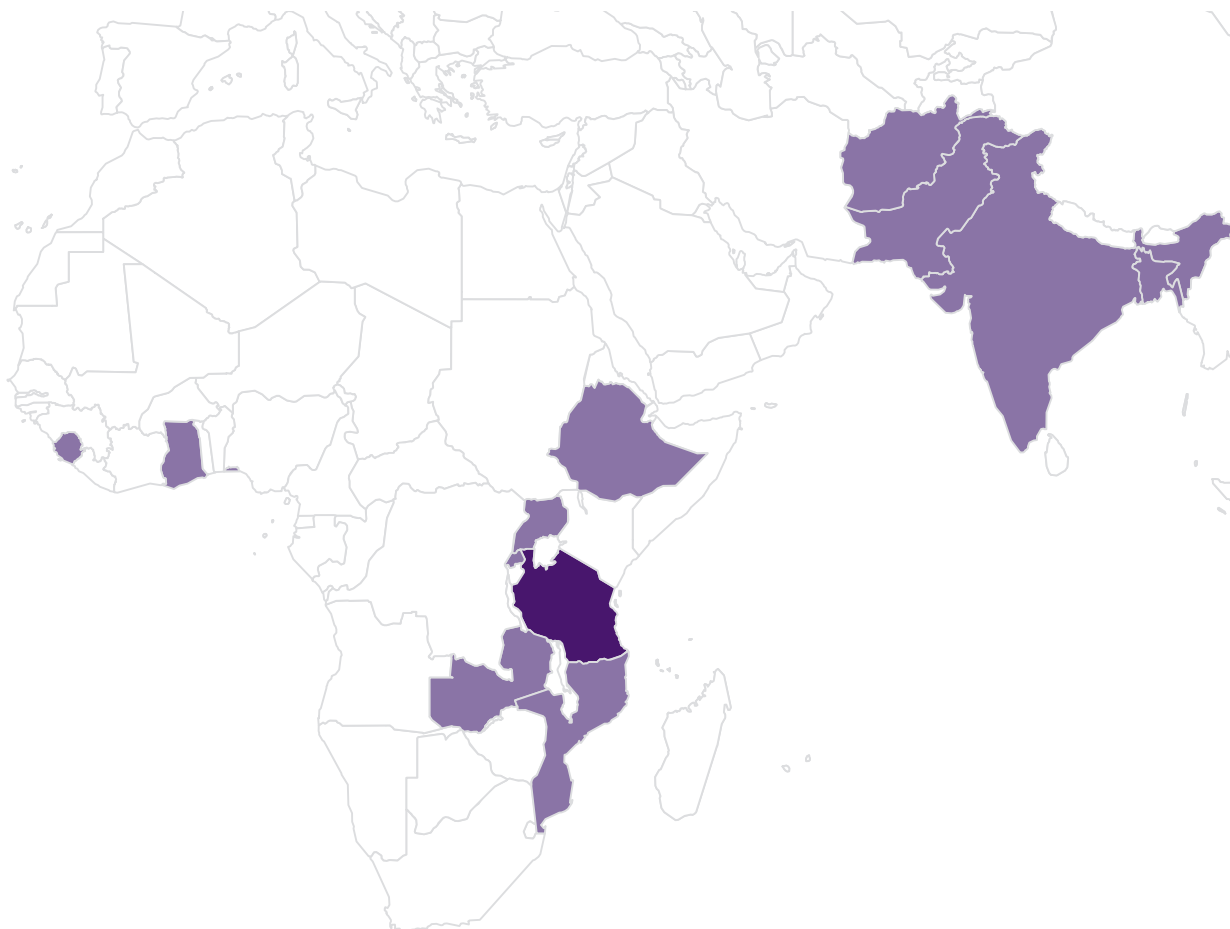


Differences between sources of government expenditure in education and health, Tanzania

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Reliable data on government expenditure in priority sectors, such as health and education, is a key ingredient into the analysis of public policy effectiveness. This brief note has two primary goals: (i) to document the increasing divergence over time between various official Tanzanian data sources on spending in these two sectors, and (ii) to outline possible explanations for this divergence and highlight its consequences for social expenditure analysis.

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There are at least two official sources of information on long-term government expenditure in health and education: one is provided by the Ministry of Finance and presented in the **Economic Survey Report (ESR)** and the other is prepared by the respective sector ministries. The Ministry of Education prepares annually the **Basic Education Statistics in Tanzania** report (**BEST**) while the Ministry of Health reports the **National Health Account (NHA)** every three years. Given that the NHA is available for only three years (1999, 2002/03, and 2005/06), one could use the **World Health Organization** series which imputes values for years using other official sources. While the series on nominal total government expenditure do not differ substantially between sources, expenditure in education and health start diverging substantially after the fiscal year 2001/02. Some of the differences related to education spending seem to be due to budgeted versus realised amounts, while those on health spending can be mainly attributed to central versus consolidated government expenditures. There still remain significant differences unexplained.

1. The Sources

The **Economic Survey Reports (ESR)** are prepared annually by the Ministry of Finance and Economic Affairs, presents basic information since 1995 on economic activity, prices, government finance, and utilization of public services, among other things. The last available ESR is from 2008. Table 26 of the report presents a disaggregation of the *central* government expenditure by purpose and by source of funding. Expenditures in health and education are further disaggregated in six sub-votes each. Data for the years 1997/98, 1998/99, 2006/07 and 2007/08 are estimates. The rest are actual expenditure figures (rather than budget figures).

The **Basic Education Statistics in Tanzania (BEST)** are compiled annually by the Ministry of Education and Vocational Training. Data on central government expenditure, expenditure in the sector (disaggregated by levels) and the Ministry's spending are available since 1998. The report also presents information on enrolment and drop-out, number of teachers and passing exams for all levels of schooling. The last available BEST is from the year 2008. Data on total government budget and education sector expenditure are reported to come from the Public Expenditure Reviews (PER) – see below.¹

The total expenditure in education from the ESR and BEST are quite different (see table 1 and figure 2). Specifically, since 2001/02 the government expenditure in education as reported by the Ministry of Education is increasingly greater than that reported directly by the Ministry of Finance. While the sector expenditure in the FY 2000/01 from both sources practically coincide, in 2007 the BEST's figure is twice that reported in ESR. In terms of the sector's contribution to total government expenditure, it represents a difference of 11 percentage points (from 9% according to ESR to 20% according to BEST).

The **World Health Organization (WHO)** compiles national health accounts (NHA) for almost all countries. The NHA provide basic indicators of spending on health by financing sources and financing agents. Data on government expenditure in the sectors comes from the Ministry's National Health Accounts publications for the year 1999, whereas for the rest of the years it uses figures from the Health Sector PER (2006) and imputations based also on ESR. Total government expenditure was taken from ESR.

The WHO estimates on public expenditure in health are generally significantly higher than the ESR, at times around three times as large. The 2001 WHO figure is 40 per cent above that of ESR, whereas in 2007 the WHO public health expenditure is almost two and half larger than ESR's amount. As in the case of education, the differences in the total government expenditure are generally relatively small.

¹ There are some divergences between Sector budget from BEST and from PER that we could get hold of (the last report obtained is from 2004), but the differences are not very large and they might be due to later corrections in the official figures.

A final source of information is the **Public Expenditure Review (PER)**, prepared by the Government of Tanzania and the World Bank. These reports are done within the context of the Medium Term Expenditure Framework, a five-year plan and have as one of its key objectives ‘to ensure that the expenditure patterns of the government match the policy priorities as stipulated in the Poverty Reduction Strategy Paper (PRSP)’ (Ministry of Health 2004, p 1). PER reports are available for the years 2001 to 2004, and a reduced version (Rapid Budget Analysis) for the fiscal year 2009/10. The information on government expenditure is available from 1997/98 till 2003/04, and from 2007/08 till 2009/10. For health, there is also information for intermediate years (table 2). Unfortunately, data on sectoral spending cannot be disaggregated by type of providers. However, the information will help us understand the reasons behind the differences in other official sources.

2. Explaining the differences between sources

a. Budget estimates versus actual expenditure

There are several possible reasons for these differences. The first explanation is that one source of information may be reporting *budgeted* expenditure while the second reports actual (realised) expenditure. Indeed, this seems to be the reason behind the disparities between ESR and BEST figures on **total government budget**. Specifically, the amounts reported in BEST are closer – though not exactly the same – to the budgeted expenditure reported in the ESR reports, before the actual figures are available. For instance, the figures for 2003/04 are relatively close to those in the 2004 ESR report (2,607 bills. and 2,578 bills.) which are, in turn, substantially different to the actual expenditure figures declared in the 2007 ESR (2,192 bills.).

The actual-versus-budget explanation appears at first to be also behind the discrepancies between the two sources on **government expenditure in education**. The 2002/03 and 2003/04 BEST figures in this category are surprisingly similar to those reported in the 2004 ESR, which are two and three times the size of the actual expenditure as reported by 2007 ESR (table 3).² Yet, from the fiscal year 2004/05 onwards, the expenditure in education reported in BEST is more than twice the amounts reported in any ESR either as budgeted or actual expenditure in the sector. Some other reason must explain the observed difference. The same holds for the differences observed between WHO and ESR on government expenditure in health. The disparities are very large and cannot be explained by the budgeted/actual description.

b. Central government budget versus consolidated budget

A second potentially likely justification behind the disparities in the amounts reported by distinct sources may be due to one source presenting the central government expenditure while the other also includes spending from the regional and local governments that is funded by other than central government sources (largely, foreign donors and NGOs but also from locally collected revenues). In other words, it is possible that the discrepancies reflect the differences in the **central versus consolidated government budget**.

As mentioned above, the ESR statistics correspond to central government expenditure. The tables in BEST do not clarify whether the figures correspond to either central or consolidated budget. But given the source used (PER) it must be that up to 2003/04 the figures correspond to central government expenditure. Therefore, at least for the first eight observations, the previous explanation was the only cause behind the differences between ESR and BEST.

² Incidentally, the large differences between budgeted and actual expenditure in education in these two years are associated with a massive unrealised spending in the ‘pre-primary and primary education affairs’ sub-vote. In the fiscal year 2002/03 only a tenth of the budgeted recurrent expenditure was realised and almost none of what was budgeted in either recurrent or development spending in 2003/04. –see table 2. These changes might be in some way related with the 2002 elimination of primary school fees in 2002 (‘Free Primary Education’) and the process of decentralization of spending to local government areas. For a longer perspective on budgeted versus actual expenditure in education and in primary education votes, see figures 4 and 5 in the appendix. The budgeted amounts for primary education in these two years was unusually high and the final expenditure in 2002/03, although only a tenth of the budgeted, was still five times larger than in the previous year.

From 2005/06 onwards, further analysis indicates that the central-versus-consolidated expenditure argument explains most of the differences. The 2009 PER rapid budget analysis presents statistics on total government and education expenditure for the consolidated public sector for the years 2007/08 and 2008/09. These figures are consistent with BEST statistics (tables 1 and 2). Therefore, at least for the last few years and possibly since 2005, it is likely that the statistics on public expenditure in education in BEST corresponds to the consolidated budget estimates, which explains the difference found with the actual spending figures for the central government expenditure in ESR.

A similar story might be behind the differences found in health spending. The tables from WHO refer to 'general government expenditure' and "general government expenditure in health' without specifying whether they correspond to the central or consolidated government budget. Given that the latter is presented as a proportion of the former, one would assume that they both correspond to the same definition. Nonetheless, from comparisons with the National Health Accounts in 1999 (table 9.2 – reproduced here as table 4), it seems that the total government expenditure refers to the central government while the specific to health is most likely the referring to the consolidated account. According to NHA, the Ministry of Finance funded almost Tshs 62 billion of health expenditure – quite similar to the reported in ESR – while other Tshs 55 billion were given from donors to the local and regional governments and the ministry of health and other ministries directly. In total, the public service spending (consolidated budget) was close to TShs 119 billion, similar to the reported amount in WHO for that year. In sum, the health expenditure reported in ESR may correspond to only Ministry of Finance spending, while the WHO figure seem to include funds from donors and managed by lower level public institutions. The NHA for the later years, unfortunately, presents only information on the central government spending (budget estimates) and, indeed, the total expenditure in health is lower than that reported in WHO, hence it is consistent with the story that WHO presents consolidated statistics on public health expenditure. Finally, the figures for the years 2005/06 onwards are relatively similar to those in the Health PER report 2009, which presents also (budget estimates) consolidated expenditure statistics.

In short, the WHO statistics on public expenditure on health corresponds to the consolidated spending, most likely, budget estimates. This explains the difference with the figures from the ESR, which corresponds to central government spending, actual expenditure whenever possible.

Table 1. Government Expenditure. Total and in education and health. (in mill. Tshs., current prices)

	Source: Economic Survey Review 2007 (from Table 26 Central Government Expenditure					Source: BEST (from Public Expenditure Review) Consolidated Gov.Budget			Source: WHO		
	Total Budget	Education	% of total G	Health	% of total G	Total Budget	Education Sector Budget (in mill.shs)	% of total G	Total Gov Expenditure	(from PER, NHA)	
										Health	% of total G
1995/96	500,116	34,026	6.8	18,491	3.7				500,116	57,916	11.6
1996/97	730,878	72,100	9.9	26,472	3.6	730,878	92,631	12.7	730,878	75,796	10.4
1997/98*	815,772	47,190	5.8	36,705	4.5	975,639	102,343	10.5	856,177	85,290	10.0
1998/99*	933,287	54,088	5.8	45,513	4.9	927,732	107,457	11.6	927,732	91,785	9.9
1999/00	1,179,959	160,234	13.6	63,559	5.4	1,168,778	138,583	11.9	1,168,778	119,389	10.2
2000/01	1,392,419	204,828	14.7	83,396	6.0	1,307,214	218,051	16.7	1,307,214	115,857	8.9
2001/02	1,683,417	246,405	14.6	97,800	5.8	1,462,767	323,864	22.1	1,462,767	127,449	8.7
2002/03	1,870,383	240,387	12.9	148,861	8.0	2,106,291	396,780	18.8	1,462,767	137,428	9.4
2003/04	2,192,880	123,711	5.6	82,274	3.8	2,607,205	487,729	18.7	1,989,538	264,019	13.3
2004/05	3,076,004	172,343	5.6	106,819	3.5	3,347,538	504,745	15.1	2,516,943	358,026	14.2
2005/06	3,258,493	307,934	9.5	240,728	7.4	4,176,050	669,537	16.0	3,248,352	485,505	14.9
2006/07*	4,751,141	432,283	9.1	280,565	5.9	4,850,588	958,819	19.8	4,788,497	658,375	13.7
2007/08*	6,066,832	552,733	9.1	373,884	6.2	6,066,800	1,100,188	18.1	3,987,330	548,222	13.7

* Estimates

Table 2. Other sources of statistics (in mills. Tshs, current prices)

Source: Public Expenditure Review							Source: Ministry of Health				
	Government Expenditure	Education	%	Health	%		Government	Gov Health	%		
1998/99	973,800	164,900	16.9	72,500	7.4	actual					
1999/00	1,191,900	218,000	18.3	81,200	6.8	actual		125,762		actual	
2000/01	1,257,600	245,900	19.6	100,700	8.0	actual					
2001/02	1,625,800	344,900	21.2	142,100	8.7	actual					
2002/03*	2,091,100	436,200	20.9	186,700	8.9	budget	1,989,538	121,093	6.1	budget	
2003/04*	2,694,500	517,500	19.2	217,300	8.1	budget					
2004/05	3,364,000	689,100	20.5	278,300	8.3	budget					
2005/06				413,294		budget	4,788,497	318,627	6.7	budget	
2006/07				491,444		budget					
2007/08*	6,068,015	1,172,484	19.3	613,967	10.1	budget					
2008/09*	7,215,613	1,349,012	18.7	752,857	10.4	budget					
2009/10*	9,513,685	1,710,399	18.0	784,262	8.2	budget					

* Estimates

Table 3. Differences in budget and actual expenditure from Economic Survey Reports (mills Tshs., current prices)

Economic Survey Report 2004		2002/03		Development		Total Exp.		Recurrent		2003/04*		Total Exp.			
4 EDUCATION AFFAIRS AND SERVICES		307,672	101,691	409,363	340,840	105,408	446,248								
4.1	Pre-primary and primary education affairs and services	153,416	82,063	235,479	173,351	69,812	243,163								
4.2	Secondary education affairs and services	47,768	399	48,167	53,975	595	54,570								
4.3	Tertiary education affairs and services	76,708	2,721	79,429	81,769	4,952	86,721								
4.4	Education services not definable by level	1,840	0	1,840	1,962	0	1,962								
4.5	Subsidiary services to education	0	0	0	0	0	0								
4.6	Education affairs and services n.e.c.	27,940	16,508	44,448	29,783	30,049	59,832								
Economic Survey Report 2007		2002/03		Development		Total Exp.		Recurrent		2003/04		Total Exp.			
4 EDUCATION AFFAIRS AND SERVICES		136,657	103,730	240,387	121,745	2,065	123,711								
4.1	Pre-primary and primary education affairs and services	15,146	83,600	98,746	389	0	389								
4.2	Secondary education affairs and services	29,941	450	30,391	27,106	0	27,106								
4.3	Tertiary education affairs and services	62,749	2,000	64,749	75,356	1,144	76,500								
4.4	Education services not definable by level	18,940	0	18,940	232	0	232								
4.5	Subsidiary services to education	0	0	0	0	0	0								
4.6	Education affairs and services n.e.c.	9,879	17,680	27,559	18,662	921	19,484								
ESR 2004 - ESR 2007		2002/03		Development		Total Exp.		Recurrent		2003/04		Total Exp.		Distribution of differences in total expenditure	
4 EDUCATION AFFAIRS AND SERVICES		171,015	-2,039	168,976	219,095	103,343	322,537							2002/03	2003/04
4.1	Pre-primary and primary education affairs and services	138,270	-1,537	136,733	172,962	69,812	242,774							80.9	75.3
4.2	Secondary education affairs and services	17,827	-51	17,776	26,869	595	27,464							10.5	8.5
4.3	Tertiary education affairs and services	13,959	721	14,680	6,413	3,808	10,221							8.7	3.2
4.4	Education services not definable by level	-17,100	0	-17,100	1,730	0	1,730							-10.1	0.5
4.5	Subsidiary services to education	0	0	0	0	0	0							0.0	0.0
4.6	Education affairs and services n.e.c.	18,061	-1,172	16,889	11,121	29,128	40,348							10.0	12.5

Table 4. Annual funds provided from finance sources to financing agents (Tshs, 1999/00)

	Sources					Total
	Donors	Ministry of Finance	NGOs	Households	Firms	
Financing agents						
Districts	36,131,419,577	17849072075				53,980,491,652
MoH	17,512,123,457	33967992068				51,480,115,525
Other ministries	2,132,076,000	844336368				2,976,412,368
Regions	2,221,660,922	9037194140				11,258,855,062
Public sector	57,997,279,956	61,698,594,651	-	-	-	119,695,874,607
NGOs	6,065,766,967		12718701370			18,784,468,337
Households				130,081,376,585		130,081,376,585
Private insurances					6968486245	6,968,486,245
Total	64,063,046,923	61,698,594,651	12,718,701,370	130,081,376,585	6,968,486,245	275,530,205,774

Source: 1999 National Health Accounts (table 9.2)

Figure 1: Central Government Expenditure (in mil.shs, current Tshs)

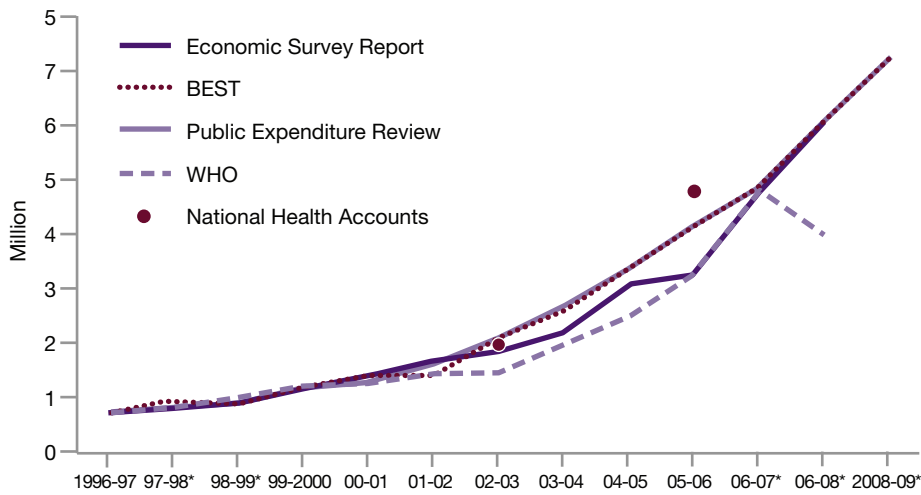


Figure 2: Expenditure in Education (in mil., current Tshs)

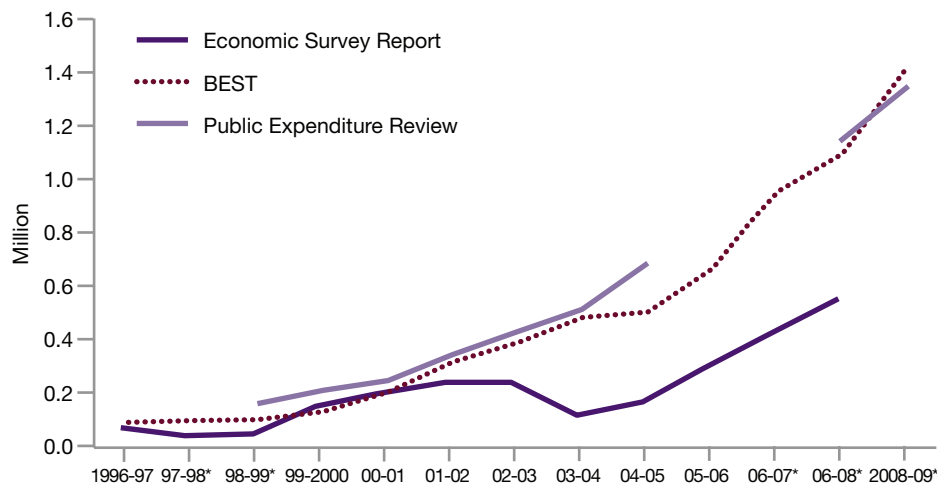


Figure 3: Expenditure in Health (in mil., current Tshs)

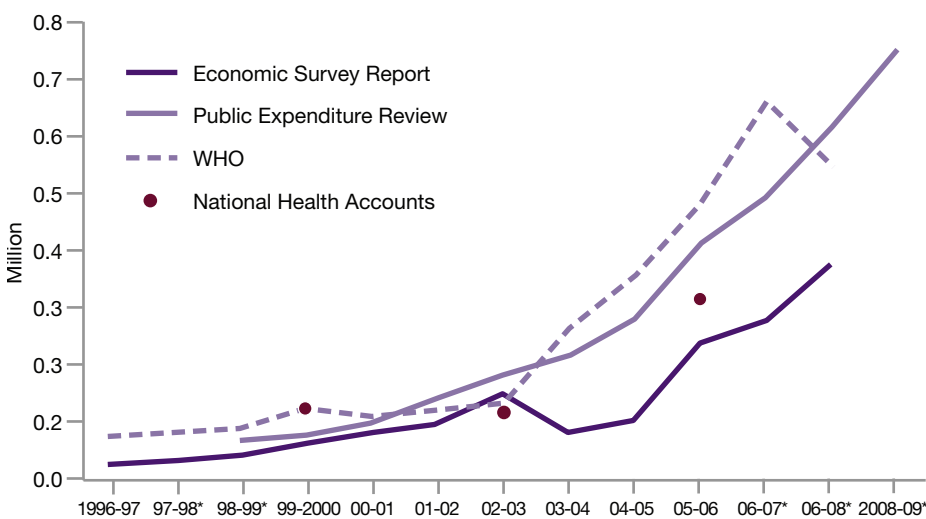


Figure 4: Central Government Expenditure (in mil.shs, current Tshs)

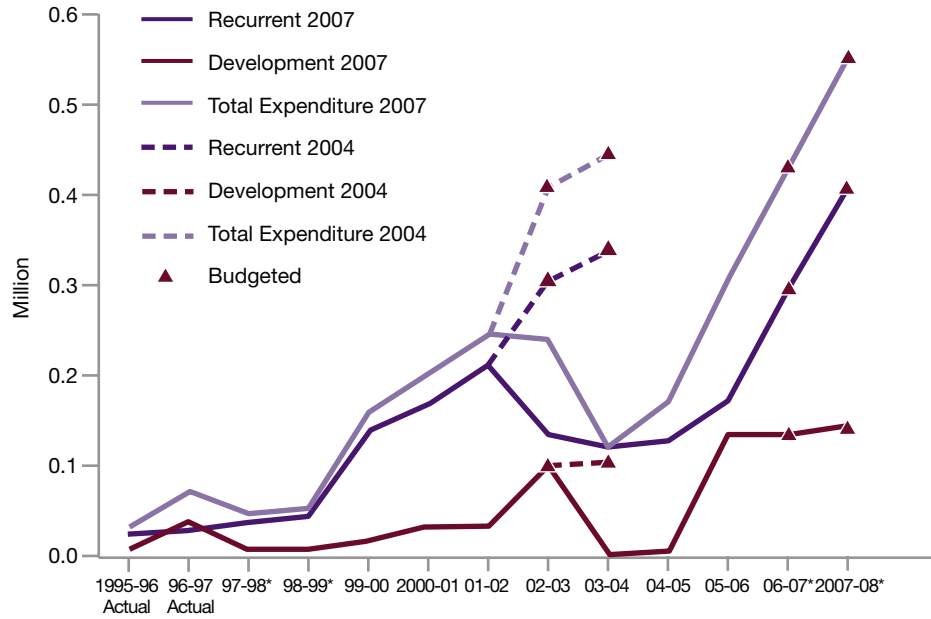
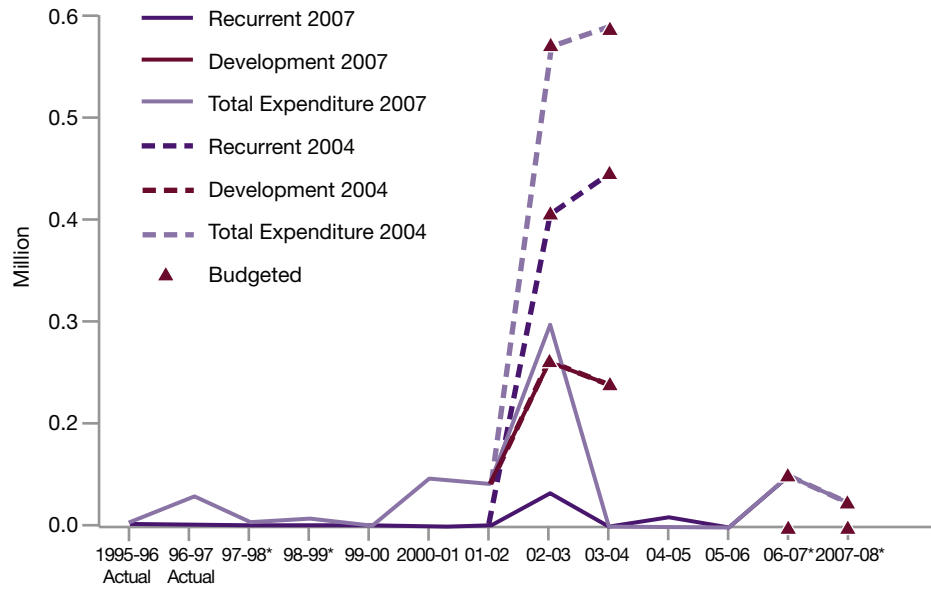


Figure 5: Central Government Expenditure (in mil.shs, current Tshs)



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