



IMF Working Paper

Suggestions for Alternative Measures of Budget Balance for South Africa

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Abstract

The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate.

The following hypothesis was set and tested by this study: is the conventional budget balance, as generally accepted and used, still relevant for South Africa? The paper found that several possible alternatives are available but each must be viewed from the standpoint of their applicability to the South African context. Several were not suitable for South Africa—only because of a serious lack of available data needed to make them operational. The paper also highlights the need for reforms in government financial information in South Africa.

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I. INTRODUCTION

Fiscal deficits were at the forefront of macroeconomic problems in the 1980s and 1990s, in both developing and industrial countries. They were originally blamed in large part for the assortment of ills that had beset developing countries at that time: overindebtedness; high inflation; and poor investment and growth performance. In the 1990s, fiscal deficits also occupied the center stage in the massive reform programs, that were initiated in the BRO countries (the Baltic countries, Russia, and other countries of the former Soviet Union) and many developing countries on all continents (Easterly and Schmidt-Hebbel, 1994).

The successes and failures of fiscal adjustment raise many issues. Not the least of these is how to define and measure fiscal adjustment. What are the most meaningful measures of public sector deficits? How should one assess fiscal stance, public sector solvency, and sustainability of deficits? The budget deficit is therefore often subjected to intense interest and scrutiny. Unless interpreted with caution, however, the conventionally defined budget deficit could give rise to misleading conclusions about a country's fiscal policy stance and possible erroneous policy prescriptions (Abedien and Biggs, 1998).

During the last few years, more emphasis has been placed by policymakers in South Africa on limiting the role of government in the economy, as well as reducing the budget deficit, as one of the policy goals of the Growth, Employment and Redistribution strategy adopted in 1996 (see South Africa, Republic of, pp. 7–9). The development in 1997 of the Medium-Term Expenditure Framework (MTEF) in South Africa once again placed emphasis on the use of the (conventional) budget deficit, since a specific (target) deficit was used as a primary fiscal policy goal. This leads to the question: is the conventional budget balance the right indicator to measure the stance of fiscal policy in South Africa? As noted in recent literature, several other fiscal indicators have been proposed as alternatives to the conventional balance and are already used with success by international organizations such as the IMF and the Organization for Economic Cooperation and Development (OECD). This study, focusing on South Africa, aims to develop a better fiscal indicator than the conventional measure of the budget balance—one that could be applied to general fiscal policy development in South Africa.²

This study therefore aims to critically analyze the conventional budget balance and, if it is found not to be ideal for the situation in South Africa, to suggest workable alternative budget balances or fiscal indicators to correctly measure the country's fiscal stance.

Finally, it should be mentioned that several aspects, such as a comprehensive balance sheet for government and concepts like the net worth of government are not fully treated in this

²Abedien and Biggs (1998, p. 231) provide a useful description of alternative measures in the South African context but do not suggest which indicator would be the best.

paper. At the time of the study, certain problems with the availability of data on valuation of (nonfinancial) government assets, as well as verification of certain government liabilities, were experienced.³ These data limitations will be removed only if comprehensive reforms in fiscal accounting are implemented in South Africa. Furthermore, little emphasis was placed on calculation of the quasi-fiscal budget balance in this study. Certain alternative budget balance norms—the so-called domestic and external budget balances—are also not fully developed.

II. OVERVIEW OF PROBLEM

The terms “budget deficit” appear regularly in news articles, and in government policy documents, usually with the warning that it is very undesirable (Eisner, 1997). The blame for economic ills such as high inflation and the discouragement of private investment is sometimes placed on (usually too large) budget deficits (see, among others, Eisner, 1989). Concrete proof for all these assumptions of “guilt” is seldom provided and little attention is paid to the “objective” measurement and interpretation of the budget deficit.⁴

Supporters from the classical and the neoclassical schools of thought agree with the viewpoint that *all* budget deficits (even small ones) are undesirable and should therefore be avoided at all costs. According to this viewpoint, government will with its actions crowd out private sector activity in the economy (Rosen, 1995). Another opinion is that budget deficits consume capital today, that was intended for use by future generations and, in the process, future generations will be left much poorer.⁵ This links closely to the intergenerational theory and the transfer of the cost or burden of public debt from generation to generation. Another perspective is that expenditure associated with budget deficits (and the role of government) essential to the economic well-being of a country is—for example, in the provision of public goods (Eisner, 1997).

The measurement of budget balances also raises a host of conceptual and practical issues, which are compounded by the lack of uniformity in usage among countries. For instance, the conventional budget balance can be measured on a cash basis or an accrual basis. In the first case, the balance equals the difference between total cash flow expenditure and fiscal revenue. In the second case, the balance reflects accrued income and spending flows, regardless of whether cash payments are involved. Accumulation of arrears on payments or

³South Africa has yet to move to full accrual accounting in the public sector and is currently aiming to complete this reform by 2004.

⁴ For a detailed description of the different schools of thought on the importance of the budget deficit, see Jacobs (2000, pp. 16–53).

⁵ Authors such as Barro contested this viewpoint: see Rosen (1995) for a detailed description of Barro’s viewpoint.

revenue is reflected by higher balances when measured on an accrual basis compared with a cash-based measure (Agénor and Montiel, 1999).

In the following section, further definitions or measurements of the conventional budget balance are given, followed by a description in Section IV of the international developments in the use of the budget balance as an indicator of fiscal stance.

III. DEFINITION AND APPLICATION OF BUDGET BALANCE CONCEPT IN FISCAL ANALYSIS

In the economic literature, and practices by institutions such as the World Bank and the IMF, different methods of measuring the conventional budget balance co-exist. The most commonly accepted measure used by governments to define the conventional budget balance is the resources utilized by the government in a fiscal year that needs to be financed after its revenues were deducted from the expenditure (Blejer and Cheasty, 1993). The conventional balance can therefore usually be defined as the difference between the current revenues and total expenditures of government according to Tanzi in Blejer and Cheasty (1993, p. 13). It thus reflects the financing gap that needs to be closed by net borrowing, including lending from the central bank.

The World Bank defines the conventional budget balance as the difference between expenditure items (i.e., salaries and wages, expenditures on goods and services, capital expenditure, interest on public debt, transfers and subsidies) and revenue items (i.e., taxes, user charges, grants received, profits of nonfinancial public enterprises and sale of assets) (Blejer and Cheasty, 1990).

The IMF stated in its 1986 Manual on Government Finance Statistics that the budget balance equals the following fiscal balance (Diamond and Schiller in Blejer and Cheasty, 1993):

$$\text{Fiscal balance} = \{(\text{revenue} + \text{grants}) - (\text{expenditure on goods and services} + \text{transfers}) - (\text{lending} - \text{repayments})\}.$$

Tanzi, Blejer and Teijeiro in Blejer and Cheasty (1993) define the conventional budget balance on a cash basis as the *difference between total government expenditure (including interest payments on public debt but excluding any amortization payments) and total cash receipts (including taxes and nontax revenues plus grants, without loans)*. It does not, however, provide a direct measure of monetary expansion or of the pressure as a result of increased demand for financial instruments in the short-term markets. This definition of a conventional budget balance is therefore independent from the maturity schedules of outstanding domestic public debt and the reasons related to monetary policy. It however poses a problem: public debt management and open market operations can in the end greatly influence the size of the budget balance.

According to Tanzi, Blejer and Teijeiro (1993) the conventional budget balance was also originally developed in an effort to provide a measure of the government's contribution to

aggregate demand in the economy and the lack of equilibrium in the current account of the balance of payments, or to measure the crowding out of the private sector in the financial markets.⁶

Another definition of the conventional budget balance could be the measurement of the extent government expenditures (for policy purposes) exceeds government revenues without incurring new liabilities, as proposed by Liviatan in Blejer and Cheasty (1993).

Heller, Haas and Mansur (1986) described the conventional measurement of the balance as a reflection of the current cash flow position of government, calculated by using only the cash receipts and cash expenditure in a given time period. Expenditure includes interest payments but excludes repayments of public debt.

In summary, the conventional budget balance can be regarded as the resources that should be used and financed in the fiscal year after the government has deducted its current revenue from its total expenditure. This expenditure total would include interest payments but not amortization of public debt.

IV. INTERNATIONAL AND DOMESTIC DEVELOPMENTS IN USE OF BUDGET BALANCE AS AN INDICATOR OF FISCAL STANCE

A. Introduction

Alternative indicators to measure the different interpretations of fiscal policy are increasingly being used by many countries and international organizations, such as the IMF,⁷ the World Bank, the OECD and the European Union (EU).

Countries use different definitions of the budget balance, mainly because of convention, relationships with other levels of government, and the structure of their budgets (United States General Accounting Office, 1996). Mexico (and many other Latin American countries), as well as the U.K. further analyze the public sector borrowing requirement, whereas Australia, Canada, and Germany focus on central or federal government activities, with Japan following a much narrower approach by considering the central government only in part.

⁶ This broader description of the conventional deficit is also measured on a cash basis (Robinson and Stella in Blejer and Cheasty, 1993).

⁷ The IMF mainly uses the conventional ("overall") budget balance, especially in the context of an IMF program.

To encourage comparability between different countries it is often proposed that the most common indicator, the budget balance of the general government, should be used, as suggested by the United Nations' System of National Accounts, better known as the SNA.

In the following sections attention is drawn to the use of budget balances by the EU (as suggested by the Maastricht Treaty), New Zealand and Australia, as well as the USA.

B. Maastricht Treaty's Requirements for Use of Fiscal Indicators

During the eighties most European countries experienced a deterioration in their fiscal situations. Budget deficits were large, which resulted in a situation in which debt sustainability was very difficult to maintain (Duperrut, 1998).

In 1988 the creation of the European Monetary Union (EMU) was proposed by the European Economic Community. This led to the Maastricht Treaty in February 1992 after intensive negotiations (Duperrut, 1998, pp. 212–213). This important treaty contains five unification criteria, which included two fiscal policy criteria:

- (1) Avoidance of "excessive government budget balances," as described in Article 104c of the Treaty.
- (2) The prerequisite of sustainability of the government's financial position (according to Article 109j).

The values attached to these criteria (or put differently: budget rules) are contained in the "Protocol on the Excessive Deficit Procedures" of the Treaty.⁸ An important consideration for this study is the fact that General Government is used in both these calculations (of the budget balance and the debt to GDP ratio).

The Maastricht Treaty has attracted significant attention in South Africa. There is frequent reference to the 3.0 percent reference value regarding the budget deficit, as also implemented by the South African government in their GEAR policy, in consideration by the domestic financial markets as a viable and acceptable target for "good" fiscal policy. International organizations and financial markets sometimes apply pressure on countries to try to achieve this 3.0 percent target although there is no proof that this limit can be considered as the optimal value for an individual country or monetary union (Duperrut, 1998).

However, a recent development is that the deficit and debt criteria of the Maastricht Treaty have now been complemented by the provisions of the Stability and Growth Pact (IMF, 2001a).

⁸ The values are 3.0 percent and 60.0 percent of GDP for budget deficit and the public debt to GDP ratio respectively.

C. New Zealand and Australia

Notable factors in the substantial (and mainly successful) fiscal reforms in New Zealand and Australia are the areas of accounting and the financial systems of government.

Some important aspects of the earlier fiscal reforms in New Zealand are the State Owned Enterprises Act (1986), which imposed a corporate form on government owned businesses, the State Sector Act (1988), which introduced chief executive employment contracts and related accountability mechanisms, and the Public Finance Act (1989, but amended several times since) which introduced the major aspects of financial management reform, such as output budgeting and accrual accounting.

Individual departments, and the government as a whole are required to publish annual audited financial statements including:

- (1) A statement of financial position;
- (2) An operating statement;
- (3) A statement of cash flows;
- (4) Statements of commitments and contingent liabilities;
- (5) A statement of any unauthorized expenditures;
- (6) A statement of accounting policies; and
- (7) Such other financial statements as are necessary to fairly reflect the financial operations and financial position.

Indeed, New Zealand produces this information unaudited for nine months of the year (it misses the first two months). In addition, the government as a whole is required to present a statement of borrowings, a statement of emergency expenditures, and a statement of trust money. Individual departments are required to present a statement of objectives, and to provide audited reports on their service performance.

All the above-mentioned statements are compiled according to the accrual principle and cover most of the public sector⁹ (Scott, 1996).

⁹ It should, however, be noted that in New Zealand the combined financial statements of the government do not cover the whole of the public sector in gross terms. The government's interest in state-owned enterprises and Crown entities (i.e., legally separate bodies that are owned or controlled by government and have no commercial objectives) has been consolidated on a net equity basis, i.e., the government's equity in these bodies is an asset on the government's balance sheet, but the gross revenues and expenditures of these bodies are not consolidated in the operating statement. Full line-by-line consolidation will be introduced in the 2002/03 Budget due to be presented in May 2002. This will have separate segment reporting of the different sub-sectors of the public sector.

New Zealand is a country that has made exceptional progress in the area of government financial accounts. There also exists a legal obligation regarding the publication of government information, as set out in the Fiscal Responsibility Act (1994) and the Public Finance Act (1989) (Scott, 1996). The publication of a full Balance Sheet of the Government of New Zealand was a unique characteristic of these government reforms and qualifies New Zealand as one of the few countries, to use the net worth concept to guide fiscal policy.

Australia also has a balance sheet statement including a net worth concept. Furthermore the fiscal accounts in both New Zealand and Australia are centered on three key concepts: (i) an operating balance statement (on an accrual basis); (ii) a statement of cash flows; and (iii) a balance sheet statement with a net worth concept. The main difference between the two countries are the use of different accounting standards and the fact that in Australia the main accrual indicator is a net-lending concept of the fiscal balance, while New Zealand main accrual indicator is the operating balance (which does not include capital expenditure, but does include expenses associated with depreciation). However in recent times, an increasing focus in New Zealand has shifted to the OBERAC, which is the operating balance excluding revaluations and accounting policy changes.

D. United States

In the eighties several developed countries attempted to lower their high budget deficits. The United States also lowered its deficit from the high level of 6.0 percent of GDP in 1983 to 2.9 percent in 1994. Although the constitutional change necessary to achieve a balanced budget by the year 2002 was rejected by a small margin in 1995, the Congress was still serious about reducing the deficit over time (Corsetti and Roubini, 1996), and, for the first time in several years, the United States experienced a budget surplus of 0.8 percent in 1998.

The United States now places relatively more emphasis on expenditure rather than deficit rules, as the 1990 Budget Enforcement Act (BEA) replaced the relatively unsuccessful deficit targets of the 1985 Gramm-Rudman-Hollings Act with more complex limits on spending (excluding social security and Medicare). Discretionary spending categories are defined and capped in nominal terms for five years ahead; if these caps are exceeded, a uniform percentage reduction in spending in that category is required. For revenues and mandatory spending (spending controlled by permanent laws such as Medicare), the BEA requires that changes be financed on a pay-as-you-go basis, implying that any law that reduces revenue or increases spending must be offset by other measures to avoid triggering uniform cuts in certain mandatory spending programs. Discretionary spending caps and pay-as-you-go legislation are set to expire in 2002 (IMF, 2001a).

For policy purposes the United States still only considers the federal budget balance and ignores the balance of state and local governments.

E. Summary

The above discussion of international conventions in the use of alternative fiscal indicators, although interesting, need to be related to their relevance for South Africa. Such questions include: What impact could budget rules, like the Maastricht Treaty, have in the context of the Southern African Development Community? Also, should South Africa change its budget deficit target from the National Government to the General Government? Should South Africa like New Zealand move to the net worth concept and the compilation of a comprehensive balance sheet as part of legal requirements similar to the "Fiscal Responsibility Act"? And, finally, should South Africa like the United States, focus its fiscal targets on the federal (national) level and ignore the lower levels of government?

Important factors to consider in answering the above questions are the level of economic development in South Africa and the restrictions in the availability of the relevant data. General new developments in government finance statistics by international organizations, such as the publication of the new GFS2001 Manual by the IMF, could also play an important role.

V. APPLICABLE ALTERNATIVE DEFINITIONS OF BUDGET BALANCE AND THEIR INTERPRETATION

According to Blejer and Cheasty (1993) the choice of a budget balance is mainly focused on the interpretation and management of fiscal policy. There is thus no ideal measure of the budget balance, but rather a set of different budget balances that could be considered as more appropriate, each applicable to a specific circumstance.

Although numerous different budget balances and other fiscal indicators can be identified, (see Table 1), it was decided to analyze 22 alternative budget balances in more detail in this study. As mentioned previously, severe data constraints limited the number of budget balances, which could be calculated for South Africa.

These alternative definitions of the budget balance include: the current balance (measuring government savings); the primary balance (which excludes interest payments); public debt/GDP ratio and the primary tax gaps (measuring fiscal sustainability); the borrowing requirement (equaling the conventional balance in South Africa); and, indicators to measure fiscal impact and discretionary fiscal policy.

The above indicators can be supplemented by the cyclically adjusted and the cyclically neutral balance, which allow for the effects of cyclical variations in the business cycle, when measuring the effect of fiscal policy on the economy (the cyclical neutral balance only adjusts the revenue side of the budget).

Table 1. Possible Alternative Budget Balances And Other Fiscal Indicators

	<i>Fiscal indicator</i>	<i>Definition</i>	<i>Uses</i>
1.	Conventional budget deficit/fiscal balance – cash balance (GFS) or accrual balance (SNA) Total budget balance	= all cash receipts – all cash expenditures or balance calculated according to the accrual method = government expenditure – government revenue + grants	Typically used – benchmark for this study to compare other indicators
2.	Total budget balance without grants	= total budget balance (1) – grants	Only relevant when grants are substantial
3.	External budget balance	= government expenditure (externally financed) – external receipts	Shows reliance on foreign financing
4.	Domestic budget balance	= total balance – external balance	See above
5.	Operational budget balance	= total balance – inflationary component of interest payments (or primary balance + real interest payments)	Shows impact of fiscal policy in periods of high inflation
6.	Primary budget balance	= total balance – interest payments	Measures fiscal sustainability
7.	Current budget balance	= current revenue – current expenditure	Measures extent of government savings
8.	Consolidated budget balance for the public sector (as defined)	= (a) including the rest of the public sector = (b) including quasi-fiscal activities of the central bank	Wider definition
9.	Cyclically neutral budget balance	= Expenditures – cyclically adjusted revenue	Excludes fluctuations due to changes in business cycle
10.	Cyclically adjusted budget balance	= total balance – cyclically neutral balance	See above
11.	Benchmark budget balance	= normative year balance (as pre-determined)	Subjective – depends on choice of analyst
12.	Structural budget balance	= cyclical effect of budget + benchmark balance	See above
13.	Full employment budget balance	= full employment expenditure – full employment revenue	Hypothetical balance if economy was operating at full employment
14.	Liquidity budget balance	= total balance – net domestic non-bank loans – net external loans	Takes liquidity constraints into account

	<i>Fiscal indicator</i>	<i>Definition</i>	<i>Uses</i>
15.	Permanent balance	= present value of all government assets (assets, taxes, etc.) – present value of all government liabilities	Derived from balance sheet concept
16.	Change in net worth of the public sector	= difference between opening and closing balance sheets	Shows government fiscal position
17.	Generational budget balance	= present value of taxes – present value of all transfers (of an average member of a specific generation)	Hypothetical balance – useful in intergenerational studies
18.	Dynamic budget balance	= changes in prices and valuations of assets (using nominal and real discount rates)	Highlights effects of inflation on value of assets over time
19.	Real budget balance (balance adjusted for inflation)	= equals the changes in real government debt	Useful in periods of high inflation
20.	Budget balance adjusted to measure: * fiscal stance * fiscal sustainability * fiscal vulnerability * fiscal conditionality * fiscal position * fiscal impact * discretionary fiscal policy	= operational balance, PSBR, primary balance = primary tax gaps ¹⁰ = government debt/GDP ratio = pre-determined weights for fiscal targets (e.g., GEAR) = government dissavings/reduction in net worth = impact of FP on resource allocation and composition of total demand in the economy ¹¹ = net fiscal impact ¹²	Discussed above

¹⁰ See Jacobs (2000, pp. 107–111).

¹¹ Ibid (2000, pp. 112–116).

¹² Ibid (2000, pp. 116–121).

	<i>Fiscal indicator</i>	<i>Definition</i>	<i>Uses</i>
21.	Budget balance and arrears	= should distinguish between domestic and external arrears	Only relevant in countries with arrear payment problems
22.	Budget balance and contingent liabilities	= includes future cash flows	More comprehensive measure
23.	Public sector borrowing requirement (cash basis – GFS) (PSBR)	= total coverage of the public sector	Wider coverage
24.	Comprehensive balance sheet or welfare accounts	= measures the changes in net worth and permanent income of government	See above
25.	Budget balance and the sale of public sector assets (privatization)	= included in the calculation of PSBR	See above – relevant when privatization proceeds are large
26.	Economic budget balance	= includes receipts from social security payments	More comprehensive
27.	Weighted budget balance	= utilizes a set of weights – 2 main approaches ¹³	Depends on choice of weights used
28.	Tax burden	= total taxes/GDP ratio	Additional fiscal indicator
29.	Hybrid budget balance	= combination of conventional balance and net worth concept	See above
30.	Public debt/GDP ratio Real public debt per capita Real public debt per EAP	= total public debt/GDP = total public debt (adjusted for inflation)/population = real public debt/EAP	Additional fiscal indicator

Where:

FP	=	Fiscal policy;
GDP	=	Gross Domestic Product;
PSBR	=	Public Sector Borrowing Requirement;
GEAR	=	“Growth, Employment and Redistribution Strategy;”
EAP	=	Economic Active Population; and
GFS	=	Government Finance Statistics.

Other useful indicators are the real and operational balance (adjusting for inflation); weighted balances (where the choice of weights depends on the relative importance placed on certain

¹³ Ibid (2000, pp. 149–155).

policy dimensions—this is useful when analyzing policy outcomes versus policy goals); the full employment balance, as well as the net worth concepts and other balance sheet related indicators such as the hybrid, permanent and economic balances.

VI. COMPARISON BETWEEN CONVENTIONAL DEFINITION OF BUDGET BALANCE AND ALTERNATIVE DEFINITIONS IN SOUTH AFRICA

A. General Remarks

The conventional budget balance, as well as the primary and current balances, is currently used for the monitoring of fiscal policy in South Africa. The primary sources of data are the Ministry of Finance (MOF) and the South African Reserve Bank (SARB). The SARB obtains its information mainly from the MOF, but does supplement it with data from the banking sector, as well as sample surveys (especially with respect to the provincial and local governments). This information is also provided to the IMF, which publishes it in commonly used sources such as Government Finance Statistics (GFS) and International Finance Statistics (IFS).

In April 1996, after the Mexican financial crisis, the IMF created the Special Data Dissemination Standards (SDDS) to improve the quality and timeliness of the international financial statistics worldwide. The South African government undertook in August of that year to comply with those standards (countries had until end-1998 to implement some reforms to enable them to do this). South Africa was also one of the first 24 countries to have the necessary data available by the time of the IMF's Annual Meetings in September 1996. Government financial information forms an important part of this system. Renewed focus was therefore placed on the importance and quality of government finance statistics.

B. A Comparison Between Budget Balances as Published by the SARB and the MOF

Since 1993 the MOF publishes the conventional, the current, and the primary budget balances in the annual Budget Review. The SARB also publishes the conventional budget balance for each level of government from 1972/73 onwards, as well as the cash flow adjusted budget balance and the public sector borrowing requirement.

Table 2 shows the conventional budget balance and the cash flow adjusted balance of the SARB for selected years. The difference is due to the fact that the SARB makes an adjustment in regard to outstanding intergovernmental transfers according to the GFS86 method.

Given the difference in these two fiscal indicators alone, it is clear that a choice between them would have been difficult. This again highlights the need to supplement the conventional budget balance with alternative indicators.

Table 2. Conventional Budget Balance and Cash Flow-Adjusted Balance of SARB
(for the National Government)

YEAR	<i>Conventional budget balance</i> <i>(Percent of GDP)</i>	<i>Cash flow adjusted balance</i> <i>(Percent of GDP)</i>
1980/81	-2.0	-0.7
1985/86	-2.9	-2.8
1990/91	-4.6	-2.8
1995/96	-5.7	-5.4
1997/98	-3.5	-4.0

Source: The Ministry of Finance and the SARB

C. A Comparison Between Conventional Budget Balance and Other Alternative Fiscal Indicators in South Africa

This section focuses on a comparison between the conventional budget balance and alternative fiscal indicators (as set out in Table 1) in South Africa. The possible value of these indicators will be explored as well as the possibility of replacing the conventional budget balance, as currently applied by the South African policy makers, with one or more of these alternative indicators.

Tables 3 and 4 compare the conventional budget balance with possible alternative indicators as calculated for the National Government in South Africa.

A brief description of the outcome of this comparison is as follows:

(1) *The current balance* is somewhat lower than the conventional balance in South Africa, which implies that part of the conventional balance (or deficit) was incurred by expenditures on capital goods and services. The current balance also measures government savings in the economy.

(2) *The primary balance* equals the conventional balance without interest payments—as a measure of fiscal sustainability. The value has increased in the period between 1995/96 and 1997/98, which could be viewed as an indication that fiscal policy was indeed more sustainable.

(3) *Public debt to GDP ratio* can be considered as a very useful indicator because it is compared internationally with the 60 percent value of the “Maastricht Treaty.” It shows a declining trend since 1995/96, which can be directly linked, to the policy of the South African government to lower the budget deficit every year.

(4) *The borrowing requirement of the National Government* is directly linked to the conventional balance due to the fact that South Africa seldom receives foreign grants. The deficit therefore has to be financed in full through domestic financing in the Treasury bill market.

(5–6) *The primary tax gaps* can also be used to test the sustainability of fiscal policy over the medium or short term. The positive values could be considered as an indication that fiscal policy is not sustainable except if certain policy changes are implemented.

(7–8) *Indicators to measure the impact of fiscal policy* in South Africa—that is, what the impact or effect of fiscal policy on the economy were. In 1995/96 the indicator for fiscal impact equaled 4.6 percent of GDP (somewhat smaller than the conventional budget balance).

(9) *The measurement of discretionary fiscal policy* was 0.4 percent of GDP in 1997/98. According to this measure the government in South Africa has very little room for discretionary policy and fiscal policy was not powerful during the period under consideration.

(10) *The full employment balance* measures the hypothetical balance if the economy was operating at full employment—it is very difficult to measure this indicator (and to interpret its value) for South Africa.

(11) *The operational balance* shows the impact of fiscal policy during times of high inflation—not currently useful in the South African context.

(12–13) *The cyclical adjusted and the cyclical neutral indicators* provide a broad understanding of the effect of fiscal policy when fluctuations in the business cycle are removed in the calculation of the budget balance. Big surpluses in the cyclical neutral indicator (where the effect is only removed in regard to the revenues of the budget) imply that the budget would have been in surplus if better policy with respect to revenue had been implemented.

(14) *The real balance* shows the budget balance without inflation and is more applicable in high inflation countries.

(15) *The GEAR adjusted indicator* is an approximation of the balance if certain objectives (such as the implementation of the GEAR policy) were obtained. It can be very useful in the analysis of the deviations of the outcome of policy *versus* these objectives. But, it is also very subjective because it enables the analyst to choose the values of the weights according to his or her interpretation of the policy.

(16–17) *Weighted balances* are budget balances with special emphasis (or a higher value or weight) on either current or capital expenditure. These indicators, like those above, are subject to the analyst's choice of weights.

(18–19) *Net worth or changes in net worth of government* are calculated with information from a calculated balance sheet for the South African government. At present South Africa does not have a comprehensive balance sheet for government because of the lack of information on government assets and certain government liabilities.

(20–22) *Hybrid, permanent and economical balances* are derived from the balance sheet concept. As mentioned above, some further work needs to be done in this area—therefore the calculation of these indices is problematic.

Table 3 therefore shows the calculated values of the different fiscal indicators for the National Government for the period 1995/96 to 1997/98. It is clear from these results that a large interval of values for these indicators exists, which in turn, complicates the conclusions on the applicability in the South African context. Table 4 shows the following distinction in determining the general usefulness of these indicators:

Category	Comment
Extremely useful and useful	Could be used with success;
Useful (but use with care)	Could be used with certain limitations; and
Useful (after further research)	Not to be used without further developments.

For more information on the reasons why the fiscal indicators were divided in these three categories, please refer to Table 4.

D. Summary

It is clear from the tables above that most of these alternative indicators are useful, some even very useful. Although the table was developed for the National Government, similar analyses can be performed for other levels of government.

It can be concluded with some certainty that the development of alternative budget balances or fiscal indicators can contribute to more effective fiscal policy and fiscal analysis in South Africa. The choice between the alternatives depends mainly on the intended purpose.

Table 3. A Comparison Between Different Alternative Fiscal Indicators for Selected Years
(for the National Government)

	Fiscal indicator (percent of GDP)	1995/96	1997/98
	<i>Conventional budget balance</i>	-5.7	-3.5
1	Current balance	-4.7	-2.8
2	Primary balance	0.2	2.9
3	Public debt to GDP ratio	57.1	56.6
4	Borrowing requirement	5.7	3.5
5-6	Primary tax gap (Short and medium term)	2.5	1.4
7-8	Indicators to measure the fiscal impact (AD) (of IAD)	4.6	5.0
9	Indicators to measure discretionary impact (ABB)	0.1	0.4
10	Full employment balance	-8.9	-8.0
11	Operational balance	3.6	6.1
12	Cyclical adjusted indicator	-0.3	1.0
13	Cyclical neutral indicator	8.5	6.0
14	Real balance	2.4	0.6
15	GEAR-adjusted indicator	-4.2	-4.4
16	Weighted balance (Emphasis on current expenditure)	-4.5	-4.8
17	Weighted balance (Emphasis on capital expenditure)	-4.2	-4.5
18	Net worth of government	-36.5	-33.5
19	Changes in net worth of government	-2.5	-1.3
20	Hybrid balance	-42.2	-37.0
21	Permanent balance	-22.0	-19.5
22	Economic balance	-0.8	-0.8

Source: Jacobs (2000, Chapter 6).

Table 4. Summary of Results of Study for National Government
(Conventional Budget Balance *versus* Other Alternative Budget Balances/Fiscal Indicators)

	<i>Fiscal Indicator</i>	Alternative indicator compared to the conventional budget balance/deficit (CD)					<i>Interpretation</i>	<i>Possible usefulness in SA and reasons for recommendations</i>
		<i>Somewhat lower (<2 percent)</i>	<i>Lower</i>	<i>Equal</i>	<i>Higher</i>	<i>Somewhat higher (>2 percent)</i>		
1	Current balance		X				Similar trend than CD	Useful—especially measuring the extent of government savings in the economy
2	Primary balance	X					Positive since 1995/96—implies sustainable FP	Extremely useful—better measure of fiscal sustainability than the CD
3	Public debt to GDP ratio					X	Increasing trend until 1995/96—then declining	Extremely useful—compared internationally with the 60%-"Maastricht Treaty"—norm
4	Borrowing requirement			X			Directly correlated with CD	Useful—same purpose as CD
5-6	Primary tax gaps	X					Better measure of the sustainability of FP	Extremely useful—gap is positive therefore FP is not sustainable
7-8	Indicators to measure the fiscal impact (IAD and AD)	X					Better measure of the impact of FP on economy	Extremely useful—if $\Delta AD < \Delta IAD$ then it implies policy changes—not applicable for SA
9	Indicators to measure discretionary changes (ABB)	X					Values close to zero—FP was not expansionary	Extremely useful—important if the effectiveness of FP measures are to be used in future
10	Full employment balance					X	Values are much higher	Can be used sometimes—difficult to interpret
11	Operational balance	X					Trend differs from CD—measure stance of FP	Difficult to draw conclusions—can be useful—shows impact of FP in periods of high inflation
12	Cyclical adjusted	X					Different uses	Extremely useful

	<i>Fiscal Indicator</i>	Alternative indicator compared to the conventional budget balance/deficit (CD)					<i>Interpretation</i>	<i>Possible usefulness in SA and reasons for recommendations</i>
		<i>Somewhat lower (<2 percent)</i>	<i>Lower</i>	<i>Equal</i>	<i>Higher</i>	<i>Somewhat higher (>2 percent)</i>		
	indicator							
13	Cyclical neutral indicator	X					Shows huge surpluses—if fiscal policies regarding revenues were correct	Extremely useful—may show previous surpluses or mistakes in fiscal policy
14	Real balance		X				Shows balance without inflation—more applicable in high inflation countries	Useful—but in circumstances of high inflation
15	GEAR-adjusted indicator				X		Measure certain prerequisites for FP	Useful—shows deviations from results compared with govt. policies
16	Weighted balance (emphasis on current expenditure)				X		Higher current expenditure—indicates government dissavings	Useful but subjective—depends on the choice of weights used
17	Weighted balance (emphasis on capital expenditure)				Slightly higher		Expenditure on capital causes somewhat higher deficits (but slightly lower than above)	Useful but subjective—depends on the choice of weights used
18	Net worth of government						Difficult to interpret because of possible underestimate of assets	Further research is needed before this indicator can be fully operational
19	Change in net worth		X				Same as in number 18 above	Same as in number 18 above
20	Hybrid balance						Same as in number 18 above	Same as in number 18 above
21	Permanent balance						Same as in number 18 above	Same as in number 18 above
22	Economic balance	X					Only difference is in the classification	Useful

Where:

FP = Fiscal Policy; ABB = Adjusted Budget Balance; CD = Conventional budget deficit (balance);

GEAR = "Growth, Employment and Redistribution Strategy;" IAD = Inflation Adjusted Deficit; and, AD = Adjusted Deficit.

VII. SUGGESTIONS FOR FUTURE USE

A number of different but interesting conclusions can be made from the results in this study. One of the most important observations is that there still exists much room for improvement of the fiscal-financial information in South Africa. As mentioned above, the lack of reliable data was one of the greatest drawbacks in the analysis and much of the information needed had to be calculated or derived by the author, which added subjectivity to the results.

It is therefore encouraging to learn that the Office of the Accountant General in the MOF is currently working towards creating one database for the general government sector to provide all users of government data one source of reliable information.⁷ The recent enactment of the Public Finance Management Act (PFMA) (No.1 of 1999 as amended by Act 29 of 1999) and the several implementing regulations furthermore provided much needed reforms in the reporting requirements on all levels of government in South Africa.

At the start of this study, a number of pertinent questions were asked regarding the international convention of the use of alternative budget balances and its relevance for South Africa. Regarding these questions, it can be concluded that the amount of information available to policy makers and analysts should be expanded—therefore information systems should be expanded as well. South Africa should also, move towards full implementation of GFS2001 and its recommendations. Meanwhile, it is proposed that the MOF and the SARB make use of the following alternative indicators, as developed in this study:

I. “Extremely Useful” and “Useful” Indicators:

- (1) The current balance (already used in SA);
- (2) The primary balance (already used in SA);
- (3) Public debt to GDP ratio (already used in SA);
- (4) Borrowing requirement (already used in SA);
- (5) The primary tax gaps (if further increases in taxes are proposed);
- (6) Indicators to measure the impact of fiscal policy;
- (7) Indicators to measure discretionary changes;
- (8) Cyclically adjusted indicator;
- (9) Cyclically neutral indicator;

II. “Useful” Indicators (to be used with care):

- (10) Real and operational balances;
- (11) GEAR-adjusted and other weighted balances;

⁷ The project is managed by the Ministry of Finance is called “Vunlindlela.” At the moment it covers only National and Provincial Governments.

III. Useful Indicators with Further Research Needed:

- (12) A comprehensive balance sheet for government as well as the net worth concepts and related indicators.

Indicators (1) to (9) above would influence the MTEF of government if used in addition to the conventional budget balance. They also provide to the policy maker and the fiscal analyst a more complete picture of fiscal policy and the outcome of future policy proposals.

The main conclusion of the study is therefore that South Africa should move away from just using the conventional budget balance as fiscal indicator. It should be improved by making full use of alternative indicators and the following necessary steps could be suggested:

Step 1: Use of the budget balance of the General Government and not the consolidated National (and Provincial) Governments as a measure in the development of the MTEF and for the calculation of other government policy objectives (as commonly used by the European union).

Step 2: Develop a three to five-year program (based on the outcome or success of the “Vunlindlela” project of the MOF) to move completely to the IMF’s proposed GFS-based method of government accounting for all levels of general government. If needed, technical assistance could be obtained from international organizations such as the IMF, the World Bank or other bilateral donors, such as the European Union or DFID to expedite these reforms.

Step 3: Making full use of these alternative indicators in an environment of comprehensive government information systems would benefit South Africa and would also contribute to greater transparency of the government’s fiscal operations.

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