



THE INSTITUTE OF ECONOMIC AFFAIRS

**ARE OUR REVENUE
TARGETS ON TARGET?**

IEA MONOGRAPH
No. 2

ARE OUR REVENUE TARGETS ON TARGET?

A Publication of The Institute of Economic Affairs

Accra

2002



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ISBN: 9988-584-17-2

ISSN: 0855-3238

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PREFACE

The Institute of Economic Affairs is pleased to publish *Are Our Revenue Targets on Target?* This is the second of the series of monographs in which important economic, social, political and legal issues are examined in considerable detail.

Revenues constitute the lifeblood of all economies. They not only finance development projects and the recurrent costs arising from such projects, but also pay for statutory expenditures such as debt servicing. Maximizing revenues however, requires a good idea of the revenue generating potential of the economy. Without a good idea of the quantum of revenue that can be generated within an economy, revenue targets will either understate or overstate the true revenue potential of the economy. Indeed, estimates of the revenue potential of a country tend to be even more problematic when it is characterized by a large informal sector, unstable macro-economic conditions and poor forecasting capacities. This study examines the revenue target setting process in Ghana and makes recommendations to policy-makers.

I am delighted to place on record the gratitude of The Institute of Economic Affairs to the Danish Government, through The Royal Danish Embassy in Accra and DANIDA, whose generous assistance has made this publication possible.

Dr. Charles Mensa
President
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Accra, May 2002

AUTHORSHIP

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INTRODUCTION

The search for macro-stability in Ghana largely hinges on the ability of government to finance its expenditures without resorting to unsustainable borrowing through the printing of currency and or the sale of treasury bills. In effect, maximizing revenues and ensuring cost effective expenditure are critical ingredients in the search for macro-stability. However, maximizing revenue collection requires a good working knowledge of the revenue generating base or potential of the economy.

All too often, revenue-collecting agencies (i.e., CEPS, IRS and the VAT Service) celebrate their success in meeting revenue targets. These self-congratulations make their achievements appear even more impressive given their complaints about poor conditions of service and lack of adequate logistical support to facilitate their work. Are our revenue targets appropriately set, or are they too low or too high? Do revenue targets appropriately reflect the macroeconomic framework? To place the "success" of revenue generating agencies in the proper perspective, it is important to understand how revenue targets are set in Ghana, and on that basis to assess the performance of our revenue agencies.

This paper critically examines the target setting process in Ghana, and uses the findings as a basis for assessing the success of the revenue agencies in meeting their targets. Although the focus is on domestic revenue targets, the study does not examine the issue of internally generated revenues, or target setting within a ministry, department or agency. Since revenue determination at the micro level is quite different from a similar exercise at the macro level, this aspect of revenue will

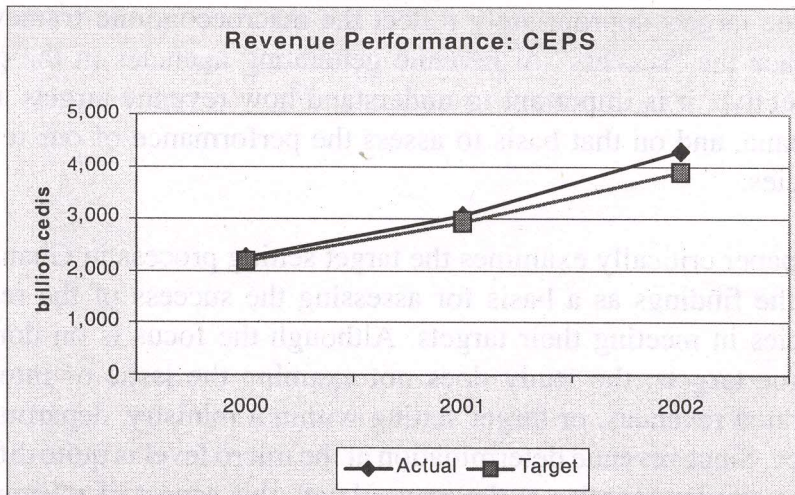
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be examined separately in a subsequent study. The final section of this paper makes recommendations to policy-makers on the basis of the findings.

The Institutional Actors in the Revenue Target Setting Process

The key institutional actor in the revenue setting process is the Ministry of Finance. The Ministry however sets the targets in collaboration with the revenue agencies (i.e., The Custom Excise and Preventive Services, the Internal Revenue Service (IRS), and the Value Added Tax (VAT) Service). Revenue targets are set by each agency based on a specific formula or method. Although each agency plays a lead role in setting their targets, the Ministry of Finance has the ultimate authority in determining the final targets of a revenue agency. In effect, it can override the targets set by the revenue agencies to ensure consistency with the demands of the annual budget.

Figure 1



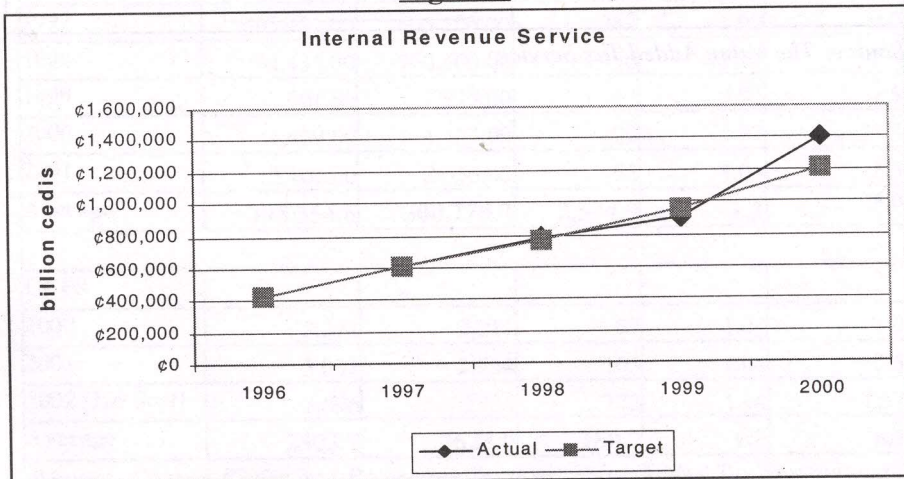
Source: Custom Excise and Preventive Services

Trends in Actual and Projected Revenue

As shown in Figures 1, 2 and 3, the revenue agencies generally tend to exceed their targets. Even when the agencies have failed to meet their targets, actual revenues have been at least 90 percent of targeted revenues. The IRS in 2000 exceeded their target by 16 percent. The Value Added Tax Service after narrowly missing their target for domestic VAT revenue in 2000, exceeded their target by a narrow margin in 2001. In 2002 all the revenue agencies exceeded their targets. Indeed, CEPS was the best performer, exceeding its target by 11.5 percent, followed by the IRS (3%) and the VAT Service (1.18%).

These performances are even more remarkable when one takes into consideration the fact that the targets set by the revenue agencies can be revised upward by the Ministry of Finance to address the financing gap in the budget.

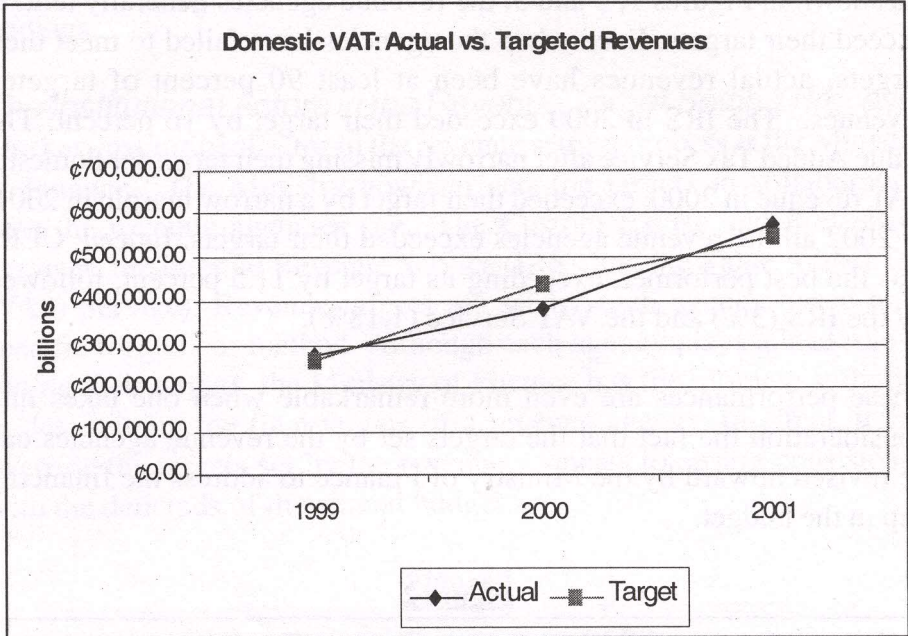
Figure 2



Source: Internal Revenue Service

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Figure 3



Source: The Value Added Tax Service

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Table 1
The Performance of the Revenue Agencies
(billion Cedis, unless otherwise stated)

	Actual (A)	Target (B)	A - B	Ratio of A:B	% VARIANCE
Domestic VAT					
1999	274,528.06	265,780.47	8,748	1.03	3.3
2000	385,158.32	437,124.21	-51,966	0.88	-11.9
2001	574,041.60	545,300.00	28,742	1.05	5.3
Average	411,242.7	416,068.2	(4,825.5)	1.0	-1.1
Import VAT					
2000	892,370.94	825,875.71	66,495	1.08	8.1
2001	1,352,985.65	1,194,399.99	158,586	1.13	13.3
Average	1,122,678.3	1,010,137.9	112,540.4	1.1	10.7
IRS					
1996	424,491.00	424,700.00	-209	1.00	0.0
1997	605,782.00	605,500.00	282	1.00	0.0
1998	785,436.00	770,400.00	15,036	1.02	2.0
1999	901.60	915.00	-13	0.99	-1.5
2000	1,409.00	1,107.00	302	1.27	27.3
2001	2,108.00	2,056.00	52	1.03	2.5
Average	303,354.6	300,779.7	2,574.9	1.1	5.0
CEPS					
2000	2,278	2,211	67	1.03	3.0
2001	3,037	2,934	103	1.04	3.5
2002 [Jan-Sept]	3,096	2724	372	1.14	13.7
Average	2803.7	2623.0	180.7	1.0	6.7

Sources: Custom Excise and Preventive Services, Value Added Tax Service and the Internal Revenue Service

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Table 2

Disaggregation of CEPS Revenue Collection Performance: 2000-2002
(January-September)

Revenue Source	2000		2001		2002 (Jan-Sept)	
	Actual	Target	Actual	Target	Actual	Target
Import Duty & Levies	805	720	1,081	1,076	1,128	928
Import VAT	919	847	1,359	1259	1193	1022
Petroleum	554	644	597	599	775	774
Total	2,278	2,211	3,037	2,934	3,096	2,724

Sources: Custom Excise and Preventive Services

SETTING VALUE ADDED TAX TARGETS

The Value Added Tax is assessed on all transactions involving the production of goods or provision of services to the consumer. Except those specifically exempted, taxable supplies are generally subject to VAT both at the stage of importation, and when such commodities are traded within the domestic economy. In effect, there are currently two categories of Value Added Tax: domestic and import. The domestic VAT is assessed on firms whose total sales exceed a specified minimum threshold.

The method used in determining VAT revenue targets or estimates takes into account the:

- Inflation rate

- Real GDP growth rate
- Import growth rate
- Exchange rate depreciation
- Rate of depreciation of the Cedi

The exchange rate depreciation however, only applies to the computation of the import VAT revenue targets.

Estimating VAT Targets

Since the Value Added Tax (VAT) has both a domestic and import component, the estimation of the total VAT revenue target requires access to cost, insurance and freight (c.i.f) import data. The VAT Service relies on CEPS (database on the projected value of total imports) for this information. Furthermore, both institutions adopt similar methods for estimating import revenues.

Estimating the Domestic VAT

The procedure for estimating VAT revenues from domestic sources requires the following:

- Reliable estimates of inflation
- Reliable estimates of the real GDP growth rate
- The applicable domestic VAT rate

Both the inflation and real GDP growth data make it possible to compute the nominal GDP growth rate. For instance, given a nominal GDP of ₵36,590.09 million in the previous year and projected rate of inflation and real GDP growth of 20% and 5% respectively, the estimated nominal GDP will be ₵ 46,103.51 million:

$$₵36,590.09 \text{ million} * (1+0.20)(1+0.05) = ₵36,590.09 \text{ million} (1.26).$$

The projected domestic VAT revenue will equal the product of the nominal GDP and the applicable domestic value added tax.

The Alternative VAT model

An alternative model requires reliable estimates of the value of total consumption in the country. Since only a subset of the population is eligible to pay VAT, total consumption estimates are discounted by a factor representing those who are VAT exempt. The relevant VAT rate is then applied to the net consumption estimate to arrive at the estimated VAT revenues for the year. However, because the compliance rate is never 100 percent, the VAT estimates are further discounted by a factor representing the non-compliance rate.

The implicit challenges in adopting this model are:

- Obtaining reliable estimates of consumption expenditure
- Obtaining reliable estimates of VAT compliance

This methodology requires good estimates of the components of the total consumption value of the economy, namely:

- Individual consumption,
- Industrial consumption and
- Government consumption.

These together constitute total consumption. This is what constitutes the VAT tax base.

In summary the method can be described as follows:

- a. Use the Household Expenditure Survey report from the Ghana Statistical Service to estimate household and industry consumption.

- b. Identify the percentage exempted from tax, and subtract their consumption from total consumption to arrive at the actual taxable consumption.
- c. Apply the rate to total consumption taxable.
- d. Estimate the compliance rate and use that to arrive at the actual VAT value.
- e. Where there is a difficulty in getting current consumption data, estimates of the relationship between GDP growth and consumption are computed to estimate consumption values.

Other Approaches

Time Series Analysis

According to the revenue agencies, this approach to revenue projection is not employed due to uncertainties and instability in relation to the general macroeconomic environment. This has been reflected in for example, huge and unanticipated fluctuations in rates of inflation, and uncertainties with regard to interest rates and exchange rate depreciation, which affect businesses. These in themselves were partly caused by fiscal indiscipline on the part of Government.

Another reason assigned for not using time series analysis is the fact that the new VAT was operationalized in 1999; hence, the time span is too short for any meaningful time series analysis. Also, the use of this approach is constrained by the unreliability of, and inconsistencies in, available data.

How Are Projected Import Values Computed?

The computation of projected import revenues from VAT is based on past trends in the relationship between imports and the nominal Gross Domestic Product (GDP). As in the case of the domestic VAT however, estimating the nominal GDP requires information about inflation and the real GDP growth rate. For instance, if imports account for say 40 percent of the growth in the nominal GDP, then a projected nominal GDP growth of say €200 billion should be associated with an import level of €80 billion cedis (i.e., $0.40 \times 200 \text{ billion cedis} = 80 \text{ billion Cedis}$).

In effect, a good estimate of import values requires reliable estimates of the rate of inflation and the real GDP growth rate. However, *in general, inflation forecasts have understated the actual levels of inflation, while real GDP projections have overstated the actual GDP growth rates.*

Furthermore, since some imports are VAT exempt, estimating VAT revenue also requires good projections of the VAT eligible component of total imports¹. It is currently estimated that the percentage of the total c.i.f. value of imports that is subject to VAT is 55.42%. Hence, for a total import value of say \$2523.68 million, only 55.42 percent or \$1,398.62 million is eligible for VAT. This implies that a VAT rate of 12.5 percent will yield potential VAT revenue of \$174.8 million (i.e., $.125 \times \$1398.60 \text{ million}$), which constitutes 6.9 percent (i.e., $\$174.8 / \$2,523.68$) of the total import value in 2002. This percentage represents the effective import VAT rate, or the proportion of import revenue that accrues as revenue to the VAT Service.

¹ *The VAT eligible component of an item includes the import duty assessed on that item.*

It stands to reason therefore, that current estimates of import VAT revenue can be derived from previous trends in the effective import VAT rate. For instance, for an estimated import value of \$1.7 bn. in 2003 and an (historical) average effective import VAT rate of 10 percent, the projected import VAT rate for 2003 will be \$0.17bn (\$1.7bn x 10 percent).

Finally, since VAT targets are expressed in cedis while imports are denominated in foreign currency, the accuracy of the target depends on the accuracy of the nominal exchange rate forecast. The reference foreign currency is a basket comprising the currencies of the major trading partners. *Invariably, however, nominal exchange rate projections have generally understated the actual levels of currency depreciation, particularly because of the volatility of the currency.*

Table 3
ESTIMATION OF IMPORT VAT REVENUE
FOR JANUARY- DECEMBER 2002

VAT CLASSIFICATION	NOMINAL VAT RATE	% SHARE	VALUE (US\$M)	REVENUE (US\$M)	REVENUE (¢ M)
ZERO-RATED AND EXEMPTED	0.00	44.58	1,125.05	0.00	0.00
STANDARD	17.50	55.42	1,398.62	269.42	2,071,822.60
TOTAL		100.00	2,523.68	269.42	2,071,822.60
EFFECTIVE IMPORT VAT RATE			10.68%		

* CIF Value (\$) = 2,523.68 Exchange rate (¢/\$) = 7,690.00

Source: Value Added Tax Service

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The Ministry of Finance uses the Budget resource requirements for a given year to make necessary adjustments to the projections of the revenue agencies accordingly. Hence, in periods of large financing gaps, the Ministry will tend to revise the revenue estimates upward.

Alternative Method for Import Estimation

An alternative method of making import projections is to project current import estimates forward using the expected monthly average dollar exchange rate. The underlying assumption is that imports will grow at a rate equal to the monthly rate of exchange depreciation. This involves:

1. Converting the current Cedi-denominated import c.i.f., value into dollars using the monthly average inter-bank exchange rate;
2. Assuming that the dollar-denominated import value increases by a factor equal to the expected monthly average dollar exchange rate (i.e., multiplying the import value by the coming year's expected monthly average \$ exchange rate).

The resulting figure represents estimate of imports for the following year. The VAT eligible component represents a fraction of the estimated import level.

***Estimating Import Revenue:
Custom Excise and Preventive Services***

The procedure adopted by CEPS for estimating import revenues is similar in several respects to the one adopted by VAT. However, the effective import tax for CEPS is different from VAT because of the different tax rates used by the two agencies.

The CEPS database on monthly import flows provides an indication of the monthly distribution of imports. Since the database spans the period of a decade, CEPS is able to establish a ten (10)-year trend in import flows expressed as a proportion of the GDP. The monthly import ratios assist CEPS in revising its import levels for the current year. Such revisions in turn serve to improve import projections for the subsequent year. For instance, in September of the current year CEPS may revise its estimates of the total import level for 2002 by using the most recent actual monthly import/GDP ratios to estimate import levels for the rest of the year (i.e., the period October to December). *Based on the revised estimates for 2002, CEPS assumes that the total import level for 2003 will grow at the same rate as the projected real GDP.*

The Effective Rate of Tax

Total import value however, does not constitute the expected import revenues since the latter constitutes only a fraction of total import value. That fraction, also referred to as the effective import tax, is the single nominal rate applicable to the total import (CIF) value to obtain the total yield from a particular tax type. Hence, like the effective VAT import tax, the effective import tax is a concept that provides an estimate of the import revenue. An effective import tax of say 20 percent therefore, implies that for a given import value of say \$200 million,

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the import revenues will be approximately \$40 million. The effective import tax rate can be inferred from the ratios of past year import revenues to total imports.

It is important to note however, that the effective rate of import tax is dependent on how import values are distributed among the various tax rates. In estimating the effective rate for a particular year, cognizance is taken of the trends in proportions of import values falling in various rate categories. Thus, the effective rate of tax is based on expectations regarding the distribution of imports across the various applicable rates. The probable distribution is based on the previous year's distribution adjusted for proposed policy measures.²

In general, the distribution of imports among various categories will tend to be stable in the absence of major policy changes; particularly those that influence import duties. Thus, this aspect of the revenue projection procedure will generally not be as prone to error as the determination of the inflation and exchange rates.

The Exchange Rate

Since revenue targets are expressed in dollars, it is necessary for CEPS to provide projections regarding the exchange rate. If for instance CEPS bases its target on an exchange rate of say $\text{¢}7000$ to the dollar, then the \$40 million target will be equivalent to $\text{¢}280$ billion. If however, CEPS's projection understates the actual exchange rate and in reality the exchange rate turns out to be $\text{¢}8000$ /dollar, then CEPS will realize $\text{¢}320$ billion

² Alternatively, it is calculated as the product of two matrices, a matrix of the rates, including exemption, applicable to the rate and a distribution of proportions of import value to which these rates are applied.

from its operations and exceed the target of ₵280 billion.

Bearing in mind the fact that the projected import revenue is based on the previous year's effective import tax, and given the fact that the effective import tax is itself derived from estimates of import revenues (which are invariably understated due to the application of lower exchange rates), it stands to reason that projections for the new year will tend to be biased downward, precisely if the previous year's effective import tax rate was understated. It is important to note that while the effective import tax will not be affected by the choice of exchange rate (because the rate is derived from a ratio) the Cedi equivalent of the import revenue will tend to be lower if the exchange rate is understated.

In effect, there is a likelihood that the CEPS targets have an in-built cascading effect in a downward direction. One way to deal with the problem is to reduce the number of volatile variables that feed into the revenue projections. For instance, since imports are already priced in dollars, it is simpler to express the import revenue target also in dollars, and thereby avoid the added complexity of making exchange rate projections.

Projecting Exchange Rates

Ideally, the Bank of Ghana should provide CEPS with exchange rate projections. However, CEPS officials indicate that the Bank's projections are not timely, and that as a result the Agency is compelled to make its own projections. Methods for projecting the rate of depreciation have changed over the years, from simple regression to using the rate of inflation (i.e., the rate of change in the CPI) as a proxy for the annual rate of depreciation. In effect, an annual rate of

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depreciation based on the projected rate of inflation is applied to the average monthly exchange rate for the preceding year to arrive at the exchange rate for the subsequent year.

Bearing in mind the fact that inflation projections have been consistently lower than actuals, it is not surprising that the exchange rate projections also understate the actual rates of depreciation.

Table 4
BASIS OF 2002 IMPORT REVENUE ESTIMATES
CUSTOM EXCISE AND PREVENTIVE SERVICES

DESCRIPTION	VALUE
PROB. ACTUAL IMPORT CIF (US\$ mill) FOR 2001	2,415.00
EST. IMPORT CIF (US\$ mill.) FOR 2002 = PROJECTED 2001 + GROWTH OF 5%	2,536.00
EFFECTIVE DUTY RATE OPTIONS:(6.4, 6.5, 6.6, 6.7, 6.8)	
EFFECTIVE DUTY RATE OPTION PROPOSED	6.60%
ESTIMATED ANNUAL EXCHANGE RATE (¢/US\$)	7,690.00
ESTIMATED CIF (¢million)	19,499,918.00
PROP. OF TOTAL IMPORTS RATED 0%	22%
PROP. OF TOTAL IMPORTS ADMITTED @0% CONCESSION	1.94%
PROP. OF TOTAL IMPORTS ADMITTED @ 10% CONCESSION	1.38%

Sources: Custom Excise and Preventive Services

In effect, estimates of the major import revenue instruments are based on the following projected parameters:

- Total import (CIF) value
- Average exchange rate
- Effective rate of duty/tax

Methodology for Setting Revenue Targets at the Internal Revenue Service

The Internal Revenue Service estimates its revenues for the upcoming year based on two factors:

- the projected nominal increase in the GDP
- the rate of increase or expansion in the tax base

As discussed above, the projected nominal increase in GDP requires reliable projections of both the real growth rate in GDP and the rate of inflation. For instance, if the real GDP is projected to grow at 4.5 percent, and the inflation rate is projected at 18 percent, then the nominal growth in the GDP is:

$$(1 + \text{real growth})(1 + \text{inflation}) = 1 + \text{nominal growth in GDP}$$

This yields the following solution:

$$(1 + 0.045)(1 + 0.18) = 1.233$$

Therefore the projected nominal growth in GDP is 23.3%

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How Does the IRS Estimate the Rate of Change in the Tax Base?

In estimating the rate of expansion in the tax base, two factors are considered:

- the expected increase or decline in new entrants into the workforce
- changes in the compliance rate among those not presently covered by the tax net

Given the tax laws, a change in the compliance rate among those not presently covered by the tax net depends on the resources available to the Internal Revenue Service for overheads (i.e., salaries and maintenance costs), and for capital investments. Such resources include:

Personnel Emoluments

1. A good remuneration package

Administration

2. Fieldtrip allowances to staff
3. Stationery for raising assessments
4. Fuel for vehicles
5. Maintenance of vehicles and office equipment

Investments

6. New tax districts
7. New vehicles and new office equipment

In effect, the rate of increase in the tax base is assumed to depend on the expected resource allocation to the IRS. In periods of low expectations, the rate adopted is low; in periods of high expectations, the rate presumably rises or is more optimistic.

If the release of resources for the first five items of expenditure is not timely, not only does tax collection suffer but the estimated revenue target for subsequent years may be revised downward, implying that a lower rate will be used.

According to the IRS the rate of increasing the number of taxpayers is quite flexible or elastic. It can vary from 2.6% (rate of population growth) to the nominal GDP growth rate itself i.e. 23.3%. Although the IRS has traditionally used a rate which ranges between 7% and 4%, it is not obvious how these rates are arrived at empirically. In 2002 the IRS used 5% as the rate of roping in new taxpayers.

Are Our Revenue Targets on Target?

The estimates of the revenue agencies are only as good as the projections of real GDP growth rate, inflation rate, imports, the exchange rate and other variables necessary for setting their targets. Indeed, since import projections derive from the nominal GDP projections, the key variables on which the revenue projections rest are the real GDP, the rate of exchange rate depreciation, and the inflation rate.

Traditionally government projections have tended to overstate the real GDP growth rate and understate the inflation rate and the rate of exchange rate depreciation. If the degree of understatement of the inflation rate is higher than the degree of overstatement of the real GDP growth rate, then the nominal GDP will be understated because the nominal GDP is a product of the two variables. Since the nominal GDP is the basis for all revenue projections, this will imply lower revenue projections and hence, lower targets.

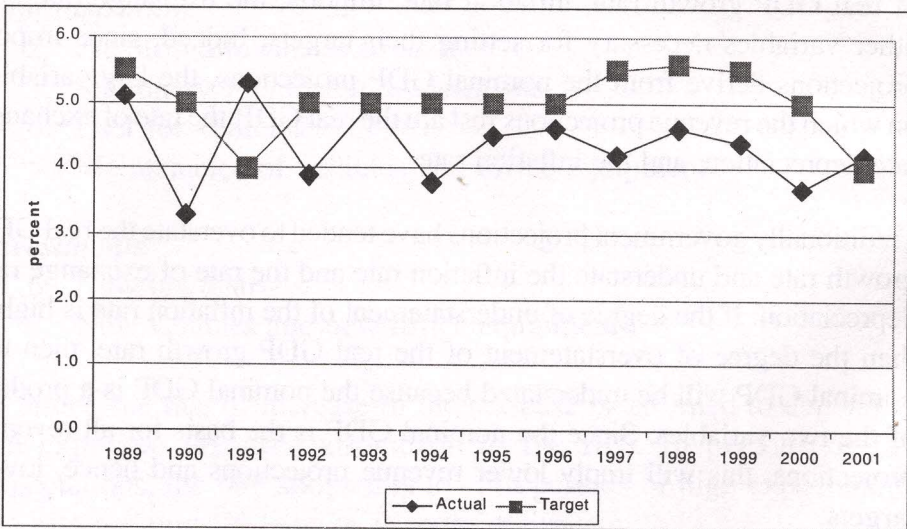
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Furthermore, understating the rate of exchange rate depreciation will understate import revenues since the domestic currency value of imports will be understated. The targets would even be lower if the Ministry of Finance does not revise them upwards in an attempt to fill the financing gap.

Trends in Actual versus Projected GDP and Inflation Targets

Between 1999 and 2001 the actual real GDP growth rate was overstated by an average of less than 1 percentage point (0.73). In other words the government's real GDP projections exceeded the actual by less than one percentage point.

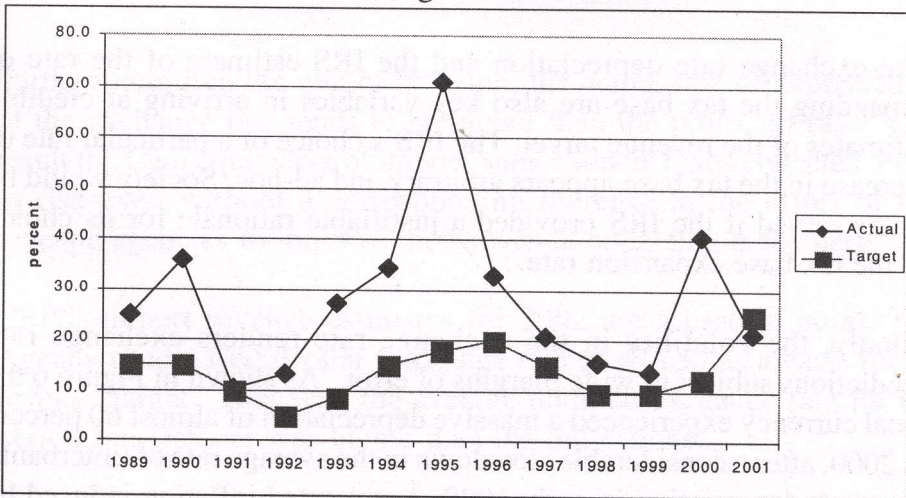
Figure 4
Actual Versus Targeted Real GDP Growth Rates



Source: Bank of Ghana Statistical Bulletin, November 2002

On the other hand, the projected inflation rate was approximately 9 percentage points lower than the actual. Indeed, in 2000 the government's projection was 28 percentage points lower than the actual figure. This implies that the nominal GDP was actually higher than predicted. Hence, the revenue targets were based on a lower nominal GDP than what should have been used. Since inflation projections have persistently understated the actual, it implies that the revenue estimates have consistently been biased downwards. The consistency in the downward bias of the estimates could have been addressed if the real GDP had been overstated by the same margin as the inflation rate. However, this has not been the case. The margin of error in the real GDP growth rate has been consistently in the range of 1 to 2 percentage points; in general GDP growth is less volatile or tends to be more stable than inflationary trends. Hence, the margin of error in prediction is generally smaller than in the case of the inflation rate.

Figure 5
Actual vs. Targeted Inflation Rates



Source: Bank of Ghana Statistical Bulletin, November 2002

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A further implication of this trend is that, as projected inflation becomes more accurate, the revenue agencies will become hard pressed to meet their targets, assuming their targets are based on trends in the nominal GDP growth rate. In 2002 for instance, the inflation rate prediction of 13 percent appears well within reach. Correspondingly, the revenue agencies by September, were below their targets.

Table 5

Recent Trends in Revenue Performance: Jan-Nov. 2002

Million Cedis

	Jan.-Nov. Outturn	Jan.-Nov. Estimates	Deviation
CEPS	3,844,948.3	3,544,313.0	300,635.3
IRS	2,333,510.6	2,339,038.0	(5,527.9)
VAT	888,647.2	964,090.0	(75,442.8)

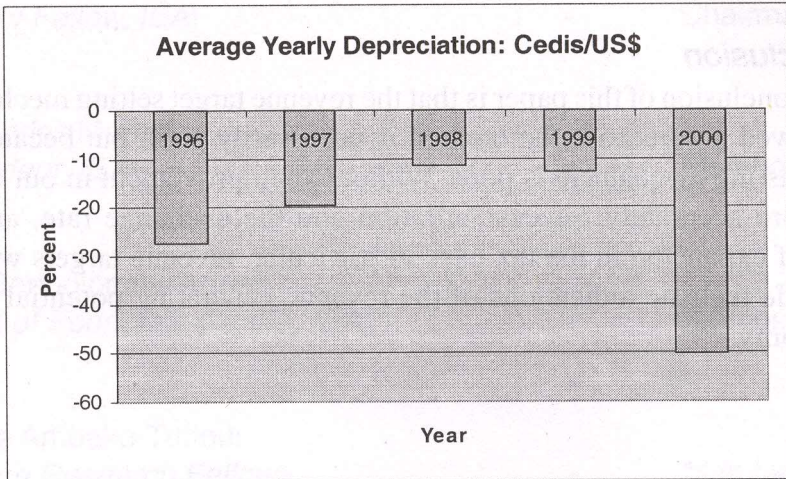
Source: Bank of Ghana

The exchange rate depreciation and the IRS estimate of the rate of expanding the tax base are also key variables in arriving at credible estimates of the revenue target. The IRS's choice of a particular rate of increase in the tax base appears arbitrary and ad-hoc. Society would be better served if the IRS provided a justifiable rationale for its choice of the tax base expansion rate.

Finally, the volatility in the exchange rate renders exchange rate predictions subject to wide margins of error. As shown in Figure 6 the local currency experienced a massive depreciation of almost 60 percent in 2000, after a considerable slowdown in the average rate of (interbank) currency depreciation in early 1999. Accelerated inflation induced by

monetization of the budget deficit has contributed immensely to the depreciation of the currency.

Figure 6



Source: Bank of Ghana Statistical Bulletin, November 2002

Furthermore, like the rate of inflation, the actual rate of depreciation of the exchange rate tends to be higher than the projected rate. As a result the Cedi equivalent of import Value Added Taxes collected tends to rise even without a corresponding increase in the effort of the revenue agencies to improve their revenue collecting machinery.

CEPS' import revenue estimates for 2002 are a case in point. The Agency used a Cedi/Dollar Exchange rate of $\text{¢}7,650$ as a basis for its revenue target. However, the average nominal exchange rate for the period Jan-October was higher than the projections.

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The overall result is a perverse situation where the revenue agencies complain about their inability to effectively undertake their duties due to inadequate resources, yet consistently meet their targets.

Conclusion

The conclusion of this paper is that the revenue target setting mechanism is flawed not because the method is necessarily poor, but because the forecasting mechanism is poor. Without an improvement in our ability to more accurately forecast inflation and the exchange rate, and the rate of expansion in the tax base in particular, revenue targets will not provide realistic indications of the revenue generating potential of the economy.

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