management in disarray which should not place

cost sharing high on the sectoral policy agenda, but which should concentrate on improving the quality of its public services, raising the level of its public expenditures and improving their structure.

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V Conclusions for Cost Sharing Policy

A. Cost Sharing in Perspective

I have argued in this paper that cost sharing in education does not axiomatically result in qualitative improvements in schools and increased finance for education as a whole. It is not, however, my contention that education should (or can) be exclusively the responsibility of the state: individuals will always face costs. Rather it is the application of cost recovery policies for the wrong reasons and on the basis of inadequately understood evidence and theoretical analysis which must be scrutinised.

The conclusion is based on the study of two countries, and experience differs between countries. Another case study could be that of Kenya, which has been held up as a successful pioneer of cost sharing policies. In some sense that is true, but it is also apparent in Kenya that the cost sharing policy has reached its limits; that enrolment ratios

are falling; that quality is deteriorating; that accountability for sectoral performance by sectoral managers has been eroded; and that a major reappraisal of how education is financed in the country is required. The *Harambee* schools and Institutes, while more reliant than many writers appear to think on state funding, played an important part in the development of education in Kenya, but failure to understand the limitations on private finance has led to a crisis of confidence in the education system, and considerable indebtedness of individuals and institutions.

Cost sharing policies have provided a breathing space which have allowed governments to allocate resources to growth which eventually enable them to assume greater responsibility for financing education systems. Cost sharing does not provide a permanent solution to the problems of financing costly education services in countries with weak fiscal management which have education policies which make unrealistic demands on fiscal and household capacity.

While in Kenya the policy has run its course and requires major modification, other countries such as Tanzania are embarking on similar policies, and should learn the lessons of those who have gone before.[144] Once it is accepted that the attractions of cost sharing as a major financial policy instrument are limited, other reappraisals follow, principally policies related to 'community participation'.[145]

[[144] See Lillis K. and H. Ayot, Community Financing of Education in Kenya, in Bray M. with K. Lillis, *Community Financing of Education: Issues and Policy Implications in Less Developed Countries*, Pergamon Press, 1988, pp 117 - 129, for a well argued, perceptive and prescient analysis, written 10 years ago, of the *Harambee* system.

[145] The best sustained example of scepticism that I know of is Lillis and Ayot *op cit*. The rest of the book

in which the chapter is contained is more ambiguous. However, the message of caution was clear enough.]

One consequence of endorsing cost sharing community based policies is the legitimisation of the cost sharing culture as a response to fiscal stress and inefficient public sector management. By disguising the demands on parents and children in the euphemism of 'participation' the real reasons for cost sharing systems have been obscured. Governments could be bypassed by aid agencies and NGOs, which suited the Bretton Woods institutions' onslaught on government in the late 1980s and first half of the 1990s, and which was consistent with the NGO conception of the world as a place where the rural poor and others were deprived of 'voice'. Government officers could develop community participation policies and thus relinquish responsibility for maintaining large parts of the system.

Another consequence has been the serious deterioration of education infrastructure: in nearly all countries it became - and still is - the norm to expect communities to be responsible for building. Yet infrastructure is expensive in terms of time and money. While communities could reasonably be expected to erect simple temporary or semi-temporary structures, such structures were regarded as permanent by governments, which allocated no resources. Foreign aid agencies frequently financed shells of buildings, to be completed by communities, but in many countries even these were an excessive burden, or simply unsuitable for any number of different reasons. As long as the benefits from education were significant and visible, communities could be mobilised, but when enrolment ratios started to decline it was less likely that communities would take such a strong interest: the reason for declining enrolment ratios were precisely those reasons which reduced enthusiasm for local education development. A vicious spiral of decline set in, and it is now apparent in almost all African countries that the

absence of good structures and teachers' houses is a strong factor in enrolment decline. Where teachers have poor living conditions they are absent or late and demoralised, and this affects parental and children's attitudes to school.

One reason given for failure of community participation is that communities did not have sufficient discretion, and there is much to be said for that view. Where communities feel they can exercise some influence over how schools are run, it is possible that education benefits. However, this is a slightly different (though related) issue from that of how schools are financed. The main issue from a financial point of view is that it is unlikely that any component of the education budget can be entirely handed over to local fund raising. Matching grant and other systems which achieve the same end are likely to give added momentum.[146] It is time for government budgets to take on responsibility for infrastructure, at least where there are problems in attracting children to school.

[[146] For example, in Zimbabwe the government's matching grant to communities for teachers' houses was too low, and few got built. With foreign aid funds the government contribution was increased in 1995, and there was a significant increase in the number of houses as communities then became able to raise the balance of finance required.]

Similarly, it is now almost received wisdom that textbooks should be rented or purchased by children and parents. Yet the cost of providing children with textbooks is not prohibitive within the perspective of total government expenditure. Failure of government managers and aid agencies to understand the necessary sequencing of reforms and the consequent neglect of public sector management has resulted in education system development projects which ignored the root causes of the apparent inability of the state to finance even the cheapest school inputs. Book provision was long of notorious interest to agencies because

of the gains that publishers (and paper companies) could make, and because it is a technically easy way of spending aid budgets. Aid provision of books created a culture, which is persistent, of governments believing that they do not need to cover that expense.

People will always face costs, whether a service is 'free' or not. The issues are the level of those costs and the benefits derived from them. The level of cost is largely determined by government policy, whether the costs are faced by private or state schools. Governments set salary levels and determine the curriculum, the number of subjects and the length of the school year. Competition and consumer pressure can have very little impact on cost, except in the narrowest of senses. The essential components of a cost sharing policy should be (a) to aim at the lowest fee possible and (b) to relate benefits from the fee directly to the fee payer. The first component may seem surprising, but without it there are no constraints on how government determines education costs. It means

that before any steps to introduce fees are taken, all other steps which are necessary to reduce costs must be taken, whether they are technical, such as control over teacher numbers, institutional, such as decentralisation and autonomisation, or political, such as reducing the scope of the curriculum. The more normal approach has the reverse aim, to maximise fees.

B. Package of Reforms

Although the justification of cost sharing policies may be found in their anticipated impact on revenues, efficiency and equity, the public finance and public sector management environment may be hostile. As with other policy reforms, cost sharing should therefore be seen as part of a package of policies, and the pacing and sequencing of implementation should take into account the wide range of factors which influence the supply of education and the demand for it. It is now widely recognised that a key to the success of reform

policies is how they are sequenced, especially the order of (a) changes in incentive structures; and (b) changes in institutional structures. Components of cost sharing policy should be as follows, in the order of implementation sequence;

a) public sector reform;

b) sectoral finance and management reform;

c) direct linkage of cost recovery to service improvements.

Within all of these a pattern of incentives should be identified. Reform programmes without incentives to reform have less chance of succeeding. The policy should recognise from the outset the fragility of user fees as a base, and the importance of broad-based tax finance, derived from a progressive tax system. Direct and indirect costs should not have a perverse effect and make the overall incidence of

compulsory and quasi-compulsory payments regressive.

Public Sector Reform

There are three critical areas of focus in public sector reform: (a) revenue raising; (b) resource allocation and management; and (c) the reform of institutions and management systems. One of the most serious weaknesses of the Bretton Woods led reform programmes is that these three aspects were ignored or compartmentalised: they conformed to the government systems and structures which themselves needed to be changed. Civil service reform (CSR) and public finance reform are usually two separate programmers, with little connection between them: this has certainly been the case in both Ghana and Tanzania. All the three issues have bearings on the budget deficit, and therefore borrowing and public debt, and, by extension, fiscal stress and cost sharing.

One of the more serious mistakes in adjustment policies was the early concentration on expenditure reductions while ignoring revenue raising.[147] Badly designed tax systems and inefficient tax collection lead to higher budget deficits or reduced public expenditures, and consequently can have a serious effect on education expenditures. There is little justification for structural changes to education systems in response to fiscal pressure when possibilities for increased revenue are present: even though revenue measures may take some time to come through (though they need not), structural changes can be irreversible and cause permanent damage. The more common case is gradual erosion of infrastructure and of salaries through cumulative expenditure reductions caused by revenue shortfalls.

[[147] Partly due to assumption of the presence of the 'Please Effect', which proposes that improved tax revenue leads to government responses which

increase expenditure rather than reduce government dissaving.]

Tax finance is the only sustainable source of finance for education. However, innovative possibilities exist in the form of earmarked taxation and forms of local taxation. Such innovations are not viable if the normal system is weak and not enforced. It is sometimes argued that cost recovery is required precisely because taxation systems are weak, but this is a curious argument, in the same category of argument that has resulted in the profusion of parallel project management and aid delivery systems, many established by foreign aid agencies, on the grounds of government failure. For cost recovery systems to work, government systems must work.

In view of the importance of budget reform it is surprising how little serious effort has been made to make it a priority,[148] and while large inflows of foreign aid are

available, aid fungibility will continue to threaten that budgets will not be improved. Both the countries in the case studies in this paper have weak state machinery, similar to many developing countries, suffering from inefficiency, low morale and principal-agent problems. Overall public expenditure reform is the major condition underlying all sectoral and sub-sectoral financial interventions. There is no justification for a state to pass on the costs of inefficiency to citizens. While tax finance is often costly and inefficient, supplementary costs of inefficiency are even less acceptable when they are compulsory. In that one of the main reasons, if not the main reason, for the introduction of cost recovery policies, is the failure of public finances to cover the costs of education, the tendency is to take the inefficiencies of public finance management as a given and proceed to raise additional revenues. In most economic adjustment programmes cost recovery has been part of a package of measures to achieve fiscal balance through expenditure reduction, not to improve education quality.

[[148] 'In virtually no country has fiscal reform enabled the budget to become a real tool for effectively managing the development process', Gordon D. F., Debt. Conditionality and Reform, in Callaghy T. M. & J. Ravenhill (eds), *Hemmed In: Responses to Africa's Economic Decline*, Columbia University Press, 1993, p 122.]

Budgets are the most important policy documents of governments: they are approved by parliaments and therefore have legal status. Yet in many countries they do not reflect stated priorities: there is usually a disparity between government's revealed preferences and the policies they present to their own populations and to foreign aid agencies. Expenditure reform must take place through the budget process. Because of the collapse of the budget process in many countries, foreign aid agencies have established parallel structures and accounting systems, but such practices only paper over the cracks and fail to achieve

lasting improvements. Therefore, sectoral reform must also take place through the budget process and the normal systems of sectoral management which centres on budget implementation.

A policy of cost sharing in education or other sectors depends for its effectiveness on the strength of public finance management. In that it is generally recognised that cost sharing policies have a greater chance of success under decentralised conditions, local government fiscal systems take on the responsibility for regulation and accountability. Where these have been weak cost sharing has aroused popular resistance, and fees collected are often not accounted for. Similarly, in order for institutions to have autonomy of financial management strong supervisory and audit systems are needed: in their absence autonomisation of institutional management will not be effective, yet that policy is one of the most potentially important in bringing down institutional costs. In other words, wherever we look

for interventions which will facilitate service cost reductions and best use of non-tax finances, we see the essential condition of public sector expenditure management reform.

Financial reform cannot take place without an improved quality of civil service. Most countries, including Ghana and Tanzania, have been trying to tackle public sector management and employment issues for some time, but for various reasons with limited success. Manpower decisions are essentially budgetary decisions, and most civil service reforms (CSRs) did not appreciate that link. In both Ghana and Tanzania the systems of recruitment and of budget are independent of each other, and establishment therefore becomes a fixed cost to budget managers. This is particularly important for education sectors which are the largest single civilian employer in every country. Teacher allocation and reallocation should be effected through the budget (preferably by system managers within a decentralised system where decentralisation is an option)

and not by central or parallel planning mechanisms, such as are to be found in Sector Development Programmes and CSRs. Efficient staffing is at the heart of a package of reforms which involves cost sharing, for it is only when personnel are properly and efficiently disposed that parents can rightly be asked to contribute outside the tax system.

Sector Finance and Management

The areas of reform described above are necessary conditions and arguably even sufficient conditions for sectoral reform. Sectoral ministries generally have the responsibility for proposing resource allocation, and for making decisions which affect the costs of education. If ministries do not take action to ensure that the costs of education are fiscally realistic and affordable to government and people, the burden of cost sharing becomes heavy and at the same time the quality of infrastructure and instruction declines.

In both Ghana and Tanzania sectoral management systems require major reform at ministerial and decentralised local government levels, and at institutional levels, but such reforms take time and need to be the subject of consensus. Ministries may have weak financial control systems, and resource allocation may be largely incremental and line item based. There are few incentives to perform within hierarchical management systems in which the main criterion for success is survival, and not good performance defined in some sense as a contribution to improving learning outcomes.

Direct Linkage of Cost-Recovery to Service Improvements

As cost recovery takes place at the institutional level, institutions must be able to demonstrate immediate benefits to those who pay, either directly related to the amount of the charge or more generally through service improvements. This should be a central tenet of a cost sharing policy.

Fees are a form of benefit tax, where payment is made for government services which yield direct and identifiable benefits to the payer. Opinion surveys show that people are more willing to pay if they see tangible benefits. In some cases cost recovery policies may even reduce costs to the user of the service. In the health sector payment for drugs can achieve this, because where there are no drugs patients have to wait for longer periods, bribe or pay higher prices in the market place.[149] Similarly, it should be possible for central procurement systems to purchase and distribute textbooks more cheaply than leaving it to the market, and it may be efficient and effective for government to provide such a service on a cost recovery basis, although there will tend to be an overhead subsidy which can be justified on the grounds that more textbooks are in the system than would otherwise have been.

[[149] See Abel-Smith B. & P. Rawal, Can the poor

afford 'free' hearth services? A case study of Tanzania, *Health Policy and Planning*, Vol. 7 Nr 4 1992, pp 329-341. There is of course a major problem with the argument that because 'services have deteriorated to such an extent that even the poor have to resort to the private sector to obtain services at much higher cost, charges will be less inequitable than continuing to provide under-financed services..' (p 331). At the time of Abel-Smith's work Tanzania's revenue efforts were very poor indeed.]

Cost sharing policies must therefore be part of wider policy packages designed to address all the issues which make education cost what it does, and which constrain the fiscal capacity of government to support education. There is little sense in imposing cost recovery packages in the absence of wider interventions. They can result in much damage: the decline in enrolments and/or enrolment ratios in many

countries confirms the reality of such damage, although there are other reasons for those declines apart from cost.

The lessons for foreign aid agencies are also clear. Donors should be more sceptical of the Bretton Woods prescriptions and their underlying economic arguments.[150] They should be more circumspect about cost-benefit data, and about the supposed efficiency and equity effects which accrue from charging fees. They should be more interested in evidence of cost sharing policy success. They should analyse and tackle the underlying reasons for fiscal stress and its effects on education expenditures, and be less preoccupied with developing large-scale projects which fail to fit into a workable sequencing pattern. They should be more interested in genuinely sector-wide reforms rather than fashionable concentration on sub-sectors, at present the primary sector, but sector programmes which are financed in the same way that projects are financed will end up as projects. Their programmes should allow space for 'normal'

institutional structures to work, rather than establishing parallel project units, management teams and other parallel systems with enhanced salaries and facilities. Such a change in foreign aid practices would be fundamental, as it would involve reconsideration of their disbursement systems with a move towards direct support to government budgets, and even of the volume of resources they consider necessary.[151]

[[150] Tilak, in *Cost Recovery Approaches in Education, op cit*, notes how widespread scepticism pushed the World Bank economists into disclaiming their earlier arguments for primary education fees. The World Bank has also gone about in the prevailing wind of scepticism about its earlier health policies. (One notorious example was the case of a study, financed by the World Bank, of cost recovery in health in Kenya, the publication of which was

suppressed by the Bank. For the abridged report and a brief account of the affair, see Bloom G. and M. Segall, *Expenditure and Financing of the Health Sector in Kenya*, IDS, Sussex, 1993).

[151] It is this issue which causes difficulties for sector development programmes, which are now the New Jerusalem. While their intentions may be laudable (though there is good reason to be sceptical), agency procurement and financing regulations, and aid agencies' inherent desire to exert control, make true budget support difficult to achieve, and sector programmes tend to be large projects in disguise. Sector programmes also seek for perfection, usually with the help of liberal doses of consultants, before starting, which diminishes the opportunity for learning and organic growth within sectoral management cultures and structures. Aid agency driven programmes are also impatient, and

subject to the disbursement imperative, with aid agents being more interested in spending money than real improvement. There is evident danger of collusion between donor/lender and beneficiary in seeking perverse objectives. A justification for sectoral programmes which is rarely analysed is that they can make fungibility work positively through the budget. While there has been no analysis of the issue, there is good reason to suppose that endogenous growth as a policy objective applies just as much to public sector as to private sector institutions. Competency based and resource based growth theories of the firm have their potential parallels in public sector organisation, and the danger of sectoral programmes is that they do not take account of all the factors which themselves create new disequilibria while at the same time achieving temporary equilibrium. A dynamic process is started which 'encourages continuous growth but

limits the rate of growth' (Penrose, E. T. *op cit,* p 5).]

In summary, cost sharing should not be seen as a way of overcoming institutional and fiscal failure. Its objectives should be specified; its implementation carefully paced and sequenced; and its effects properly evaluated in order to ensure that evidence and not dogma drives policy development.

C. Summary and Conclusions

The argument advanced in this study is that cost sharing policies have not had the effects anticipated by those who introduced them. Without complementing measures, cost sharing will not increase total resources for education, nor will it enhance the efficiency of resource use, as is often proposed, to give more equitable public finance targeting. Cost sharing has undoubtedly contributed strongly to falling and stagnant enrolment ratios where these have occurred,

and the failure of cost sharing to improve the supply of learning inputs and better infrastructure is part of a wider failure to achieve good quality education service provision in many countries. The wider social and economic effects of cost sharing are little understood. This study concludes that there has been little justification to support the introduction of cost sharing policies, and is critical of the linkage which was made between foreign aid entitlement and cost sharing as part of the wider, mainly Bretton Woods Institution, project of rapid public expenditure reductions.

There are six broad and related reasons for failure of cost sharing policies.

First, the fungibility of money from cost sharing and foreign aid has permitted governments to avoid difficult reform decisions. User fees, less obvious compulsory payments, and direct intergovernmental transfers through foreign aid acted as a buffer against poor public sector management.

Governments could then maintain higher than necessary spending on external and internal security, loss making parastatals, and other manifestations of extensive government machinery, including excessive teaching forces. Governments, which themselves failed to raise adequate revenues from taxation, required its citizens to make what are essentially tax payments outside their tax systems, consolidating regressive taxation and bypassing public accountability. Moreover, the endorsement of such policies by foreign aid agencies and others gave legitimacy to related policies such as 'community participation' which included the devolution of responsibility to communities for school building and maintenance: this has resulted in the slow but sure deterioration of infrastructure. Payers of user fees and other charges have, in effect, subsidised government failure. Cost sharing may have contributed to the inefficiency and lack of effectiveness of education service delivery more than to its improvement. It might be tempting to qualify this conclusion with the observation that cost sharing is unlikely

to have such a significant effect because of the relatively small sums of money involved: while this study has shown that the sums are larger than generally supposed, it is important to realise that cost sharing is an impact *at the margin*.

Second, the underlying reasons for cost sharing related to fiscal stress and the need to fill a fiscal gap, rather than to augmenting resources within an efficient system to achieve a more equitable public spending pattern, as is argued in the literature. Fiscal stress implies that the education system is probably underfunded and/or inefficient, and that the quality of service delivered is poor. At the level of the household survey evidence suggests that primary education is among the most discretionary of household expenditures and therefore an early expenditure foregone in times of household cash budgetary stress. At the level of the school near total reliance on parental contributions for non-salary expenditures, particularly those on learning inputs, meant

that schools fell into debt or had to operate with insufficient resources to provide quality raising inputs. People do not want to pay for a poor service, and as direct and indirect charges did not improve the service, demand for schooling stagnated.

Third, the rigidities of public finance systems were not sufficiently taken into account. The reallocation effects which for many are the underlying rationale for cost sharing did not occur: charging the 'rich' did not result in more resources for the 'poor', and the supposed equity enhancements were not realised. A further reason for the failure to reallocate from higher education to primary education was that any cost reduction measures were welcomed by Ministries of Finance and by the Bretton Woods Institutions as contributions to overall reductions in public expenditures, particularly in the early years of stabilisation and adjustment when rapid expenditure reduction rather than revenue growth were priorities. Moreover, higher education is a very political sub-

sector, and difficult to rationalise.

Fourth, the timing of reform was often inappropriate. Policies were introduced during times of growing economic difficulties compounded by squeezes on public expenditure: in some places, such as Zambia, during a time of severe drought and major epidemic. In periods of economic difficulty, employment opportunities are reduced, and the costs of education outweigh perceived benefits, in spite of the misleading arguments derived from cost benefit analysis. People did not want to pay for a poor service which did not lead to employment.

Fifth, during the period of economic adjustment inappropriate policy initiatives pushed up costs, such as a too rapid attempt to introduce Universal Primary Education, '20/20' aid formulae, project based initiatives which expanded curricula and syllabuses, extensions to the basic education cycle, and other measures which could not be afforded from

domestic resources, and which there was little likelihood of being affordable in the foreseeable future. These and other initiatives which required external financing to support them were not located in a package of measures necessary to ensure that cost sharing was introduced alongside quality improvement of the education service. Donors and lenders concentrated on narrow projects and were preoccupied with targeted aid, and ignored the connections between policy actions.

Finally, the simplistic assumptions of economic rationality which underlie neo-classical economic theories of demand for a service such as education, and on which much foreign aid policy is based (for foreign aid has for the most part been the main driver of cost recovery policies), could not absorb cultural aspects of demand, and for that and other reasons the orthodox theoretical basis of cost sharing is a poor guide to policy.

This paper has argued that as a consequence of these effects, cost sharing policies have combined with other factors to interrupt enrolment growth (with declines in enrolment ratios and in some cases of absolute enrolment levels taking place in many African countries), and have contributed to the decline in the quality of education services. A properly paced and sequenced package of reform should focus first on bringing the costs of education to manageable levels, with priority given to minimising the costs to households rather than maximising them, as has tended to be the case explicitly or implicitly; and second to structuring education systems so that they can be afforded by governments without excessive dependence on foreign aid, particularly where that aid involves borrowing, no matter how concessional the interest rates.

This study has explored most of the aspects of cost sharing and cost recovery. It argues that the economic basis of many of the arguments for cost sharing policies is simplistic and

part of a wider agenda of transferring costs from government to people outside the tax system, often in untransparent and unaccountable ways. Irrespective of how households make choices, the aggregate effect seems to have been that cost sharing has contributed to a stagnation in enrolment ratios and failure to improve the quality of educational provision, and that it has enabled governments to avoid difficult reforms. There is already considerable evidence of the damage that cost sharing policies have had on health care systems and the health of populations, such as rising rates of resistance to antibiotics as people cannot afford to purchase full courses, and it is hoped that this study will raise serious questions about the near and long term effects of those policies on education systems and the opportunities for populations to improve their knowledge and skills.

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