

**PUBLIC SPENDING IN GHANA: AN  
ASSESSMENT OF NATIONAL LEVEL DATA  
(1995 – 2005)**

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## **THE GHANA STRATEGY SUPPORT PROGRAM (GSSP) BACKGROUND PAPERS**

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GSSP is a research, communication, and capacity-strengthening program to build the capabilities of researchers, administrators, policymakers, and members of civil society in Ghana to develop and implement agricultural and rural development strategies. With core funding from the U.S. Agency for International Development (USAID)/Ghana and a mandate to develop a multi-donor-funded Program, IFPRI launched GSSP as a partnership between Ghana and its development partners. IFPRI is working with these stakeholders to generate information, improve dialogue, and sharpen decisionmaking processes essential for effective formulation and implementation of development strategies. GSSP informs stakeholders on the role of agriculture and rural development in the broader economic and policy context in line with the emphasis placed on agriculture in Ghana's Growth and Poverty Reduction Strategy. GSSP supports the development and implementation of a system to monitor and evaluate progress toward achieving Ghana's growth and poverty reduction targets and the Millennium Development Goals.

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## **1. INTRODUCTION**

Ghana's Growth and Poverty Reduction Strategy (GPRS II; November, 2005) which spans the period 2006 – 2009 intends to shift the strategic focus of the country's development agenda from the direct anti-poverty objectives of the GPRS I to a more growth-oriented strategy. The development agenda of the country, as set out in GPRS II is now geared towards achieving middle income status by 2015. In other words, accelerating economic growth is to be given priority. This growth acceleration is to be complemented by policies aimed at empowering the vulnerable and excluded, so that the poor can share in the benefits of growth.

The growth agenda that is set by the GPRS II is to be led by the private sector with agriculture as the launch pad. The other priorities of the GPRS seek to complement the goal of increasing private sector competitiveness with the ultimate goal of increasing wealth creation. The total resources required to finance the GPRS II is estimated to be about \$8.06 billion. The budgeted expenditure over the period is estimated to be about \$6.26 billion. This leaves a financing gap of about \$1.79 billion. It is therefore argued that resources constitute a major constraint to the implementation of the GPRS II (GPRS II: Costing Framework, p-14; November, 2005).

The debate, however, should go beyond resource constraints. Indeed the efficiency of the expenditures to be made under the GPRS II is as important as the amount of resources to be used. An important question is whether the returns to the different elements in the investment portfolio is consistent with the planned portfolio mix in terms of achieving planned program goals. Providing an answer to these and related questions requires a careful analysis of the returns to public expenditures in Ghana. This paper provides a starting point for such an analysis. It reviews the trends in public expenditure as well as key development outcomes over the last 10 years (1995 – 2005).

## 2. OVERVIEW OF THE MACRO ECONOMY OF GHANA

Ghana's macroeconomy has seen marked improvement over the last 10 years. GDP growth has averaged about 4.7 percent over this period. Indeed, over the last 5 years, there has been a consistent increase in the GDP growth rate – by 2005 GDP growth had reached about 5.9 % compared to 4% in 1995 (See Table 1). This has resulted in an increase in the rate at which output per head is growing. Inflation has generally declined over this period from a level of about 71 percent in 1995 to about 15 percent by the end of 2005. In spite of the improvements in the macroeconomy, the response of gross domestic savings has been low. By 2003, gross domestic savings remained at about 11.3 percent (of GDP), compared to the 1995 level of about 11.6 percent. Investments have, however, increased. Having fallen from about 17.6% of GDP in 1995 to about 10% in 1999, the downward trend was reversed to reach 27.5% by 2003.

### 2.1 Fiscal Policy

The overall fiscal balance has changed little over the period 1995 – 2005. After worsening from a surplus position of about 0.9 percent of GDP in 1995 to a deficit of about 8.5 percent in 2000, it has steadily improved to a deficit of about 2 percent by the end of 2005. The political business cycles<sup>1</sup> remain but with decreasing amplitude – the overall fiscal deficit of 8.5 percent of GDP for say 2000 is much higher than the deficit of 3.2 percent recorded for 2004 (Table 1). Increasingly, government is relying less on domestic sources to finance the deficits. The reliance on domestic sources for financing the deficits has been particularly low over the last three years of the sample, culminating in a net repayment of about 1.6 percent of GDP in 2005.

Table 1 Selected Macroeconomic Indicators

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Real GDP Growth	4.0	4.6	4.2	4.7	4.4	3.7	4.2	4.5	5.2	5.8	5.9
Real GDP per Capita Growth	1.0	1.7	1.6	2.4	2.4	1.9	2.4	2.7	3.3	4.0	4.1
Inflation (end-period)	70.8	32.7	20.5	15.8	13.8	40.5	21.3	15.2	23.6	11.8	14.8
Gross Domestic savings (% GDP)	11.6	13.2	4.2	10.3	3.9	5.4	7.0	7.7	11.3	----	----
Gross National savings (% GDP)	21.1	20.3	23.8	22.4	20.5	23.1	27.1	18.8	21.9	----	----
Gross domestic Investments (% GDP)	17.6	18.1	10.4	18.0	9.9	15.2	23.1	20.2	27.5	----	----

Source: World Development Indicators (2005) and various editions of the Government Budget Statements

<sup>1</sup> The rise and fall of fiscal balance due to cycles in policy between general elections; which were held in 1992, 1996, 2000 and 2004.

**Table 2 Trends in Fiscal Balance**

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Overall Fiscal Balance (% of GDP)	0.91	-2.96	-2.11	-1.71	-2.46	-8.48	-7.24	-5.26	-3.40	-3.20	-2.00
Primary Surplus* (% of GDP)		0.3	3.2	3.7	2.3	2.45	3.80	2.14	2.50	0.70	3.40
Domestic Financing (% of GDP)		5.0	5.1	3.9	5.4	8.8	2.3	4.9	0.35	0.49	-1.62

Source: Various Government of Ghana Budget Statements

### 3. GOVERNMENT EXPENDITURES IN GHANA

Government expenditures have increased over the last five years. As a percent of GDP, expenditures have increased from the 1995 level of about 20 to about 26 percent in 2005 (Figure 1). It has to be said that generally, expenditures have been relatively higher since 2000, compared to the preceding period. As a percent of GDP, government expenditure peaked at about 34.4 percent in 2000. This relatively high expenditure ratio coincides with an election year and is consistent with the observed positive correlation between expenditures and political cycles (see Addison and Osei, 2000). Data from some of the low income countries in Sub-Saharan Africa who are less indebted, according to the 2005 World Development Indicators, show that Ghana’s expenditure is probably higher than the average for the region. Tanzania and Mozambique’s total expenditure in 2005 were respectively 24.5 and 20.1 percent of GDP (OECD Reports on Tanzania and Mozambique, 2005). These are lower than the level of about 26 percent recorded for Ghana in this period.

**Figure 1 Government Expenditure Trends, 1995 – 2005 (% of GDP)**



Source: Controller and Accountant General’s department

Budget presentation under the Medium-Term Expenditure Framework (MTEF) divides government expenditures into two broad categories, namely the discretionary and statutory expenditures (ISSER, 2006, p-41). Discretionary expenditures are classified into four sub-categories<sup>2</sup>: *Personnel Emoluments* (Item 1), *Administration* (Item 2), *Services* (Item 3) and *Investments* (Item 4). Generally, expenditures classified as discretionary are those for which government has some flexibility as to the amounts to be allocated to the Ministries, Departments and Agencies (MDAs). Statutory expenditures, on the other hand, are defined as those expenditures which are obligatory for government to undertake. For these expenditure items, government has little or no flexibility with respect to the amount to be allocated. The items that come under statutory expenditures include *District Assembly Common Fund (DACF)*, *Education Trust Fund*, *Petroleum-Related Fund*, *Road Fund*, *Transfers to Households*<sup>3</sup>, and *Debt Service* (See Budget 2007, Appendix 4a)<sup>4</sup>. Based on this definition we calculate the statutory expenditures by adding these items using data obtained from the Controller and Accountant General's Department (CAGD). The discretionary expenditures are obtained as the net of the statutory from the total expenditure.

It is observed that the proportion of discretionary expenditures has generally been higher than the statutory component. As at 1995, discretionary expenditures were about 68 percent of total expenditures (Figure 2). Up to 1999 there was a general increase in the statutory component in relative terms – increasing from about 32 percent in 1995 to about 37 percent in 1999. This fell to about 33 percent in 2000 but again increased to about 45 percent in 2001. The decrease in the statutory expenditure proportion in 2000 was mainly because discretionary expenditures increased proportionately more than the increase in statutory spending<sup>5</sup>. Since 2001 there has been a steady decline in the proportion of expenditures going to the statutory component, partly reflecting the gains from debt relief. Part of what will have been captured as external debt under statutory payments have now become HIPC expenditures which are classified under discretionary spending.

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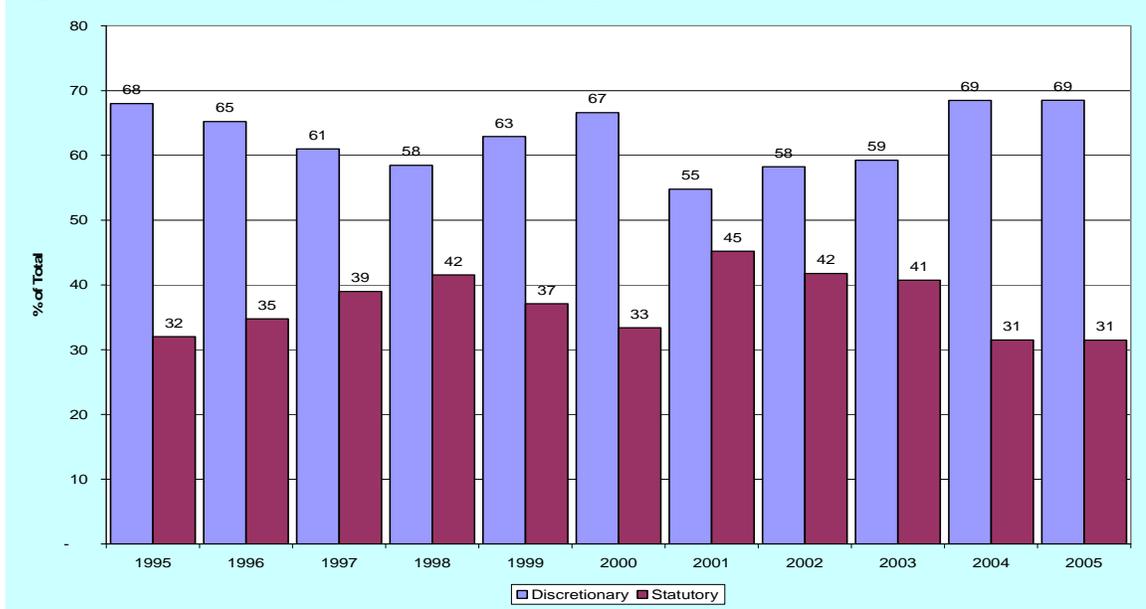
<sup>2</sup> The components of these four categories are listed in the classification of expenditure items in appendix 1

<sup>3</sup> Transfers to households includes, pensions, Gratuities, Social Security and more recently the National Health Fund

<sup>4</sup> The *District Assembly Common Fund Act* requires government to spend not less than 5% of total government tax revenue on District Assemblies in Ghana and it is managed by the Common Fund Administrator. It was recently increased to 7.5% effective 1<sup>st</sup> January 2008. The *Education Trust Fund* receives 2.5% of the total VAT receipts plus any other moneys as may be allocated by Parliament are spent on education development in Ghana. The *Petroleum-Related Fund* requires that some fixed percent of excise tax on all petroleum products sold in Ghana be used for exploration, building up strategic stocks and energy related issues. The petroleum related fund amounted to about 8% of the ex-pump price of fuel in 2006. An excise tax on petroleum products (excluding kerosene) goes to road fund; to be used for road maintenance in Ghana. The road fund is a per unit tax of about ¢600 (i.e. about 7.75 of the ex-pump prices) as at 2006.

<sup>5</sup> Though statutory spending more than doubled

Figure 2 Discretionary versus Statutory Expenditures



Source: Controller and Accountant General's department

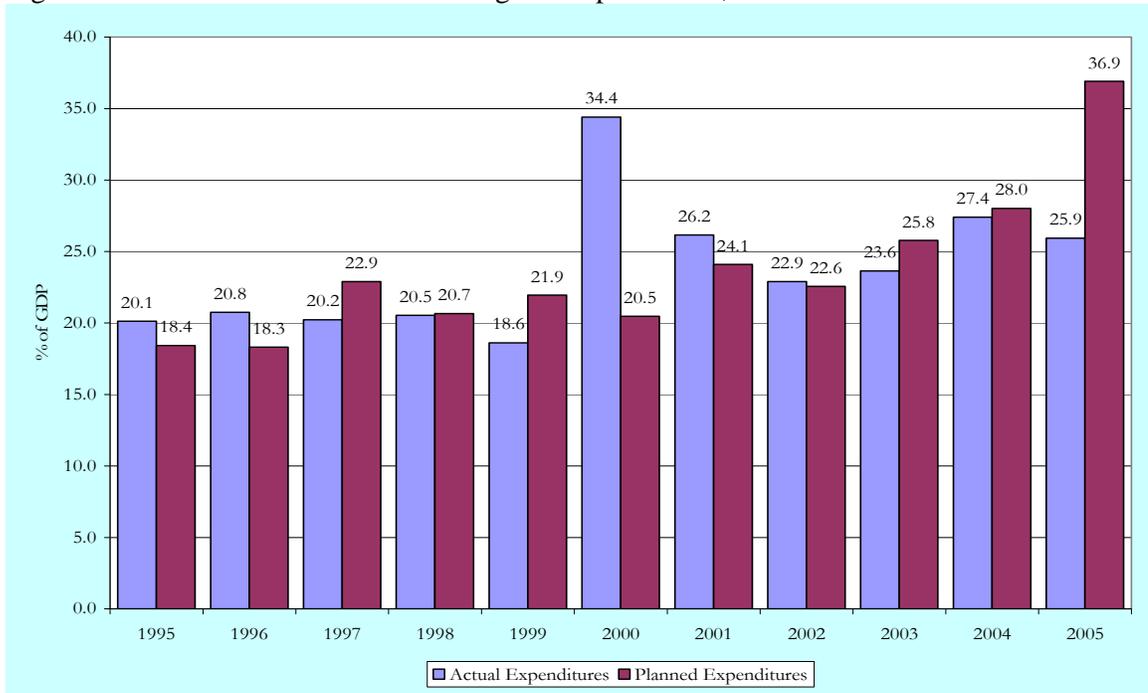
### 3.1 Budgets Versus Actual Expenditures

Government expenditures have not deviated from the budgeted in any consistent way. However one can say that in more recent years (particularly since 2002) the tendency is for the actual expenditures to be less than the budgeted (Figure 3). The largest deviation between actual and planned expenditure was recorded for 2000. The positive deviation for this year indicates that government expenditures exceeded the planned in this year. As a percent of GDP, the actual expenditure exceeded the planned by about 14 percent in 2000<sup>6</sup>

Looking at the deviations for the different expenditure components one notes that the largest deviations seem to come from expenditure items other than *personnel emoluments, Administration, service, investments and interest payments*. As shown in Figure 5 the deviations for the 'other' components is largest for the years when expenditure deviations are largest – i.e. in the years 2000 and 2005. We also note that whereas for investments (Item 4) the actual expenditures are likely to be less than the budgeted (negative deviations), the reverse is true for personnel emoluments. In particular we note that for personnel emoluments, the deviations are positive (actual expenditures exceed budgeted) for all the years between 1999 and 2005, with the exception of 2003 when it is zero.

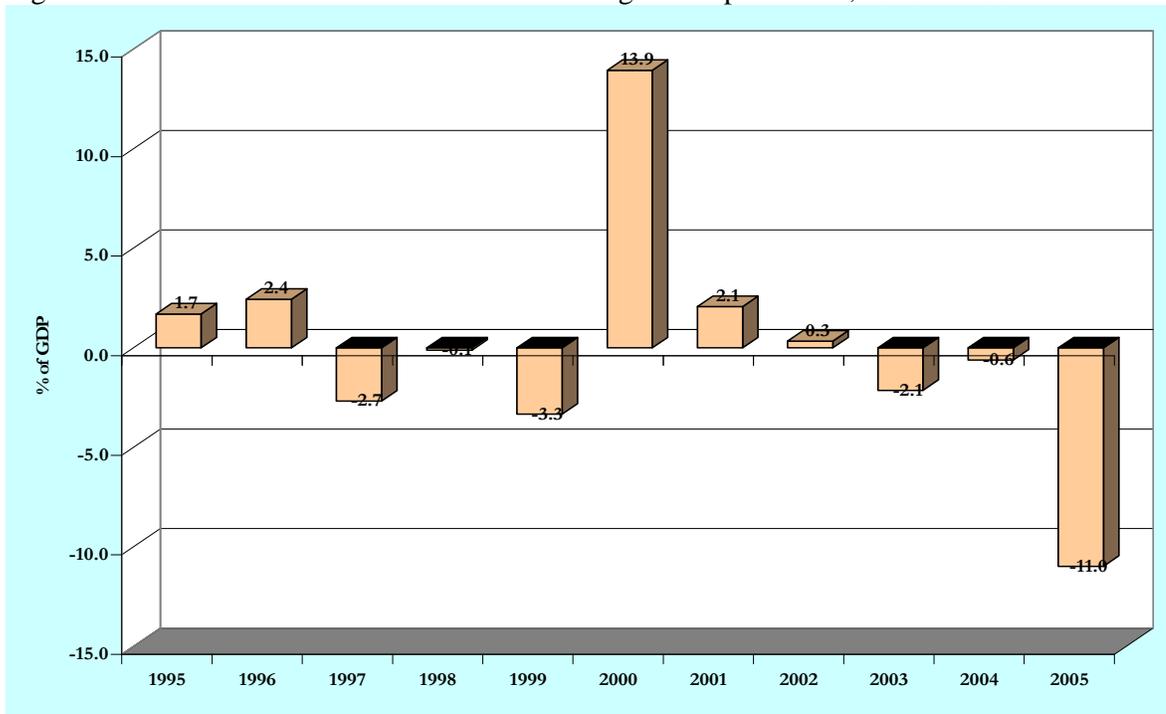
<sup>6</sup> An election year

Figure 3 Trends in Actual and Budgeted expenditures, 1995 - 2005



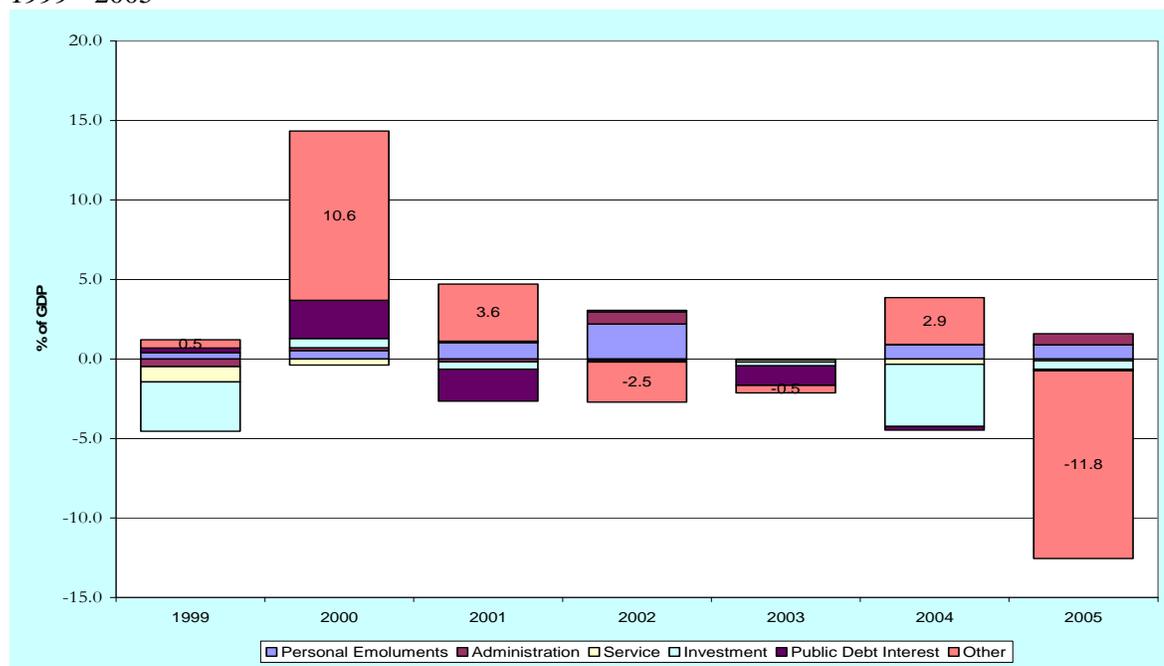
Source: Controller and Accountant General's department

Figure 4 Deviations between Actual and Budgeted Expenditures, 1995 – 2005



Source: Controller and Accountant General's department

Figure 5 Deviations Between Actual and Budgeted Expenditures by Categories, 1999 - 2005



### 3.2 Trends in Expenditure Components

Discretionary expenditures are classified into the five functional groups, namely *general administration, economic, social, infrastructure* and *public safety*. Each of these five functional groups has a unique set of Ministries Departments and Agencies (MDAs) under them. A full list of all MDAs under the different functional groups for 2005 is given in Appendix 2. We note that ministries such as Finance and Economic Planning, Foreign Affairs, Local Government and Rural Development among others are classified under *general administration*. Under *economic services* we have ministries of such as food and agriculture, trade and industry, and private sector development. Among those under the *social services* are Ministry of education, health, Youth and Sports etc. For *infrastructure* we have Ministries of Works and Housing, Roads and Transport, and Communication and Technology. Finally in the Public Safety category, we have Ministries of Justice, Defence and Interior among others. Here we look at trends for the components under the broad functional classifications.

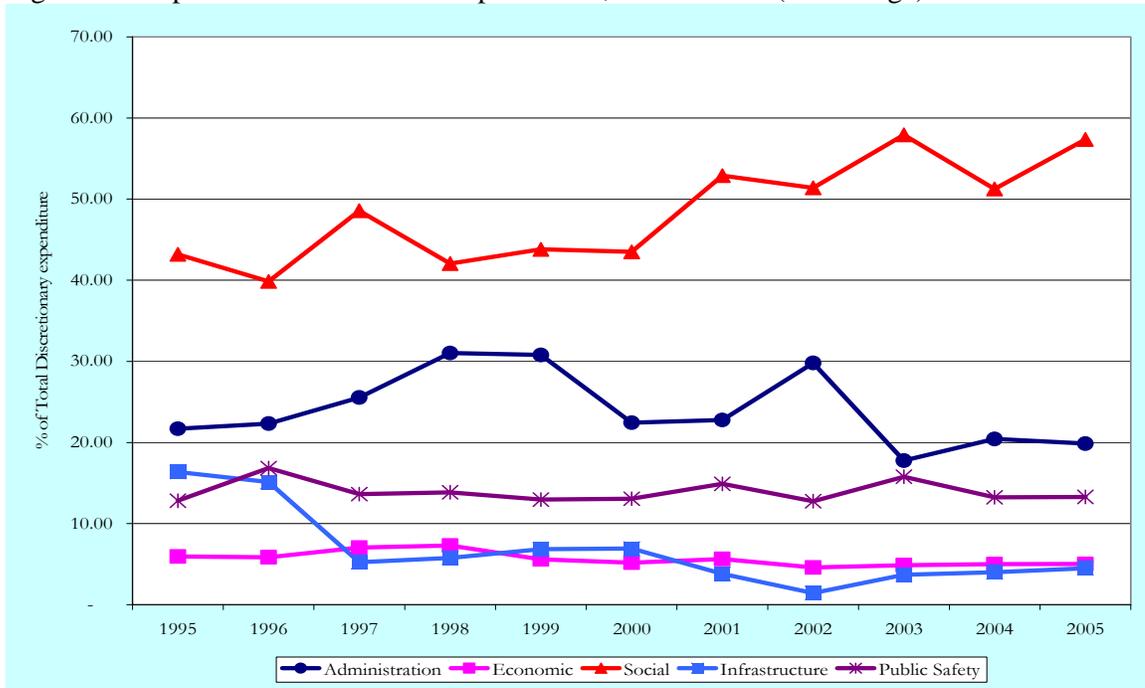
#### 3.2.1 Broad Functional Expenditure Categories

In Figure 6, the percentage composition of functional expenditures, 1995 – 2005 are outlined. Over the last 10 years, expenditures on social sector have taken the largest share of total discretionary spending. Indeed over the last 5 years, the percent of discretionary

spending going to social services have consistently increased reaching over 57 percent in 2005. The next functional group, which ranks after the social sector, is administration – attracting about 20 percent of total discretionary spending in 2005. This ratio, of total discretionary spending going to administration for 2005, is a decline from the 1999/2000 level. The proportion of spending that goes to the other 3 areas, public safety, economic services, and infrastructure were respectively about 13 percent, 5 percent, and 4.5 percent for 2005. For these three groups of expenditures, the proportions of discretionary spending that they attract have changed little over the last 5 years.

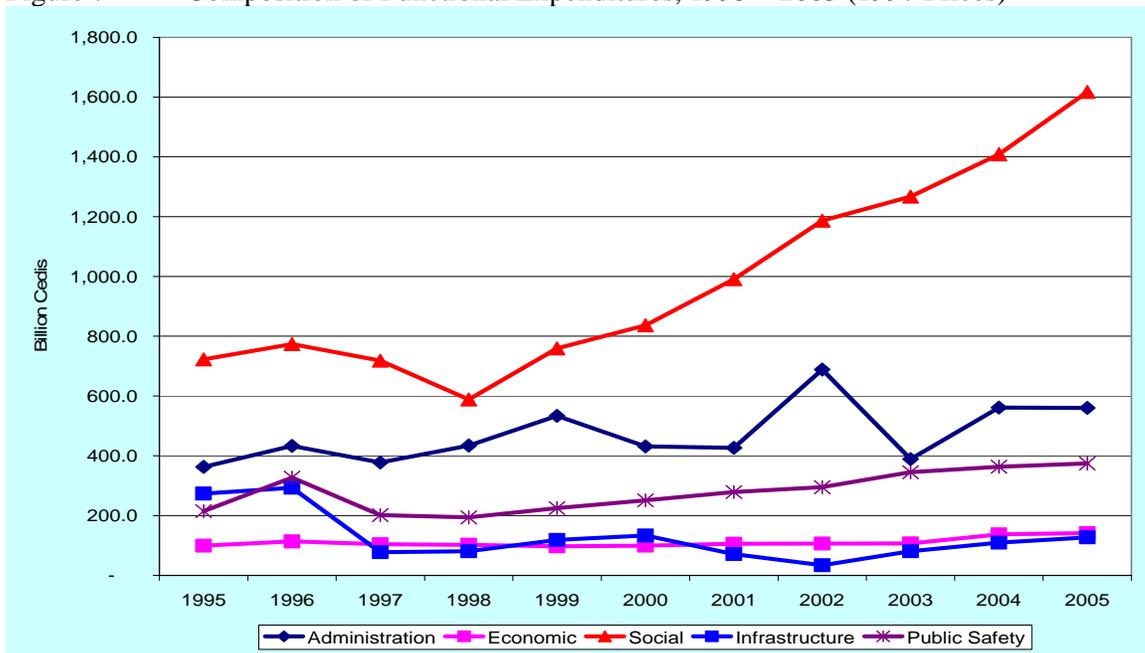
The marked increase in social spending since 2001 is consistent with the country taking advantage of the enhanced HIPC initiative. The GPRS I (2003-2005), a requirement under the HIPC, focuses on addressing poverty in Ghana by increasing the share of spending on the social sector (2004 Annual Progress Report of GPRS I, p-21). The increasing share of discretionary spending on the social sector is therefore consistent with the policy of addressing poverty by redirecting part of the gains from debt relief to the social sector. The 2004 Annual Progress Report of the GPRS I (2004 APR) makes the point that the increased social spending has crowded out resources to the economic and infrastructure sectors. As Figure 7 shows, spending on economic services and infrastructure sectors increased in real terms from 2002. However compared to the GPRS I targets (9.7 percent and 10.3 percent for 2003 and 2004 for economic services), these sectors seem to have been given lower priority as the targets were not met compared to administration, social and public safety sectors where targets were exceeded. The important point that needs to be made here is that, the balance between wealth creation and poverty reduction seem to have been skewed towards the later. However, as have been argued in the literature, significant and sustained poverty reduction cannot be achieved without adequate wealth creation (see *inter alia*, Dollar and Kraay (2000), Osei and Quartey (2001), and Hanmer and Naschold (2001)).

Figure 6 Composition of Functional Expenditures, 1995 – 2005 (Percentage)



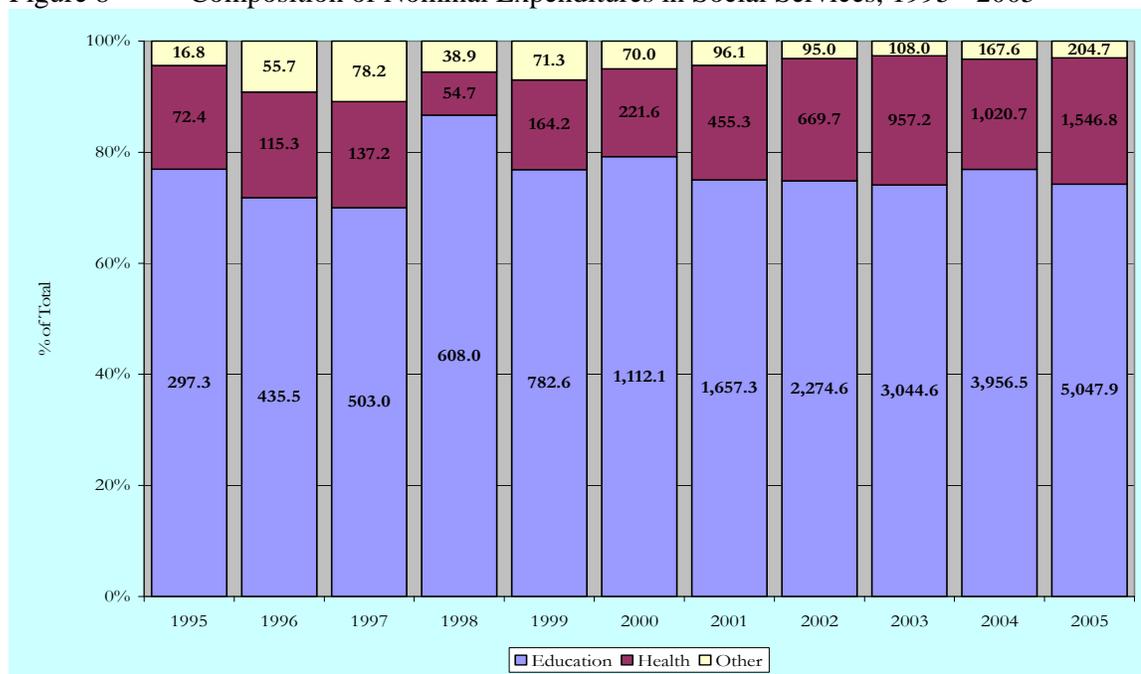
Source: Controller and Accountant General's department

Figure 7 Composition of Functional Expenditures, 1995 – 2005 (1997 Prices)



Source: Controller and Accountant General's department

Figure 8 Composition of Nominal Expenditures in Social Services, 1995 - 2005



Source: Controller and Accountant General's department

Notes: The numbers in the bars are in € billion (current prices).

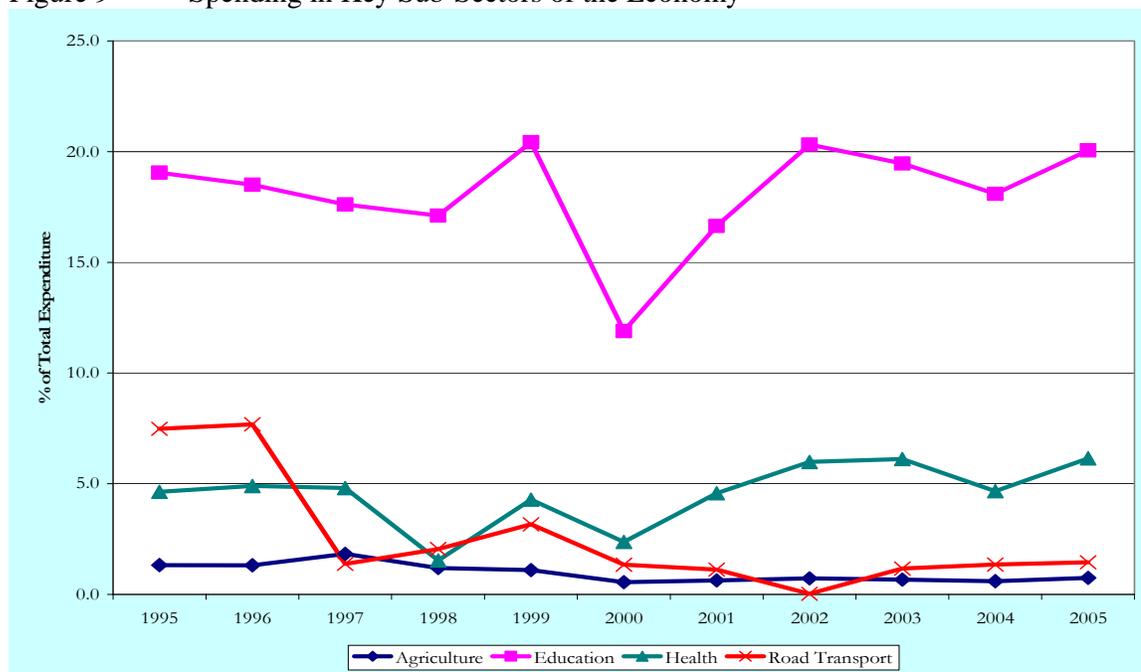
In terms of social spending, education and health account for over 95 percent of the spending for this functional group. Expenditures in education and health have been particularly high in the last 5 years. Individually, education gets the bulk of social spending – about 74 percent against about 23 percent for health in 2005 (Figure 8). As mentioned earlier, the emphasis on education and health is consistent with the GPRS I objectives.

Looking at key sub-sectors of the economy, namely education, health, agriculture and road transport<sup>7</sup>, one notes that spending in education is highest and has shown a consistent increase since 1998 (Figure 9). By 2005 education spending had reached about 20 percent of total expenditure (about 5 percent of GDP). Health expenditure ratios have also exhibited an increasing trend from about 1998, and reached a level of about 6 percent of total expenditure (about 1.6 percent of GDP) in 2005. Expenditures on agriculture and road transport have been generally very low over the period 1995 to 2005 (

Figure 9). Indeed for agriculture, the trend shows a declining one from about 1997.

<sup>7</sup> It needs to be pointed out that these are not the only sub-sectors of the economy. However these sub-sectors do feature quite prominently in the national development discourse and constitute over ??

Figure 9 Spending in Key Sub-Sectors of the Economy



Source: Controller and Accountant General's department

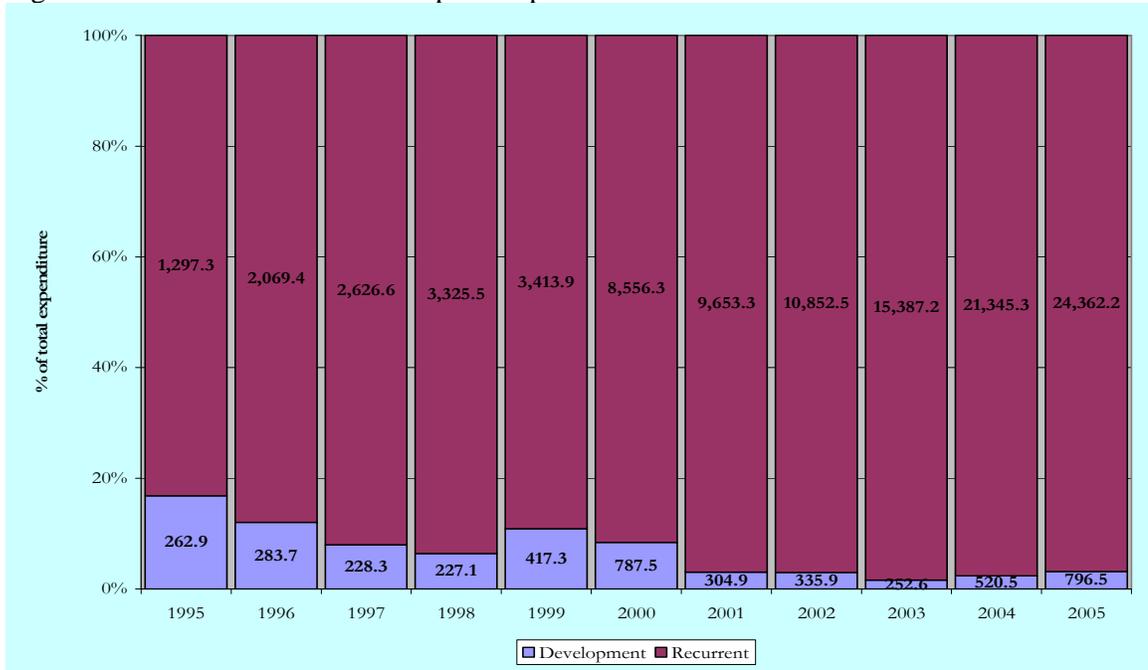
### 3.2.2 Economic Classification of Expenditures

In this section we classify total expenditure data into capital/developmental and recurrent expenditures. Since 1999 when Ghana started using the Medium Term Expenditure Framework (MTEF), government expenditure classification has changed from 'development and recurrent' to 'statutory and discretionary'. We therefore use investment (Item 4) as a proxy for development expenditure from 1999. Recurrent expenditure is computed as the difference between the total and capital expenditure. In Figure 10 we plot capital and recurrent expenditures expressed as a ratio of total expenditure. We note that capital expenditures as a ratio of total expenditures have declined over the years – from about 17 percent in 1995 to about 3 percent in 2005.

It is important to recall that statutory spending includes items such as, *District Assemblies Common Fund (DACF), Education Trust Fund, Road Fund, and the Petroleum Related Fund*, among others. Clearly, a significant part of payments to the road fund and also to the education trust fund may very well go to support development projects. In effect we could be underestimating the development expenditure component, particularly in more recent times when we use investment (Item 4) as a proxy. Having said this, however, the fact still remains that there is a significant bias against the capital/development component. For instance, in 2005, the gap between recurrent and capital/development expenditure is about ₵223.6 trillion. If we include the total of DACF, education trust fund, road fund, and petroleum related fund, the gap only reduces by ₵2.6 trillion. This indicates that the bias

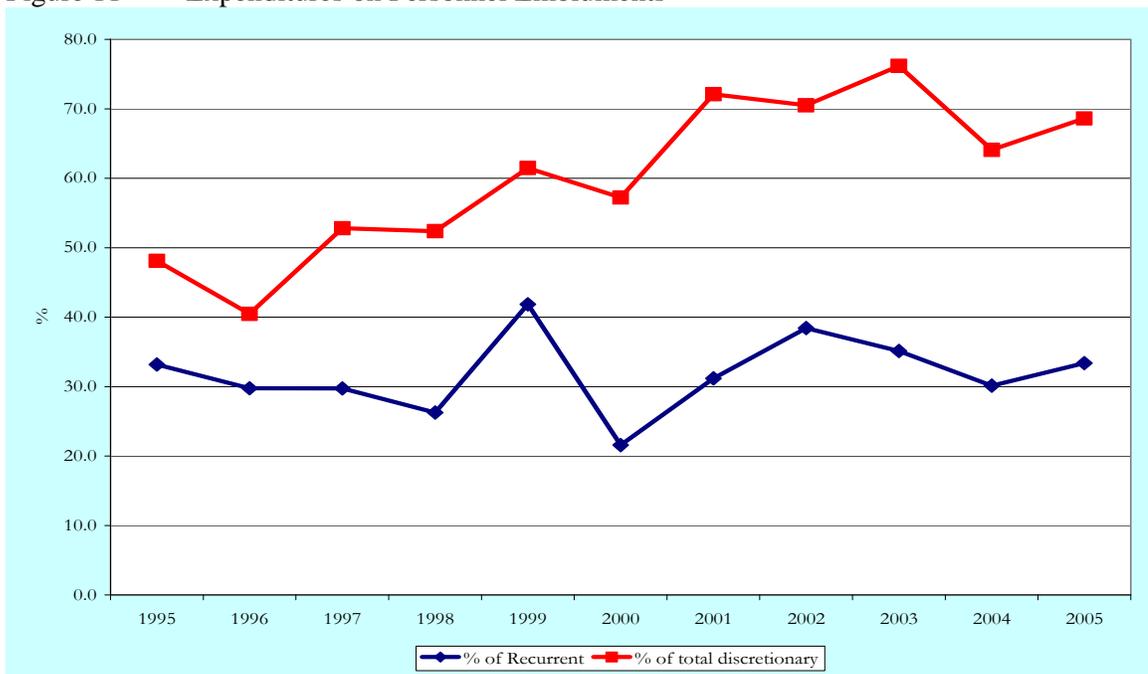
remains even if we include these items. This appears to me to be okay, that is, they more or less become even, but what should be the norm? I don't think a 50:50 split is sacrosanct. Can you discuss this with me please; it's important that we state this carefully.

Figure 10 Recurrent Versus Capital Expenditures



Source: Controller and Accountant General's department

Figure 11 Expenditures on Personnel Emoluments



Source: Controller and Accountant General's department

In Figure 11, one notes the significant levels of expenditures that goes into personnel emoluments. Whether as a percent of total discretionary or recurrent expenditures, the levels have been quite high and show an increasing trend over the period.

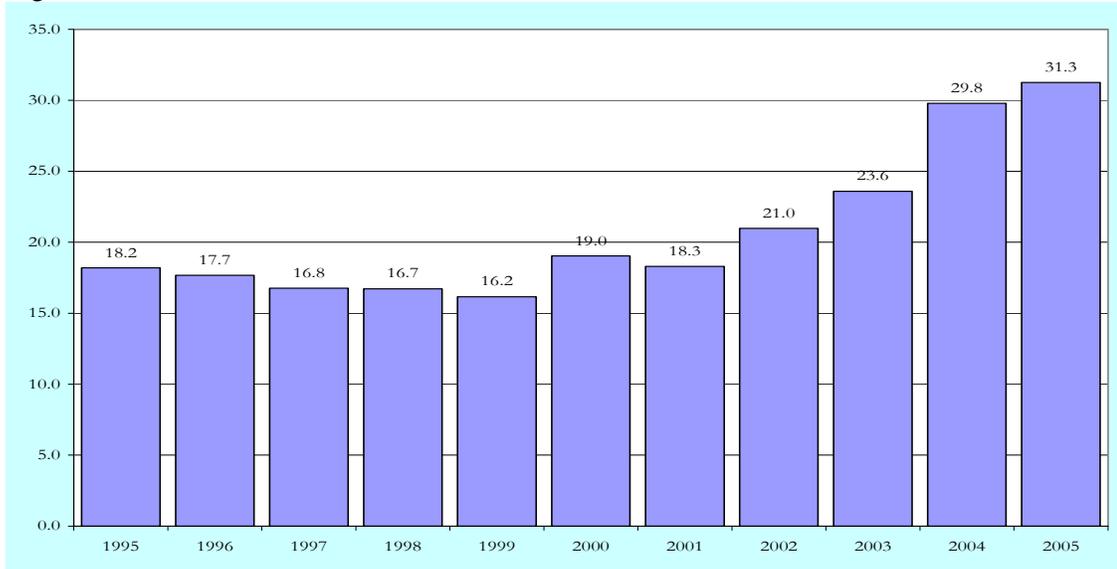
#### **4. TRENDS IN KEY SOURCES OF FINANCING GOVERNMENT SPENDING**

As with government expenditures, government revenue (including grants) increased over the period being investigated. From a level of about 18 percent in 1995, it has increased to over 31 percent in 2005. The importance of the sources of revenue has also changed over the years. Over the period 1995 – 1998, international trade taxes contributed the most to government revenue followed by indirect taxes and direct taxes in that order. In more recent years (2004 and 2005) non-tax revenues have become the most important contributor to total revenue. Generally though, it can be said that government revenue effort has increased over the years.

The non-tax revenue component which includes external inflows (which includes loans and grants that go through the central government) have shown an increasing trend in the last 5 years, contributing over 30% of total government receipts in 2005 (

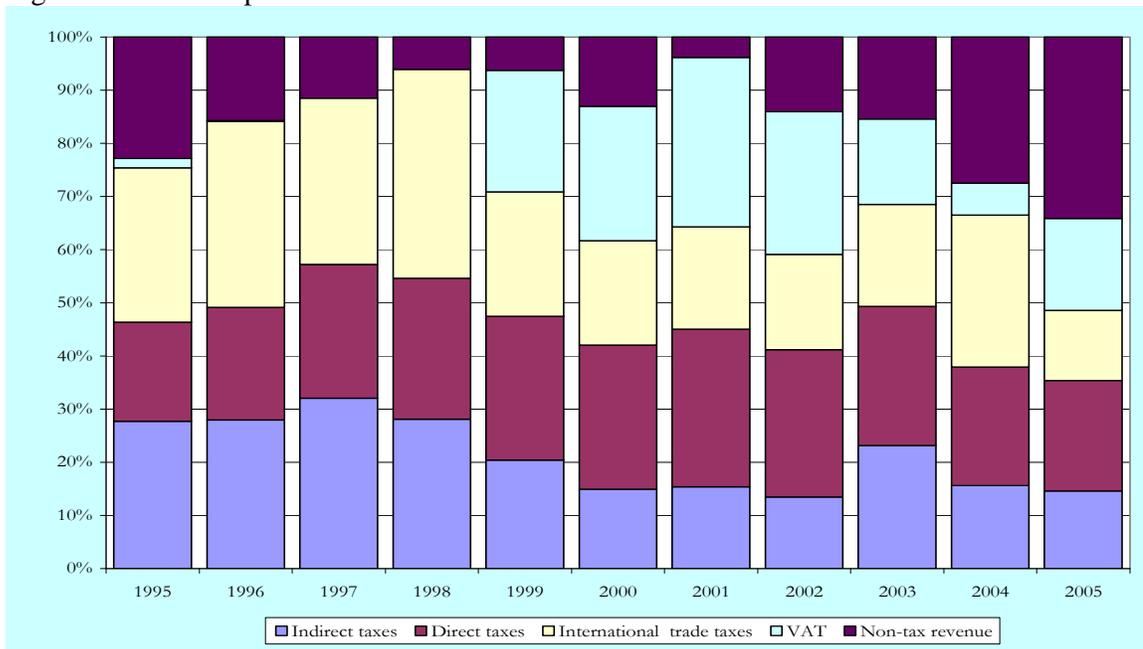
Figure 9). To understand the magnitude of external inflows in driving this trend, we show these inflows over the period 1999 – 2005 (Table 3). We calculate total external inflows as the sum of *grants*, *project loans*, *programme loans* and *exceptional financing* as obtained from the CAGD data. We note that external inflows as a percent of total government receipts increased from about 22% in 1999 to over 30% in 2005. Indeed in 2001, when the new government came to power and was enjoying significant goodwill from the donor community, external inflows exceeded 41% of total government receipts. It needs to be said that, even though the proportion of external inflows in the total receipts of government has declined, its importance in government budget cannot be overemphasised.

Figure 12 Trends in Ratio of Government Revenues to GDP, 1995 – 2005



Source: Controller and Accountant General's department

Figure 13 Composition of Government Revenues



Source: Controller and Accountant General's department

Table 3 Selected Government Fiscal Indicators, 1999 - 2005 (% of GDP)

	1999	2000	2001	2002	2003	2004	2005
<b>Total Receipts</b>	<b>28.42</b>	<b>36.52</b>	<b>35.7</b>	<b>32.34</b>	<b>33.71</b>	<b>36.01</b>	<b>36.77</b>
<b>Grants</b>	1.47	2.12	6.91	3.19	4.78	6.19	5.26

<b>Other Receipts</b>	<b>10.42</b>	<b>16.69</b>	<b>10.62</b>	<b>10.73</b>	<b>8.57</b>	<b>6.45</b>	<b>4.53</b>
Divestiture	0.26	1.19	0.41	0.02	0.65	0.36	0.24
Project Loans	3.58	3.72	5.17	2.48	3.13	3.11	3.17
Programme Loan	1.15	2.95	2.78	0.33	1.68	1.15	1.51
Exceptional Financing	0.00	0.00	0.00	2.60	2.76	1.33	1.23
Net Domestic Financing	5.43	8.83	2.27	4.88	0.35	0.49	-1.62
<b>External Loans</b>	<b>4.73</b>	<b>6.67</b>	<b>7.94</b>	<b>5.83</b>	<b>7.57</b>	<b>5.60</b>	<b>5.91</b>
External Inflows	6.20	8.79	14.85	9.02	12.35	11.79	11.17
<b>% of Revenue from External Sources</b>	<b>21.82</b>	<b>24.07</b>	<b>41.60</b>	<b>27.89</b>	<b>36.64</b>	<b>32.74</b>	<b>30.38</b>

Source: ISSER 2005 / Ministry of Finance and Economic Planning

## 5. TRENDS IN SOCIO-ECONOMIC INDICATORS

In this section we look at the trends in social indicators over, time. Given the scanty nature of social indicators, the discussion is more restricted than the normal 1995-2005 window which we have used in previous sections of this paper. Key health and education indicators are discussed. Health indicators include child survival indicators (for instance like infant mortality and child malnutrition) and coverage of supervised delivery in each region. Education indicators include Adult Literacy rates, gross primary enrolment among others. The section assess trends in these indicators and relates them to expenditures. The idea is that if expenditures have impacted significantly on outcomes, then it must reflect in the trends.

### 5.1 Key Health Indicators

There is no clear trend with respect to the health indicators. Between 1993 and 1998, key child survival indicators such as infant mortality and under-five mortality improved. Between 1998 and 2003, however, the situation seem to have worsened, with infant mortality rates increasing from about 57 (per 1000 live births) in 1998 to 64 (per 1000 live births) in 2003 (Table 4). Even though the child health indicators point to a worsening situation, the 2005 Annual Progress Report of the GPRS reports of an improvement in coverage of immunisation in 2005. In line with this the suspected measles cases declined from a level of about 13,476 in 2001 to about 487 in 2005 (2005 APR, p-106)

Other indicators of access to health, such as coverage of supervised delivery and the probability of reaching a health facility within 30 minutes show some improvement over the 2002 to 2005 period. However it is important to mention that this improvement in supply

indicators (or access) is not necessarily true for all regions in Ghana. In Table 5 we note that for the Western, Greater Accra and Ashanti regions, the coverage of supervised delivery seem to have worsened between 2002 and 2005.

**Table 4** Child Survival Indicators

	<b>1993</b>	<b>1998</b>	<b>2003</b>
Infant Mortality (per 1000 live births)	66	57	64
Under five mortality (per 1000 live births)	119	108	111
Child Malnutrition (underweight)	27%	25%	22%

Source: 2005 Annual Progress Report of the GPRS, National Development Planning Commission

Relating this to the health expenditure trends over the years, one can say that there seem to be some correlation between indicators that capture supply of health and these expenditures. However the outcomes as captured by infant mortality rates seem to have a negative correlation with health spending. This is in no way suggesting causation. In other words, this does not mean that increasing health expenditures have led to the worsening situation, in terms of the infant mortality rates. Data on the distribution of expenditure items under health spending is unavailable and therefore one cannot make any meaningful matching between these expenditures and programme outcomes. However what it does suggest is that, the intentions as revealed by the increased expenditures may not have had their desired outcomes.

**Table 5** Coverage of Supervised Delivery (%)<sup>8</sup>

	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
National	49	52.1	53.4	54.1
Ashanti	55.7	56.2	56.2	54.3
Brong Ahafo	57.8	56	57.8	62
Central	63.8	67.1	76.3	77.1
Eastern	55	50.6	47.2	58.4
Greater Accra	54.5	49.4	46.2	48.6

<sup>8</sup> Percent of births supervised by skilled attendants and trained traditional birth attendants

Northern	41.2	39.2	48.2	57.5
Upper East	42.5	44.9	71.2	53.5
Upper West	66	67.4	71.2	66.5
Volta	40.2	49	39.7	42.1
Western	46.8	47.5	46.2	35.8

Source: 2005 Annual Progress Report of the GPRS, National Development Planning Commission

**Table 6** Percent Reaching Health Facility within 30 minutes

	<b>1997</b>	<b>2003</b>
Ghana	52.9	61.0
Rural	38.6	45.5
Urban	80.3	79.3

Source: 1997 and 2003 Core Welfare Indicator Questionnaire Data

## **5.2 Key Indicators for Education**

Indicators of education also give mixed outcomes. In terms of gross enrolment rates, one notes that there has been some improvement over the last few years (2002 – 2005). The primary enrolment rates increased from about 86 percent in the 2002/2003 academic year to about 87.6 percent in the 2004/2005 academic year. This particular indicator captures the outcomes in terms of quantity – the ratio of physical bodies in primary schools (Table 7). Taking Adult literacy rates, we note that that there was an improvement between 1997 and 2003 (Table 8). For an indicator such as the number of students benefiting from the school feeding programme, we note a significant increase between 2002/2003 and 2004/2005 (Table 7)

Other indicators which capture the quality of education are also shown in table 7. We note that it is not all the indicators which suggest an improvement in the quality of education. For instance the percentage of trained teachers in primary schools decreased over the period. Also the pupil-teacher ratio and the number of pupils that have to share a core textbook increased over this period. These trends all indicate that the quality of education did not improve over those years.

Relating this to the education expenditure, one can say that the correlation between education outcomes and spending is ambiguous. Education is one area that has attracted quite significant public spending. However the outcomes have been mixed. Some indicators such as

enrolment rates seem to have improved but arguably, at the expense of other indicators that capture how effective teaching is in the classroom.

It is important to mention that, we merely try to tease out the correlations between the education spending and available indicators. Even though these correlations do not imply causation, they do raise questions about the efficacy of education spending. In a more ideal situation where comprehensive data is available, one will be able to tell the exact areas the education spending is going into and what the corresponding outcomes are. With that information one can then try to establish causation in a statistical sense.

**Table 7** Core Education Indicators

	<b>2002/2003</b>	<b>2003/2004</b>	<b>2004/2005</b>
Gross Primary Enrolment rates	85.7	86.3	87.5
% Trained teachers in primary schools	73.6	73.9	72.4
No of students benefiting from the school feeding programme	25,270	34,812	44,710
Pupil- Teacher Ratio	32.1	34	34.9
Pupil-Core textbook ratio	1 : 0.6	1 : 0.5	1 : 0.3

Source: 2005 Annual Progress Report of the GPRS, National Development Planning Commission

**Table 8** Adult Literacy rates

	<b>1997</b>			<b>2003</b>		
	Male	Female	Overall	Male	Female	Overall
Ghana	62.3	36.4	47.9	66.2	42.5	53.7
Rural	54.4	28.4	39.9	53.0	28.4	40.1
Urban	77.1	51.7	63.0	82.3	59.1	69.9

Source: 1997 and 2003 Core Welfare Indicator Questionnaire data

### **5.3 Water and Sanitation**

For water and sanitation one notes that generally there has been an improvement over the period 1997 to 2003. The proportion of the population with safe water as well as safe sanitation increased over this period. This may in part be due to an increase in the number of

water facilities reaching communities. Table 10 shows the increase in the number of boreholes constructed and rehabilitated between 2002 and 2005. For safe water this improvement is true for both rural as well as urban areas. However for sanitation the proportion of the population who have access to safe sanitation actually worsened for the rural areas (Table 9).

This highlights some of the problems typical of national level analysis. Improvements can occur at the national level along side increasing spatial inequality. It is also noted that the proportion of the population that reach their main source of water within 30 minutes have increased over this period.

For the purposes of this paper however, it is important to note that improvements in water and sanitation has occurred even though the proportion of spending going to such areas may not have increased.

**Table 9 Access to Safe Water and Adequate Sanitation in Rural Areas**

	1998	2003	2004	2005	GPRS target 2005
Percentage of rural population with access to safe drinking water (CWSA)	30%	46.4%	51.7%	52%	46%
Percentage of rural population with access to adequate sanitation (2003 CWIQ)	45.8%	55%	N/A	N/A	N/A
Incidence of guinea worm cases reported	5,545	8,290	7,275	3,958	0

Source: 2005 Annual Progress Report of the GPRS, Ministry of Health 2005 Performance Report, 2005 CWSA Annual Report

**Table 10 Water Facility delivered, 2002-2005**

	2002	2003	2004	2005
New boreholes constructed	622	1,290	2,098	1,126
Boreholes rehabilitated	407	115	85	31
New hand-dug wells	65	61	64	1
Hand-dug wells rehabilitated	2	6	----	6
Small community pipe systems completed	4	19	40	2
Small town pipe systems completed	25	46	57	2

Source: 2005 Annual Progress Report of the GPRS, 2005 Community Water and Sanitation Annual Report

**Table 11 Trends in proportions with improved water and sanitation source**

	Safe water		Safe Sanitation (toilet facilities)	
	1997	2003	1997	2003
Ghana	61.6	74.2	45.8	55.0
Rural	49.6	63.1	33.3	33.1

Urban	84.7	87.4	70.2	81.0
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Source: 1997 and 2003 Core Welfare Indicator Questionnaire data

Table 12 Proportion that reach source of water within 30 minutes

	1997	2003
Ghana	67.8	94.1
Rural	59.7	91.0
Urban	83.3	97.7

Source: 1997 and 2003 Core Welfare Indicator Questionnaire data

## 5.4 Social and Economic Infrastructure

The trends in social and economic infrastructure are examined by looking at the Feeder and Urban road networks and their conditions over the period 2000 – 2003.

### 5.4.1 Road Networks

Generally the total length of feeder roads increased between 2000 and 2003 – from about 24,000km in 2000 to about 32,600km by 2003. The proportion of the feeder roads that are paved also increased from about 2.3 percent to about 4.5 percent over the same period (Table 13). It is still the case that most feeder roads remain unpaved. From the road condition mix, one also notes that the proportion of good roads increased for both paved and unpaved roads. However the increase was marginal for the paved roads.

Looking at urban roads (Table 14), we note that there was an increase in the total length from about 2,915 in 2000 to about 4,064 in 2003. Although the length of urban roads that are paved increased over this period, as a percent of total urban roads, it has decreased. One notes that the proportion of urban roads that are in good condition declined. This decline is mainly due to a decline in the conditions of paved roads – the total length of paved urban roads in good condition decreased from 954km in 2000 to about 811km in 2003. However the unpaved urban roads in good condition increased over the same period, more than compensating for the decline in the paved roads. The net result is that the total urban roads in good condition increased over this period.

Relating the road condition mix to public spending on road transport, one could say that the correlation is not so clear. A positive trend in public expenditures on road transport after 2002 coincides with the length of feeder as well as urban roads in good condition. Between 2000 and 2002 when public spending on road transport (as a percent of GDP) was

on the decline, again we observe that the length of feeder roads in good condition increased whilst urban roads in good condition decreased.

Table 13 Feeder Roads Condition mix

Year	Paved						Unpaved						Total					
	Good		Fair		Poor		Good		Fair		Poor		Good		Fair		Poor	
	km	%	km	%	km	%	km	%	km	%	km	%	km	%	km	%	km	%
2000	311	56	194	35	50	9	6,330	27	4,923	21	12,191	52	6,641	28	5,117	21	12,241	51
2001	372	43	234	27	260	30	8,884	28	4,125	13	18,720	59	9,256	28	4,359	13	18,980	58
2002	603	55	307	28	186	17	9,764	31	5,984	19	15,749	50	10,367	32	6,291	19	15,935	49
2003	643	57	217	19	269	24	11,130	35	8,225	26	12,111	38	11,773	36	8,442	26	12,380	38

Source: Ministry of Road Transport

Table 14 Urban Roads Condition Mix

Year	Paved						Unpaved						Total					
	Good		Fair		Poor		Good		Fair		Poor		Good		Fair		Poor	
	km	%	km	%	km	%	km	%	km	%	km	%	km	%	km	%	km	%
2000	954	54	477	27	336	19	138	12	310	27	700	61	1,092	37	787	27	1,036	36
2001	712	40	480	27	587	33	313	16	215	11	1,429	73	1,025	27	695	19	2,016	54
2002	755	39	522	27	677	35	277	13	213	10	1,639	77	1,032	25	735	18	2,316	57
2003	811	42	508	26	616	32	357	17	191	9	1,581	74	1,168	29	699	17	2,197	54

Source: Ministry of Road Transport

## 6. CONCLUSION

This report has looked at the trends in government expenditures as well as the sectoral breakdown of these expenditures. It has also reported on the trends in selected development outcomes and how these development outcomes relate to the expenditure trends observed. It goes further to report on the trends in the key sources of funding and how these sources have changed over time. The major observations made in this paper can be summarised as follows:

First, it is noted that government expenditures have increased over time, with the proportion of discretionary spending having become more important in recent years and the peak for discretionary spending coinciding with election years.

Second, the report notes that of the total discretionary spending social services takes a significant portion and the importance of social spending has increased over the last few years. Undoubtedly this reflects the country's commitment to meet its obligations under the enhanced HIPC initiative and also the Millennium Development Goals (MDGs). Indeed, in the social services basket, education and health, the two major targets under MDGs, dominate.

Third, there has been an increase in government revenues over the last ten years. The major source of revenue, which used to be from international trade have reduced in importance over the years. In the last year of the sample (2005), non-tax revenue including grants became the most important source of government revenue.

Finally, there is no distinct correlation between expenditures in key sectors of the economy and corresponding development outcomes. This is particularly the case for education and health which attracts a significant portion of total government spending.

The report concludes by noting that a proper understanding of how public investment portfolio impact on key development outcomes is essential if GPRS II is to achieve its long term target of accelerated growth, leading to attaining middle-income status within a measurable planning period. This requires good quality data over a reasonable time period, particularly for any national level analysis. Indeed as shown in this paper, reconciling data from even the same source can be problematic. It is therefore essential that a proper and careful compilation of public sector data become an integral part of the development agenda. This will permit proper analysis of whether GPRS II interventions are being effectively translated into targeted development outcomes.

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## APPENDIX 1: Classification of Expenditure Items.

1. **PERSONNEL EMOLUMENTS**
  - Established Posts***
    - Established Posts
    - Non-Established posts
  - Non Established Post***
    - Contract Appointments
    - Daily Rated
    - Probation
    - Recruitment
    - Secondment
    - Other (specify)
  
2. **ADMINISTRATION ACTIVITY EXPENSES**
  - Utilities***
    - Electricity
    - Water
    - Telecommunications
    - Postal
    - Sanitation Charges
    - Armed Guard & Security
    - Fire Fighting Campaign
  - Office Cleaning***
    - Cleaning Materials
    - Contract Cleaning
  - Office Consumables***
    - Stationery
    - Refreshments
    - First Aid Materials
    - Other Office consumables
    - Head of State End of Year Activities
  - Printing & Publications***
    - Contract Printing
    - Contract Photocopying
    - Purchase of Publications
    - Advertisements
  - Rent***
    - Office Accommodation
    - Residential Accommodation
    - Rental of Office Equipment
    - Hotel Accommodation
  - Travel & Transport***
    - Travel Allowance
    - Running Costs of Official Vehicles (POL)
    - Maintenance of Official Vehicles

Car Rental  
Transfer Grants  
Out Station  
Running Cost of Presidential Aircraft  
Running Cost of Fighting Vehicles  
***Maintenance***  
Driveways and Grounds  
Minor Repairs of Residential Buildings  
Minor Repairs of Office Buildings  
Maintenance of Furniture and Fixtures  
Maintenance of Equipment, Machinery and Plant  
Minor Repairs of Schools/Colleges  
Maintenance of Presidential Aircraft  
Maintenance of Fighting Vehicles  
**Financial Charges**  
Insurance and Compensation  
Bank Charges  
Contributions  
Refunds of Medical Expenses  
Audit  
Other Charges  
UN-Peace  
Overseas Medical Treatments  
***Other Allowances***  
Motorbike Maintenance Allowance  
Bicycle Maintenance Allowance  
Car Maintenance Allowance  
Overtime Allowance  
Guide Allowance  
Etc. etc...  
Other Allowance

**3 SERVICE ACTIVITY EXPENSES**

***Training & Conference Cost***  
Training Materials  
Hire of Venue  
Hotel Accommodation  
Refreshments  
Tuition Fees (Courses, Seminars etc)  
***Consultancy***  
Local Consultants Fees  
External Consultants Fees  
Materials and Consumables  
***Materials And Consumables***  
Stationery  
Refreshments

Uniform & Protective Clothing  
Household Items  
Rations  
School Textbooks/Library Books  
Chemicals and Consumables for School Laboratories  
Other Teaching / Learning Materials  
National Awards  
Printing and Publications  
***Printing & Publications***  
Contract Printing  
Contract Photocopying  
Purchase of Publications  
Advertisement  
***Rent of Plant & Equipment***  
Rent of Plant and Equipment  
***Travel & Transport***  
Night Allowance  
Local Travel Running Costs  
Mileage Allowance  
Local Hotel  
Foreign Travel Per Diem  
Foreign Travel Costs  
Credit Facilities  
Credit (grant)  
Nat. Health Insurance Scheme  
Exempt for aged, antenatal, under 5 years  
Refund for Med. Exp (Paupers/disease Category)  
Customs duty/Handling Charges  
***Special Activities***  
Special Operations (COS)  
Special Operations (NSC)  
Service of the State Protocol  
Official Celebrations  
Head of State End of Year Activities  
Special Operations (Peace Keeping)  
Special Operations (Docking of Ships)  
***Construction Works***  
Consultancy Fees  
Contractors Fees  
**Compensation For Land**  
Sanitary Facility only  
Access Roads Only  
New Buildings  
***Rehabilitation***  
Buildings  
Plant and Equipment

Purchase of Plant, Equipment, Furniture and Vehicles <b>Purchase Of Plant, Equipment, Furniture &amp; Vehicles</b> Purchase of Plant & Equipment Purchase of Vehicles Purchase of Furniture/Fittings Purchase of Motor Cycles, Bicycles & Life-jackets Purchase of Computers & Accessories
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*Source: Guidelines for the preparation of the 2002- 2004 Budget, Ministry of Finance October, 2001*

## **APPENDIX 2: Classification of MDAs into Functional Groups**

	<b>Functional Group</b>	<b>Ministries, Departments and Agencies</b>
	<b><i>General Administration</i></b>	
1		Ministry of Local Government and Rural Development
2		Ministry of Foreign Affairs
3		Ministry of Finance and Economic Planning
4		Ministry of Parliamentary Affairs
5		Public Services Commission
6		Audit Service
7		District Assembly Common Fund Administrator
8		Electoral Commission
9		Office of Parliament
10		Office of Government Machinery
11		Ministry of Information and Presidential Affairs
12		Ministry of Regional Cooperation and NEPAD
	<b><i>Economic Services</i></b>	
1		Ministry of Food and Agriculture
2		Ministry of land and Forestry
3		Ministry of Energy
4		Ministry of Trade and Industry
5		Ministry of Tourism and Modernisation
6		Ministry of Environment Science and Technology
7		Ministry of Ports, Harbour and Railways
8		Ministry of Private Sector Development
9		Ministry of Mines
	<b><i>Social Services</i></b>	
1		Ministry of Education
2		Ministry of Youth and Sports

	<b>Functional Group</b>	<b>Ministries, Departments and Agencies</b>
3		Ministry of Health
4		Ministry of manpower and Employment
5		National Commission on Culture
6		National Commission on Civic Education
7		Ministry of Women Affairs
	<b><i>Infrastructure</i></b>	
1		Ministry of Works and Housing
2		Ministry of Roads and Transport
3		Ministry of Communication and Technology
	<b><i>Public Safety</i></b>	
1		Ministry of Interior
2		Judicial Service
3		Ministry of Justice
4		Ministry of Defence
5		Commission on Human Rights and Administrative Justice

Notes: Based On CADG's Report For 2005