

SCOPING THE FEASIBILITY AND IMPLICATIONS OF A STABILISATION FUND FOR SACU

Yash Ramkolowan



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EXECUTIVE SUMMARY

The Southern African Customs Union's (SACU) Third Ministerial Retreat set out a work programme for SACU member states and the secretariat aimed at deepening integration in the region and fostering development and industrialisation. One of the focus areas of this work programme was the establishment of a SACU stabilisation fund, primarily to counter volatility in the common SACU revenue pool. This paper aims to assess the rationale for and feasibility of such a fund within SACU.

Stabilisation funds have close links to sovereign wealth funds (SWFs), primarily because many SWFs were initially established with the dual aim of saving excess commodity revenues and acting as a revenue buffer against commodity shocks and price swings. While there is no standard definition for stabilisation funds, they were historically meant to bring about greater predictability in (and reduce the volatility of) commodity-driven revenues and, in doing so, smooth government expenditure over time. The experience of many stabilisation funds has shown that, as fund assets grow, a fund's narrow stabilisation objective may be broadened to focus on a wider set of development and economic diversification objectives.

The review of stabilisation funds suggests that these funds have predominantly been established (and funded) by countries with significant commodity revenues. While this does not preclude the use of other revenue streams within a stabilisation fund framework, it does highlight that stabilisation funds have typically been established to counter exogenous commodity shocks to government revenues. Unlike commodity shocks, the volatility attributable to distributions from the SACU revenue pool is primarily a result of an internally agreed formula that is used to distribute these pooled revenues.

The review of existing stabilisation funds also finds no evidence of one established at a regional level. This may be because, at the very least, individual country participants would need to agree to a set of common regional fund deposit and withdrawal rules, which would impact on their own revenue and expenditure dynamics. Where regional funds do exist, these are typically established for broader development and infrastructure investment purposes.

For SACU, the establishment of a regional stabilisation fund is premised on the common SACU revenue pool being the root cause of revenue unpredictability and volatility for member states. However, an analysis of SACU member state revenues shows that revenue volatility and unpredictability impacts members to different degrees. Since 2004/05 Botswana and eSwatini (Swaziland) have experienced the greatest

degree of overall revenue volatility, while South Africa has seen far lower levels of revenue volatility than the other SACU member states.

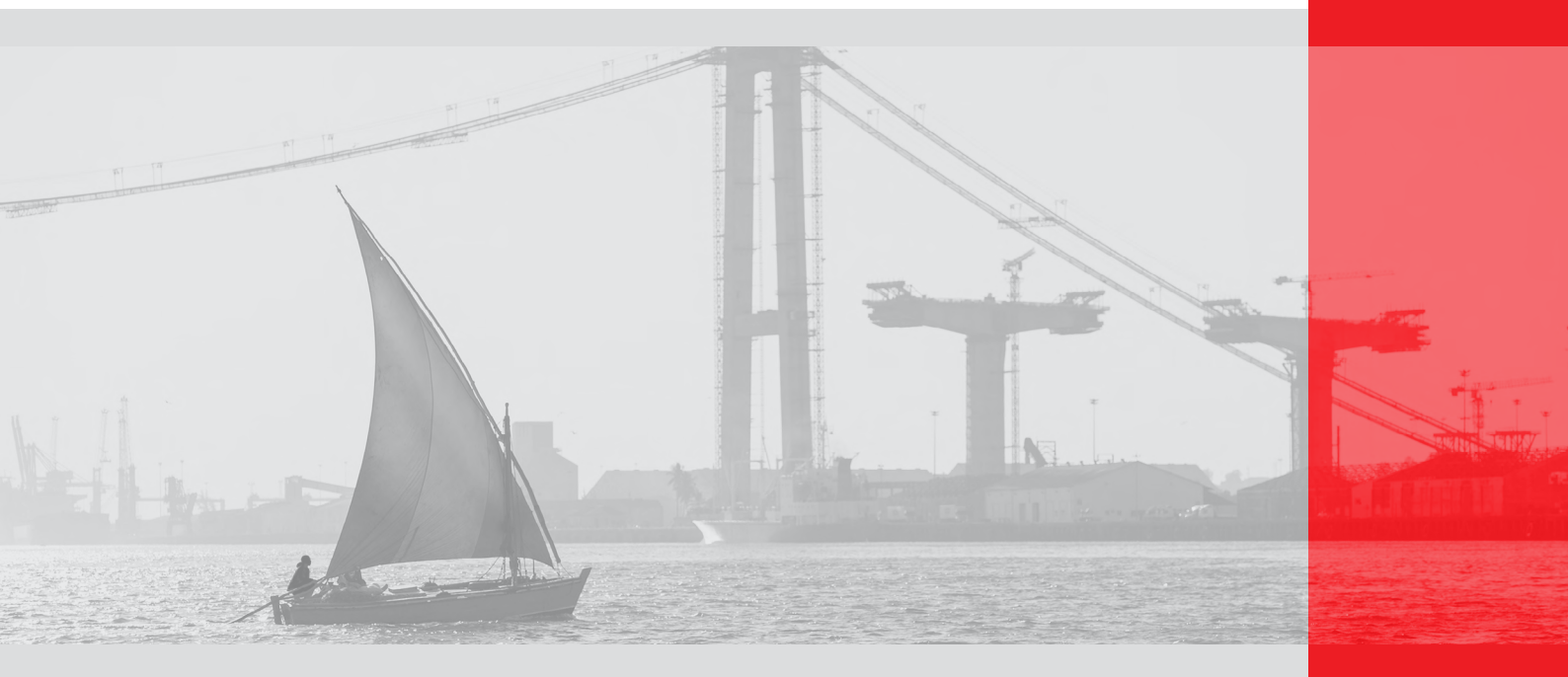
The analysis also highlights that this volatility emanates from different revenue sources. For Lesotho, Namibia and eSwatini, receipts from the common SACU revenue pool are the main driver of overall revenue volatility. For Botswana, commodity revenues have been the primary driver of revenue volatility, while for South Africa revenue volatility is driven primarily by its internal tax base (including taxes on income and goods and services).

Given that SACU member states face different degrees of revenue volatility and unpredictability, and that this emanates from different revenue sources, a regional stabilisation fund seems inappropriate and infeasible. While several sub-optimal options could be implemented to reduce the volatility (and unpredictability) in the existing SACU pool structure (including ensuring a closer match between actual pool collections and disbursements, altering the timing of disbursements and incorporating a smoothing 'formula' into the disbursement process), to truly address this source of volatility, member states should focus on revising and refining the revenue-sharing formula.

Where member states cannot agree on changes to the current revenue-sharing formula, each SACU member state could consider country-level policy options to reduce the volatility and unpredictability of government revenues. The establishment of a stabilisation fund is but one such option. The implementation of fiscal rules, medium-term expenditure frameworks and fiscal councils are among the other options that could be considered to bring greater predictability to government revenues and, by extension, expenditure in each SACU member state.

AUTHOR

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INTRODUCTION

One of the main outcomes of the most recent – 2002 – Southern African Customs Union (SACU) agreement was the implementation of a revised customs and excise revenue-sharing formula across SACU member states. However, some SACU member states have faced significant revenue volatility and unpredictability since this new formula was implemented in 2004. Given this, SACU's Third Ministerial Retreat set out a work programme for SACU member states and the SACU Secretariat, with a priority area being the exploration of a SACU stabilisation fund, in an effort to improve the predictability, and reduce the volatility, of member state revenues.¹

As highlighted in the review below, stabilisation funds have close links to sovereign wealth funds (SWFs). Funds initially conceived for stabilisation purposes have thus adapted and evolved, and their mandates have typically broadened to include more general development and diversification objectives. Nevertheless, this paper aims to assess the rationale for and feasibility of a narrowly defined stabilisation fund within SACU, in line with SACU's own expected objectives for such a fund.

The paper begins by providing a broad overview of stabilisation funds, to understand the objectives of such funds and the optimal operating structure in which such

1 Alongside this, exploring the possibility of a regional development or industrial financing mechanism also forms part of the current SACU work programme. While there may be overlaps between development and stabilisation funds, this paper focuses on funds with stabilisation objectives.

funds have maximum effect. This is followed by an analysis of the causes of SACU member states' budget volatility, identifying whether a stabilisation fund is the best instrument for addressing these volatility issues. Finally, the operation and administration of a stabilisation fund within the SACU context is broadly considered.

OVERVIEW OF STABILISATION FUNDS

RATIONALE AND OBJECTIVES OF STABILISATION FUNDS

Extra-budgetary funds (EBFs) in general can be defined as 'general government transactions, often with separate banking and institutional arrangements that are not included in the annual state (federal) budget law and the budgets of subnational levels of government'.²

EBFs can be broadly grouped based on their objectives, source of funding or institutional design. They can have a wide range of objectives, can be financed from specific taxes or general revenues and can be managed by an independent institution or within a government ministry. In many cases EBFs are not a necessity to fulfil a specific economic or financing requirement. However, EBFs may be established to address a range of budget system and political factors that weaken the link between government revenues and expenditure.³ Thus they may aim to contribute to selective sustainable development objectives by insulating specific revenue streams and funds from the overall budgeting process.

There is no single definition of a stabilisation fund, but the basic premise is to smooth (or improve predictability in) government expenditures and consumption by creating a buffer against negative external shocks to (or unpredictability in) government revenues

Revenue stabilisation or smoothing is one of many objectives that an EBF may aim to achieve. There is no single definition of a stabilisation fund, but the basic premise is to smooth (or improve predictability in) government expenditures and consumption by creating a buffer against negative external shocks to (or unpredictability in) government revenues.⁴ Historically, such funds have primarily aimed to insulate the government budget and economy from excess revenue volatility, exogenous revenue shocks and over-reliance on a single revenue stream. Through such an

2 Allen R & D Radev, 'Extrabudgetary Funds', IMF (International Monetary Fund) Fiscal Affairs Department. Washington, DC: IMF, June 2010.

3 *Ibid.*

4 Wagner G & E Elder, 'The role of budget stabilization funds in smoothing government expenditures over the business cycle', *Public Finance Review*, 33, 4, 2005.

approach, greater predictability in government expenditure is expected to achieve more sustainable development outcomes.

Given that such revenue shocks (and the ability to raise a revenue buffer) are particularly prominent in resource-rich economies, a stabilisation fund has also been described as a fund that is ‘intended to smooth revenue streams from natural resources and bring more predictability into the country’s budget’.⁵ Because of this link to commodity revenues, stabilisation funds have been closely tied to natural resource funds and SWFs.

Countries endowed with large (but finite) natural resource reserves have aimed to avoid the potential negative consequence of such large endowments by taxing resource rents and allocating these revenues to dedicated funds. These funds, which have come to be termed SWFs, often have a dual purpose: smoothing government revenues (or increasing the predictability of government revenues) over time (a budget stabilisation function) and saving resource revenues for future generations (a savings or ‘heritage’ function).

In some cases, as funds’ assets have grown, fund objectives have broadened beyond the narrow stabilisation or savings mandate to include wider sustainable development objectives, and to diversify economic growth away from a reliance on commodity resources. Given the substantial level of capital available in SWFs and their increasingly broad objectives, SWFs have been seen by some as ideal sources of investment in areas that contribute to the achievement of the UN’s Sustainable Development Goals.⁶

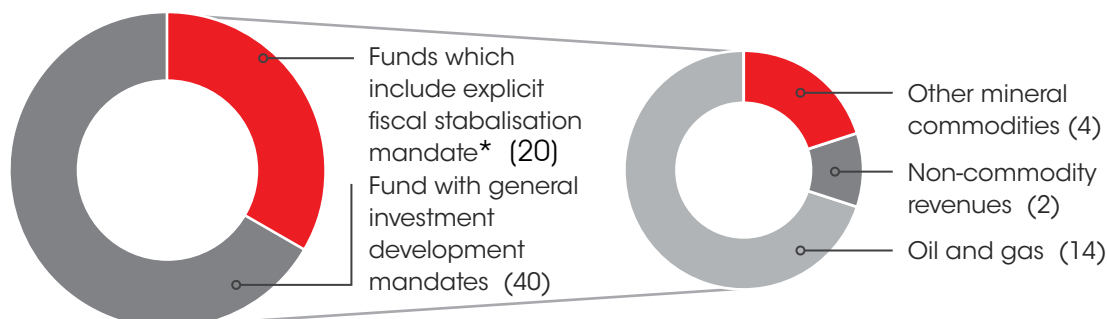
SOURCE OF FINANCING FOR STABILISATION FUNDS

EBFs, in general, may be financed through a wide number of revenue instruments. For stabilisation funds, however, evidence from existing funds suggest that these are largely financed from commodity revenues. This is highlighted in Figure 1, where only two of the 20 identified funds with a stabilisation mandate are funded by non-commodity revenues.⁷

5 Bagattini G, ‘The Political Economy of Stabilisation Funds: Measuring their Success in Resource-Dependent Countries’, IDS (Institute of Development Studies) Working Paper, 356. Brighton: IDS, 2011.

6 The Sovereign Wealth Fund Institute estimated that there was in excess of \$7.4 trillion held by SWFs globally by June 2017. For the potential links between SWFs and the Sustainable Development Goals, see Sharma R, ‘Sovereign Wealth Funds Investment in Sustainable Development Sectors’, Paper presented at ‘High-level Conference on Financing for Development and the Means of Implementation of the 2030 Agenda for Sustainable Development’, UN, 18–19 November 2017.

7 The two funds are the Fondo de Ahorro de Panamá, which is financed with revenues from the Panama Canal, and the Peru Fiscal Stabilisation Fund, which is financed from unspent ordinary government revenue (of which a substantial portion is income taxes paid by natural resource companies), 10% of privatisation proceeds and concessional fees.

FIGURE 1 FINANCE SOURCES OF NATIONAL FUNDS WITH A STABILISATION MANDATE

* This reflects only funds where fiscal stabilisation forms an explicit part of the fund's mandate. Depending on the institutional and governance structures, some general SWFs may also be used for fiscal support purposes on an ad hoc basis.

Source: Own calculations based on information from Sovereign Wealth Fund Institute, <https://www.swfinstitute.org/>, accessed 23 July 2018, and reflects only SWFs that are managed at a national government level

This is unsurprising, since countries with significant natural resource endowments (and that derive substantial government revenues from these endowments) are more likely to experience direct revenue shocks from commodity price swings. Commodity revenues are also likely to generate substantial fiscal surpluses during boom periods, allowing countries to save revenue for downswing periods.

There is no clarity on the standard size of a stabilisation fund, especially given that funds initially conceived with narrow stabilisation objectives in mind have often morphed into broader savings or heritage funds. There is a debate as to whether a narrowly focused fiscal stabilisation fund should be kept small (given the opportunity cost of holding large liquid reserves) or whether its size should be linked to the country's international reserve position (especially where the fund is financed by export-oriented resource revenues).⁸

STABILISATION FUND INSTITUTIONAL ARRANGEMENTS, ADMINISTRATION AND GOVERNANCE

Given the fact that many of the stabilisation funds have arisen from the need to insulate domestic budgets from domestic resource revenue volatility, it is not surprising that there is no evidence of regional, multi-country stabilisation funds. The closest comparison may be the EU's intention to establish a 'stabilisation

8 Bagattini G, *op. cit.*

function'. However, this institution is intended to more closely resemble a loan-based contingency reserve than a traditional stabilisation fund (see Box 1).

BOX 1 THE EU INVESTMENT STABILISATION FUNCTION

The European Commission released a communication in January 2018 exploring the idea of establishing a stabilisation function for the EU. In May 2018 this proposal was adopted by the European Commission. The European Investment Stabilisation Function is envisaged as a mechanism to support 'well-identified priorities and already planned projects' at national level in the event of a large asymmetric shock. Key characteristics of the stabilisation function would include the following.

- The EU budget would guarantee back-to-back loans of up to EUR^a 30 billion (\$35 billion) to member states, geared towards growth-friendly public investments in the event of a large asymmetric shock.
- A Stabilisation Support Fund would be created to collect contributions from member states. These funds would be used to provide an interest rate subsidy to cover the cost of any loan provided to a member state. This fund may also be used for additional stabilisation support measures in future.
- Only EU member states that complied with the EU surveillance framework prior to the asymmetric shock would be eligible for access to the funding support. The criteria for eligibility to the stabilisation function (and the support fund) would be strict and pre-defined.

As can be seen from these characteristics, while termed a 'stabilisation' function the European Investment Stabilisation Function is intended to operate very differently from traditional stabilisation funds. This function is more akin to a contingency reserve rather than being a fund with the primary aim of smoothing revenues or stabilising government expenditure. In addition, the Stabilisation Support Fund that is expected to be established alongside this function is primarily intended to subsidise loan costs, rather than provide grant funding to member states.

a Currency code for the EU euro

Sources: European Stability Mechanism, <https://www.esm.europa.eu/>, accessed 25 April 2018; European Commission, 'Completing Europe's Economic and Monetary Union: The Commission's Contribution to the Leaders' Agenda, A Stabilisation Function', 2018, <https://publications.europa.eu/en/publication-detail/-/publication/dc83aed7-00b8-11e8-b8f5-01aa75ed71a1/language-en>, accessed 31 May 2018; European Commission, 'The Reform Support Programme and the European Investment Stabilisation Function explained', Press Release, 31 May 2018, http://europa.eu/rapid/press-release_MEMO-18-3971_en.htm, accessed 31 May 2018 Sources: European Stability Mechanism, <https://www.esm.europa.eu/>, accessed 25 April 2018; European Commission, 'Completing Europe's Economic and Monetary Union: The Commission's Contribution to the Leaders' Agenda, A Stabilisation Function', 2018, <https://publications.europa.eu/en/publication-detail/-/publication/dc83aed7-00b8-11e8-b8f5-01aa75ed71a1/language-en>, accessed 31 May 2018; European Commission, 'The Reform Support Programme and the European Investment Stabilisation Function explained', Press Release, 31 May 2018, http://europa.eu/rapid/press-release_MEMO-18-3971_en.htm, accessed 31 May 2018

A regional stabilisation fund would have the effect of externalising some aspects of national fiscal management to a regional body. Where a multi-country stabilisation fund is established it is likely to require that country depositors adhere to an ‘external’ set of rules regarding when they must make deposits into the fund, and when the fund can be accessed to support a country’s fiscal policy. The political and policy need for fiscal independence makes such an arrangement unappealing for country governments that wish to maintain a sovereign hold on fiscal matters.

A regional stabilisation fund would have the effect of externalising some aspects of national fiscal management to a regional body

In terms of administration, stabilisation funds may have multiple layers of accountability. Reviews of stabilisation funds across the globe have found varying levels of accountability and different types of institutional and administrative structures.⁹ Figure 2 provides institutional options for a resource fund that are also applicable to a stabilisation fund.

From a governance perspective, while established as principles for SWFs, the Santiago Principles (also termed the SWF Generally Accepted Principles and Practices) are equally applicable to stabilisation funds. These principles provide good practice guidelines regarding legislation, transparency, the setting of objectives and governance arrangements for SWFs.¹⁰

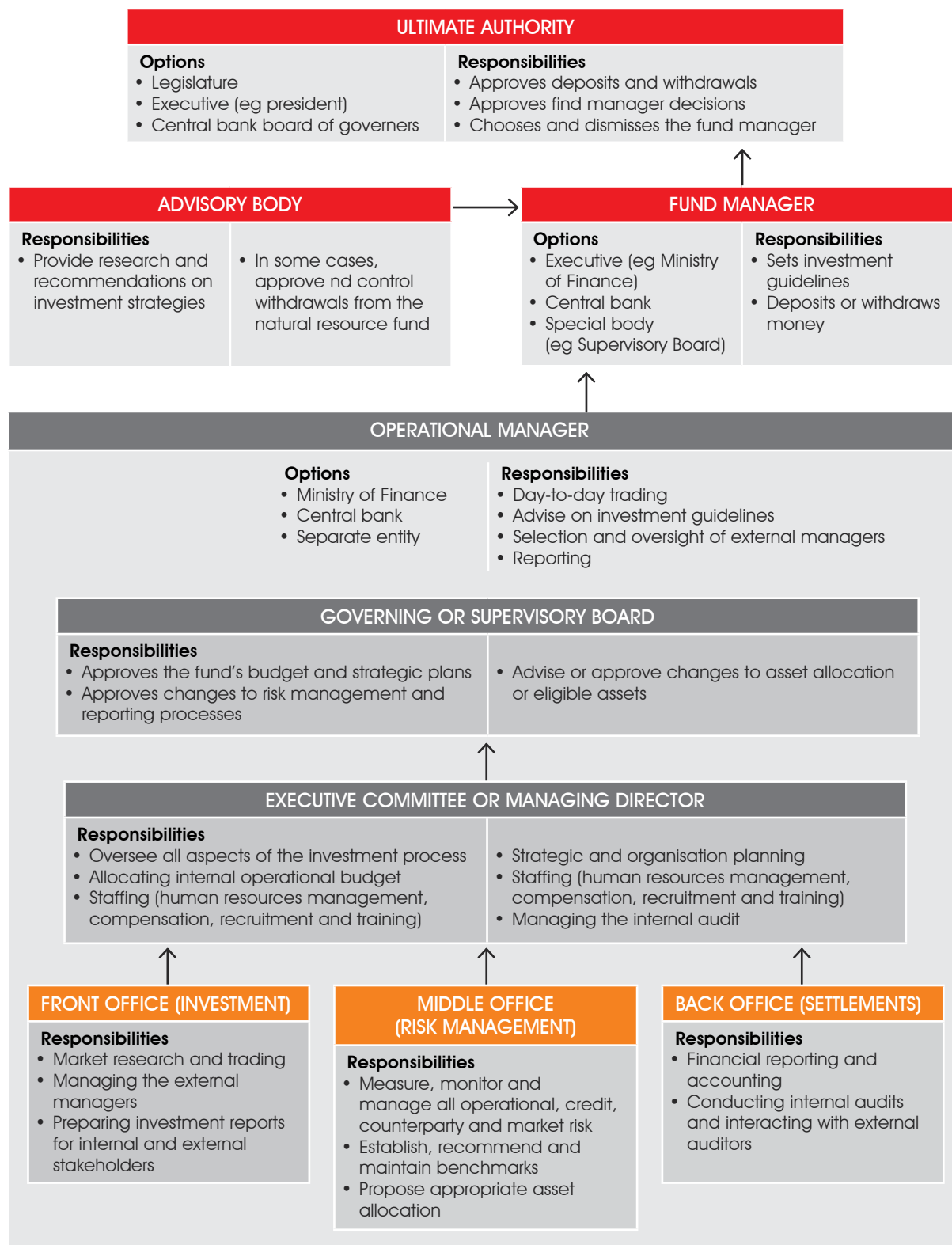
STABILISATION FUND FINANCING AND WITHDRAWAL

One of the fundamental considerations in a stabilisation fund’s design is the deposit and withdrawal rules that govern its financing and expenditure. The different types of rules used by funds that have historically had a stabilisation mandate are illustrated in Table 1. Given that stabilisation funds have primarily been established in countries with substantial natural resource endowments, for many existing funds, deposit and withdrawal rules are linked to benchmark prices for commodities or based on the level of government revenue extracted from commodity sales and exports.

9 See, for example, Bagattini G, *op. cit.*; Fasano U, ‘Review of the Experience with Oil Stabilization and Savings Funds in Selected Countries’, IMF Working Paper, WP/00/112. Washington, DC: IMF, 2000; Sugawara N, ‘From Volatility to Stability in Expenditure: Stabilization Funds in Resource-Rich Countries’, IMF Working Paper, WP/14/43. Washington, DC: IMF, 2014; Wagner G & E Elder, *op. cit.*

10 The Santiago Principles aim to promote good governance and accountability for SWFs, and were drafted by the International Working Group of SWFs and endorsed by the IMF’s International Monetary Finance Committee in 2008. The 24 principles and practices are voluntary in nature and cover legal frameworks, institutional frameworks and investment and risk management frameworks.

FIGURE 2 GOOD PRACTICE STRUCTURE OF RESOURCE FUNDS



Source: Bauer A & M Rietveld, 'Institutional Structure of Natural Resource Funds'. New York: Natural Resource Governance Institute, 2014

Deposit and withdrawal rules for some funds have also evolved as the fund's assets have grown or as the government's revenue dynamics have changed. Examples of such funds include those in operation in Norway and Chile (see Table 1). These funds increasingly see closer integration with the government budgeting process, and the level of deposits and withdrawals is primarily determined by a fiscal policy guideline or 'rule'.

TABLE 1 DEPOSIT AND WITHDRAWAL RULES FOR SELECT FUNDS WITH STABILISATION OBJECTIVES		
COUNTRY (FUND)	DEPOSIT RULES	WITHDRAWAL RULES
Chile (Economic and Social Stabilization Fund [ESSF])	<p>Chile makes use of a Structural Balance Rule. Advisory committees of the Ministry of Finance calculate trend gross domestic product (GDP) growth and forecast copper prices, which are then used to estimate fiscal revenues for budget planning.</p> <p>A minimum of 0.2% of the previous year's GDP must be deposited into the Pension Reserve Fund annually. If the effective fiscal surplus exceeds this amount, the deposit amount can rise to a maximum of 0.5% of the previous year's GDP.</p> <p>Any fiscal surplus that remains after deposits into the Pension Reserve Fund is deposited into the ESSF, subject to some deductions.</p>	<p>Chile's Structural Balance Rule allows for estimating fiscal revenues for budget planning and, therefore, whether withdrawals are needed.</p> <p>Funds can be withdrawn from the ESSF at any time in order to fill budget gaps in public expenditure and to pay down public debt. However, withdrawals are subject to the structural balance rule.</p>
Norway (Government Pension Fund)	<p>The inflows to the fund are defined in legislation and include the net cash flow to the government from the petroleum sector, in addition to the returns on the fund's investments.</p> <p>The net cash flow includes taxes and duties on petroleum companies, as well as net cash flows from the government's direct participation in the petroleum sector and dividends from Statoil.</p>	<p>The outflow from the fund is a transfer to cover the non-oil deficit of the central government budget, defined as the difference between total expenditures and non-oil revenues.</p> <p>According to the so-called 'spending rule', the non-oil budget deficit should be on average 3% of the fund over time, which corresponds to the estimated real return on the fund.</p>
Kuwait (Kuwait Investment Authority – General Revenue Fund [GRF] component)	<p>The GRF is the main treasurer for the government and receives all revenues (including all oil revenues) from which all state budgetary expenditures are paid.</p>	<p>As the main account for government receipts, the GRF transfers to pay government budgetary expenditures are sanctioned by law.</p>

COUNTRY (FUND)	DEPOSIT RULES	WITHDRAWAL RULES
Nigeria (Stabilisation Fund under the National Sovereign Investment Authority [NSIA])	Oil revenues in excess of the budget price and volume benchmarks are to be transferred to the NSIA.	The Stabilisation Fund component can be used for financing any shortfall in the budget arising from the oil price's falling below the budget benchmark price. An assessment for budget stabilisation needs is carried out quarterly, and funds are released at the end of each quarter, if stabilisation is required for that quarter.
Timor-Leste (Petroleum Fund)	Income from upstream (and downstream) petroleum activities enters the Petroleum Fund, mainly from: (1) tax revenues; (2) first tranche petroleum and oil profit; (3) investment returns; and (4) other types of revenues such as pipeline rental.	The Petroleum Fund's only expenditure is a transfer to the central government budget (based on the estimated sustainable income, calculated as 3% of total petroleum wealth), payment of operational management fees, and refunds of overpaid taxation.
Trinidad and Tobago (Heritage and Stabilization Fund)	Relevant legislation provides for 60% of excess energy (oil) revenues (actual minus budgeted revenues) to be credited to the fund.	The legislation allows for drawdowns if actual tax revenues in a given fiscal year are at least 10% below budgeted revenues. Withdrawals could be up to 60% of the shortfall, but not exceeding 25% of the fund. There is also a capital floor of \$1 billion for the fund.

Sources: Based on information from the IFSWF (International Forum for Sovereign Wealth Funds), <http://www.ifswf.org/>, accessed 23 July 2018; National Resource Governance Institute, <https://resourcegovernance.org/>, accessed 23 July 2018; NEITI (Nigeria Extractive Industries Transparency Initiative), 'The Case for a Robust Oil Savings Fund for Nigeria', Occasional Paper, 2. Abuja: NEITI, July 2017; Al-Hassan A *et al.*, 'Commodity-based Sovereign Wealth Funds: Managing Financial Flows in the Context of the Sovereign Balance Sheet', IMF Working Paper, WP/18/26. Washington, DC: IMF, 2018; Bagattini G, 'The Political Economy of Stabilisation Funds: Measuring their Success in Resource-Dependent Countries', IDS (Institute of Development Studies) Working Paper, 356. Brighton: IDS, 2011

STABILISATION FUND INVESTMENT ALLOCATION

The allocation of fund assets from an investment perspective is one of the key differences between a stabilisation fund and more general development (or even savings-only) funds. Where a fund has a stabilisation-only objective, its purpose is to act as a counter-cyclical balancing mechanism over the short to medium term and stabilisation fund assets are generally invested in highly liquid, low-risk assets. Such an investment strategy is substantively different to the investment strategy that might be employed for a development or long-term savings fund (summarised in Table 2).

TABLE 2 ASSET ALLOCATION CHARACTERISTICS OF STABILISATION AND SAVINGS FUNDS

	STABILISATION FUNDS	SAVINGS FUNDS
Investment horizon	Short term	Long term
Asset composition	Limited to highly liquid assets	Broader asset classes
Currency composition	Negatively correlated with commodity prices	Matching net import of the country
Performance benchmarks	Minimising expenditure volatility and maintaining adequate liquidity	Achieving real expected returns for long-term periods to maintain the long-term purchasing of wealth
Risk tolerance	Low risk-return profile	Active investment management with higher risk-return profile
Asset and liability management	Ensuring the sustainability of future fiscal expenditure	Maximising net value of the fund, taking into account the correlation between asset prices and liabilities

Source: Al-Hassan A *et al.*, 'Commodity-based Sovereign Wealth Funds: Managing Financial Flows in the Context of the Sovereign Balance Sheet', IMF Working Paper, WP/18/26. Washington, DC: IMF, 2018

However, as discussed previously, as the size of the fund grows, the fund objectives may broaden and the desired asset allocation may change over time to accommodate these multiple objectives.

EFFECTIVENESS OF AND NEED FOR STABILISATION FUNDS

Research on the effectiveness of stabilisation funds, in terms of both expenditure predictability and these funds' contribution to sustainable development, has broadly consistent findings. The effectiveness and impact of stabilisation funds is shown to be directly related to the level of institutional transparency and accountability within a country's budget and fund framework, and the extent to which deposit and withdrawal rules are applied and adhered to.¹¹

Related to this is the crucial fact that a stabilisation fund cannot substitute for good fiscal policy. There is little economic rationale for the establishment of a stabilisation fund over the use of other fiscal instruments. That is, from an economic perspective the objective(s) of a stabilisation fund can be achieved without needing to actually create a stabilisation fund. Rather, the creation of a stabilisation fund is

¹¹ See, for example, Bagattini G, *op. cit.*; Fasano U, *op. cit.*; Sugawara N, *op. cit.*; Wagner G & E Elder, *op. cit.*

The effectiveness and impact of stabilisation funds is shown to be directly related to the level of institutional transparency and accountability within a country's budget and fund framework, and the extent to which deposit and withdrawal rules are applied and adhered to

likely to be driven by governance and political factors, including the need to create relatively autonomous institutions that can be insulated (to some extent) from weak budgeting and fiscal policies.¹²

Various other 'special fiscal instruments' (of which a stabilisation fund is one) have been highlighted in the literature as potential tools in addressing budget and government expenditure predictability (and reducing volatility), including:¹³

- medium-term expenditure frameworks: the adoption of a medium-term budget outlook, with stronger linkages between annual budgets, policy goals and medium- to long-term fiscal objectives;
- fiscal rules: legally binding numerical targets for, or ceilings on, budget aggregates, such as an expenditure ceilings or expenditure growth targets, balance budget rules or public debt-to-GDP ratios (a recent IMF study advocates for the implementation of such rules to address budget unpredictability and volatility in Lesotho and eSwatini);¹⁴
- fiscal councils: executive or legislative bodies that are responsible for an independent assessment of fiscal policies, plans and performance, and that aim to foster greater transparency and accountability in fiscal policy; and
- revenue earmarking: legislatively assigning revenue from specific taxes or revenue to specific expenditure areas or activities.

ASSESSING THE RATIONALE FOR A SACU STABILISATION FUND

REVENUE DYNAMICS IN SACU

The scale of total revenue volatility for SACU member states

The use of a stabilisation fund has, in practice, been premised on the smoothing of volatile revenue resources to ensure greater predictability in government

12 Bagattini G, *op. cit.*

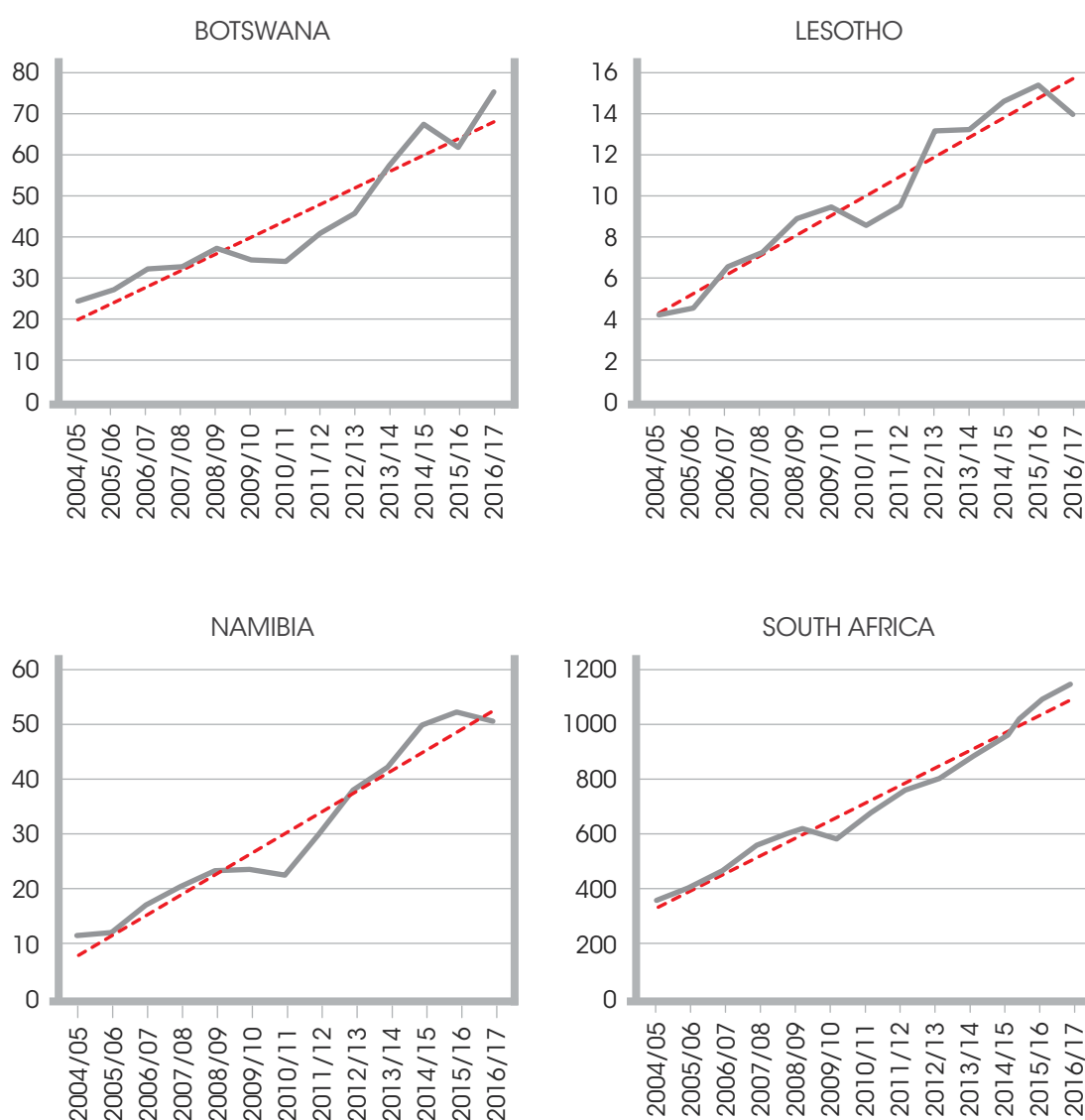
13 Ossowski R & H Halland, 'Fiscal Management in Resource Rich Countries: Essentials for Economists, Public Finance Professionals, and Policy Makers'. Washington, DC: World Bank Group, 2016.

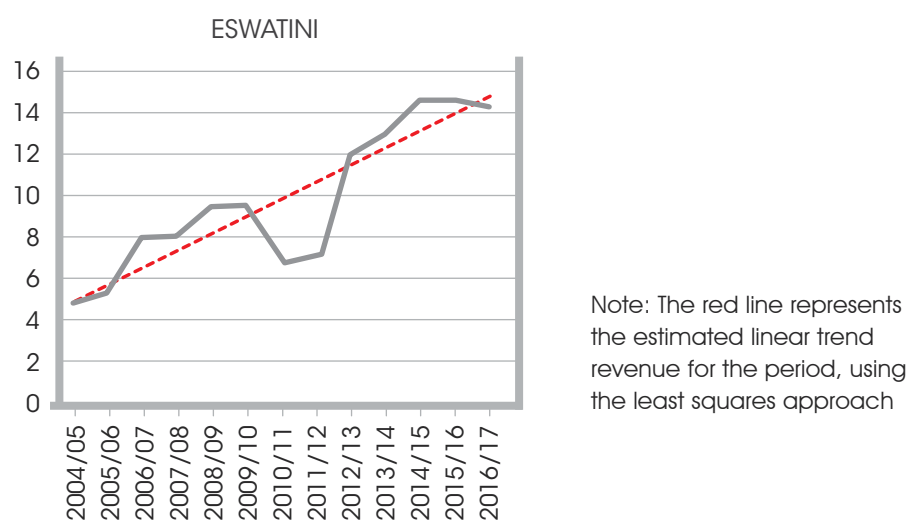
14 Honda J *et al.*, 'Fiscal Rules: Coping with Revenue Volatility in Lesotho and Swaziland'. Washington, DC: IMF, Africa Department, 2017.

expenditure. It is therefore important to assess the extent to which SACU member states have historically experienced government revenue volatility.

Figure 3 provides a summary of actual total revenue for SACU member states against the overall revenue trend (red broken line) for the period 2004/05–2016/17. From the figure it is clear that the extent of total revenue volatility is substantially different for each SACU member state. Of all SACU member states, eSwatini's total government revenues are the most volatile (least smooth), with significant deviations from the historical trend between 2004/05 and 2016/17.

FIGURE 3 ACTUAL TOTAL GOVERNMENT REVENUE VERSUS TREND REVENUE FOR SACU MEMBER STATES (ZAR BILLIONS)

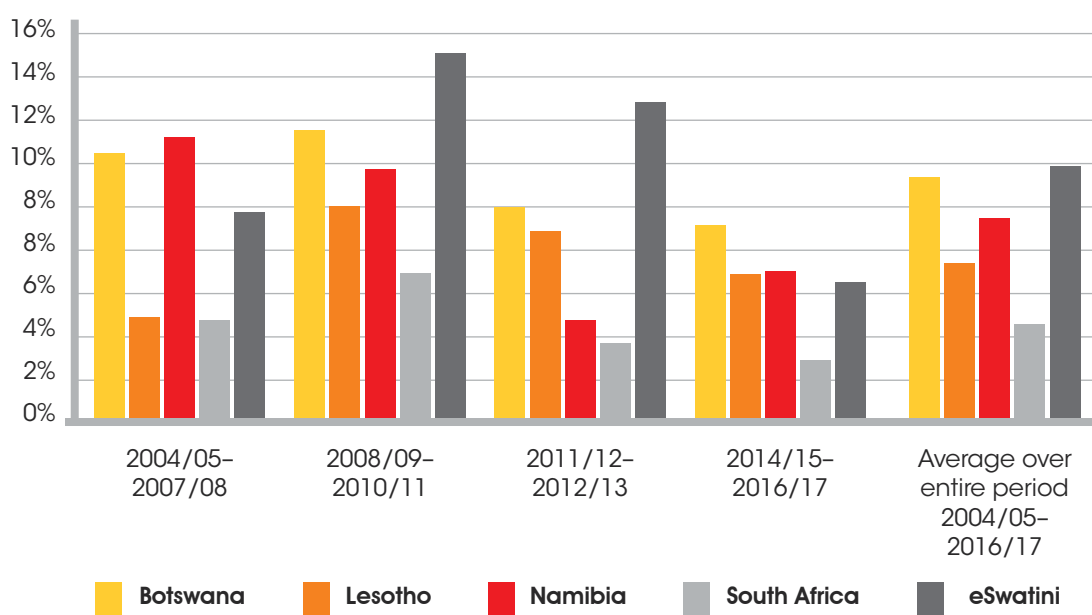




Source: Own calculations based on data from country ministries of finance and central banks

The overall scale of revenue volatility for each member state is summarised in Figure 4, which shows the absolute level of deviation from the country’s trend revenue over the 2004/05–2016/17 period. A higher percentage deviation reflects greater volatility, suggesting greater ‘swings’ away from a country’s trend revenue.

FIGURE 4 ABSOLUTE % DEVIATION FROM TREND REVENUE (AVERAGE)



Source: Own calculations based on data from country ministries of finance and central banks

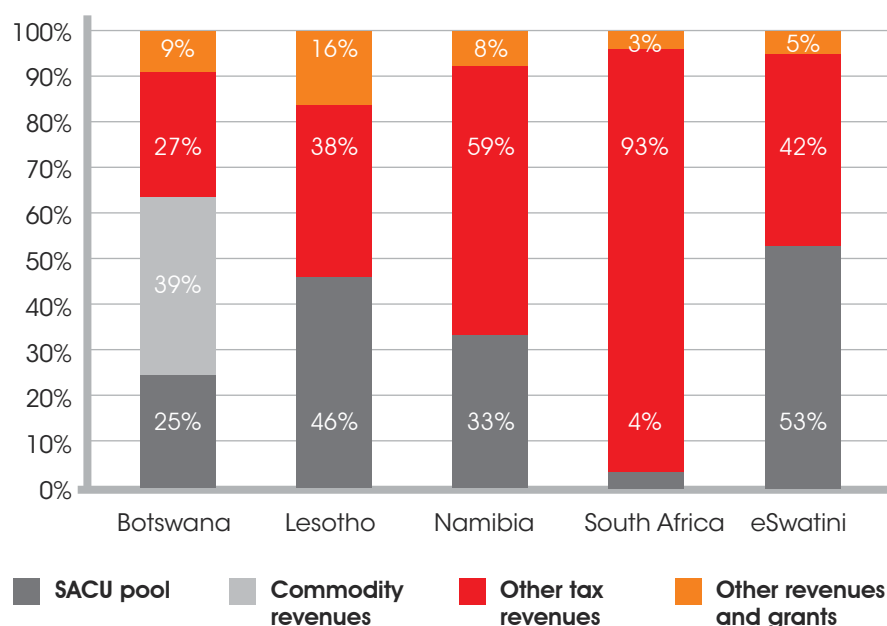
The analysis confirms that the overall level of revenue volatility is markedly different across SACU member states. Over the entire period (2004/05–2016/17), South Africa experienced far lower volatility than other SACU member states. South Africa’s overall volatility is less than half that experienced by eSwatini, which has the highest level of volatility of all SACU member states. Botswana’s level of volatility is also comparatively high, while that of Lesotho is substantially lower than that of Botswana, Namibia or eSwatini.

The main contributors to revenue volatility in SACU member states

The relative contribution of each revenue stream to total revenue volatility is a function of two factors: the overall share of that revenue stream in total government revenues and the extent of volatility that a specific revenue stream exhibits. Where a revenue stream is a large share of overall revenues and is relatively more volatile, this source of revenue will be a key driver of overall revenue volatility.

A summary of the main sources of government revenue is provided in Figure 5. Botswana is the only SACU member that has large and explicit government tax revenues and royalties from commodities (diamonds), with this source contributing on average 39% of total revenues between 2004/05 and 2016/17. The SACU revenue pool contributed an average of 25% of Botswana’s total revenues over this period.

FIGURE 5 MAIN SOURCES OF REVENUE FOR SACU MEMBER STATES, AVERAGE 2004/05–2016/17

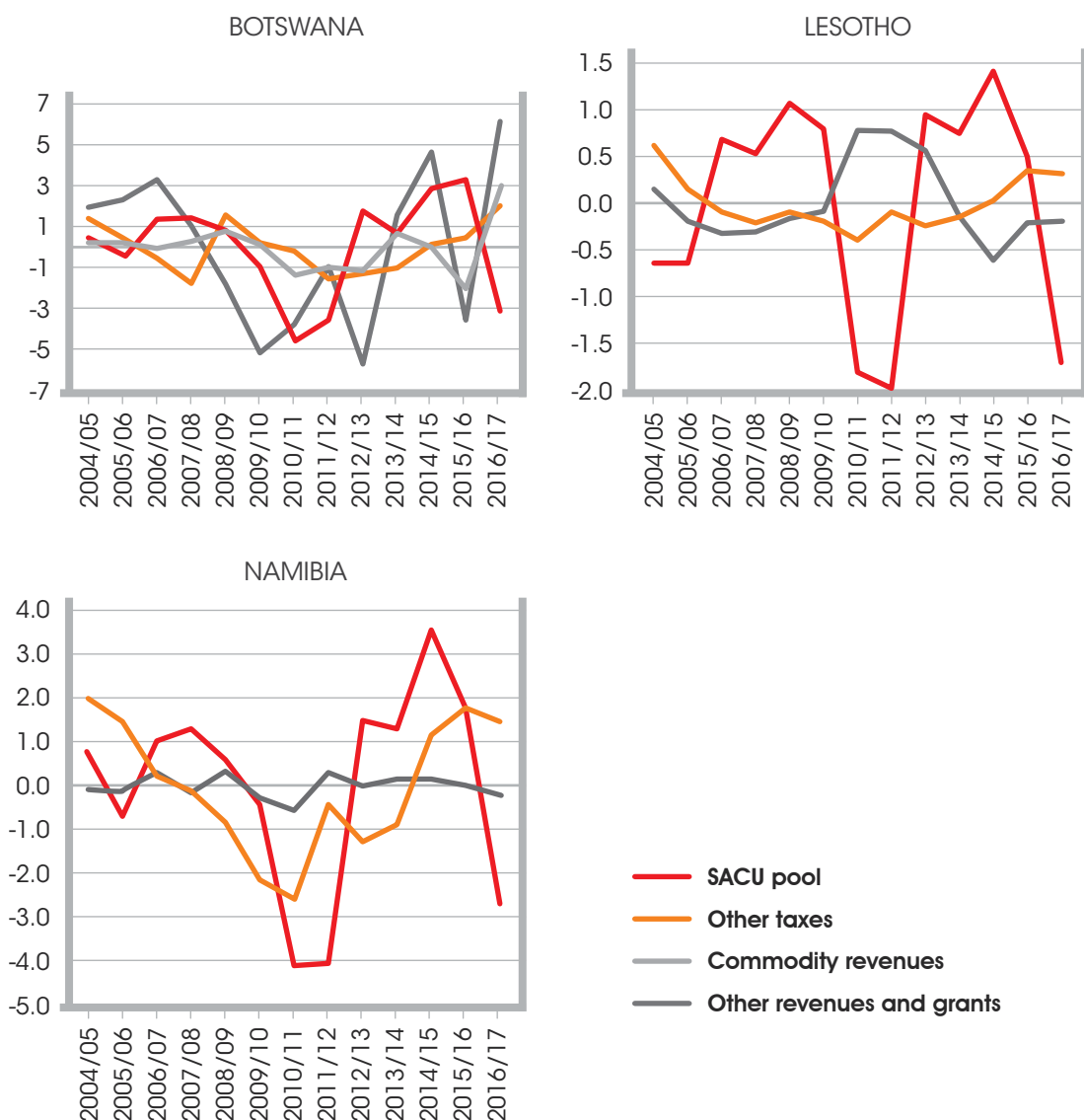


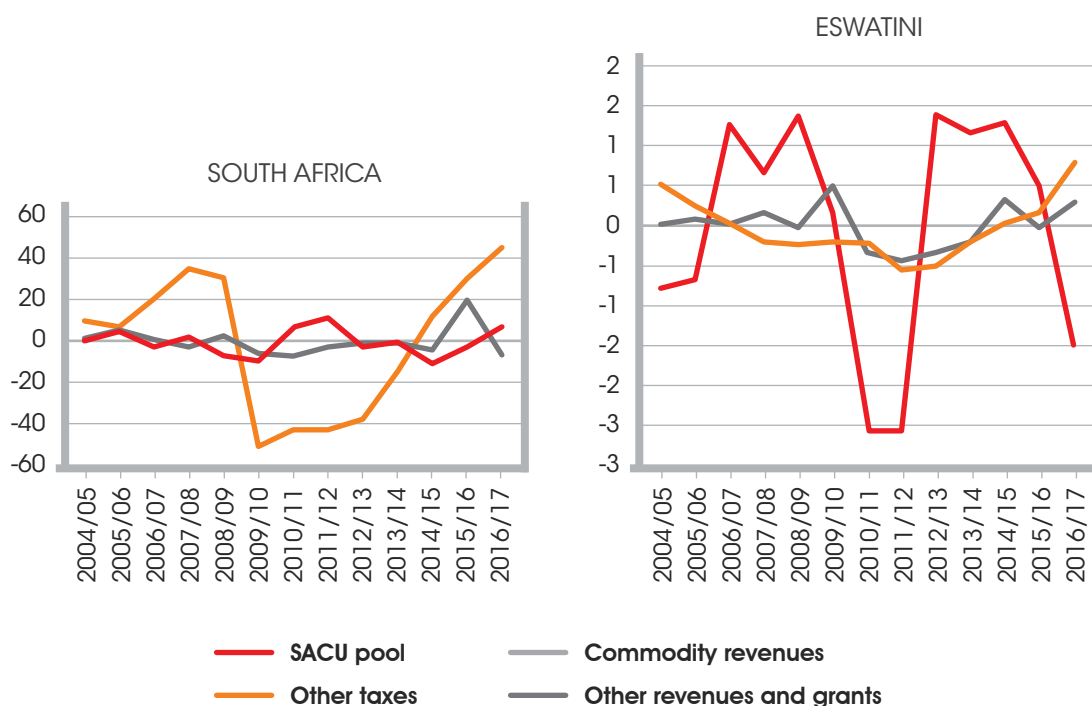
Source: Own calculations based on data from country ministries of finance and central banks

For Lesotho and eSwatini, the largest individual source of government revenue is the SACU revenue pool, which contributed close to 50% of their government revenues. For Namibia, other tax revenues (primarily income taxes and taxes on goods and property) contributed close to 60% of revenues between 2004/05 and 2016/17, while the SACU revenue pool contributed one-third of total government revenues. South Africa is by far the least reliant on the SACU revenue pool, with the bulk of its revenues derived from income, property and goods taxes.

Figure 6 provides a summary of the relative volatility of each of these revenue streams. This is based on an estimated deviation from the historical trend of each revenue stream. The greater the (absolute) deviation over time, the greater the implied volatility of the revenue stream.

FIGURE 6 VOLATILITY (BASED ON DEVIATION FROM TREND) OF MAIN SOURCES OF REVENUE (ZAR BILLIONS)





Note: For Lesotho, Namibia, South Africa and eSwatini no commodity revenue is shown, given that these countries do not explicitly separate commodity revenues from other government revenues and taxes. The analysis provides estimates of deviation from the revenue trend, calculated using the least squares approach.

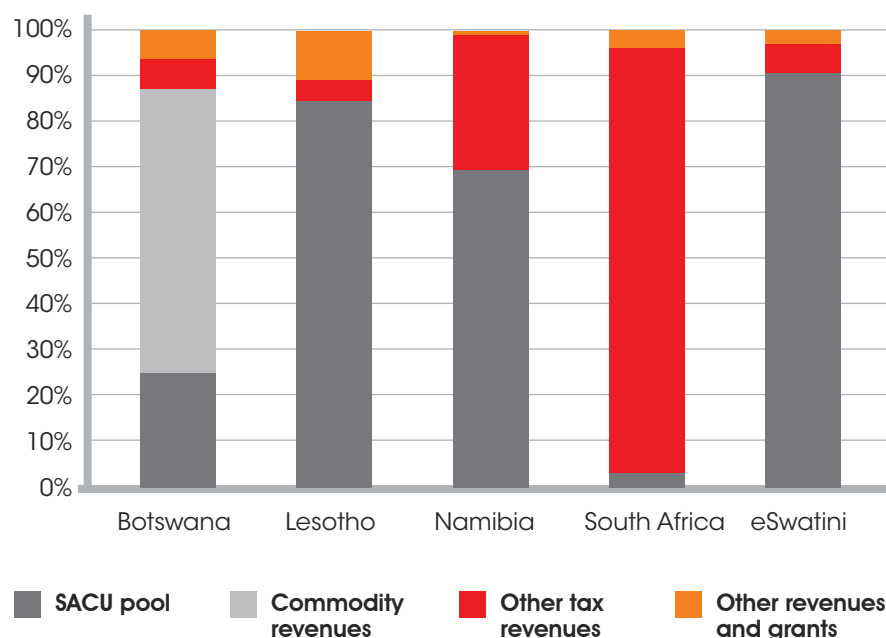
Source: Own calculations based on data from country ministries of finance and central banks

For Botswana, commodity revenues and revenues from the SACU pool appear to be especially high, with these two revenue streams having much higher deviations from the historical trend over the 2004/05–2016/17 period. For Lesotho and eSwatini, the SACU pool revenues have much greater levels of volatility than other revenue sources, while, for Namibia, SACU pool revenues, and other taxes to a lesser extent, appear to be especially volatile. For South Africa, other tax revenue is clearly the main source of revenue volatility.

Figure 7 shows the estimated contribution of each revenue stream to total revenue volatility (using variance as the metric). For Lesotho and eSwatini, the volatility in SACU pool revenues is the main contributor to overall revenue volatility. For Namibia, while the SACU pool is also the main contributor to overall revenue, other taxes are also drivers of volatility in overall revenues. In South Africa’s case, other taxes are the main drivers of revenue volatility.

For Botswana, the main source of revenue volatility is in fact commodity revenues, although SACU pool revenues are also a significant contributor to overall revenue volatility.

FIGURE 7 CONTRIBUTION TO TOTAL REVENUE VARIANCE (2004/05–2016/17)



Note: For illustrative purposes, the covariance between revenue streams (ie, the level of co-movement between revenue sources that contributes to overall revenue volatility) is not shown in the graph. Including the covariance between variables does not substantively change the analysis

Source: Own calculations based on data from country ministries of finance and central banks

Causes of volatility in the SACU pool

From the prior analysis it is clear that the SACU revenue pool has been a major cause of volatility for Lesotho, Namibia and eSwatini since 2004. Revenues from the SACU pool comprise customs and excise revenue collected by all SACU member

It is clear that the SACU revenue pool has been a major cause of volatility for Lesotho, Namibia and eSwatini since 2004

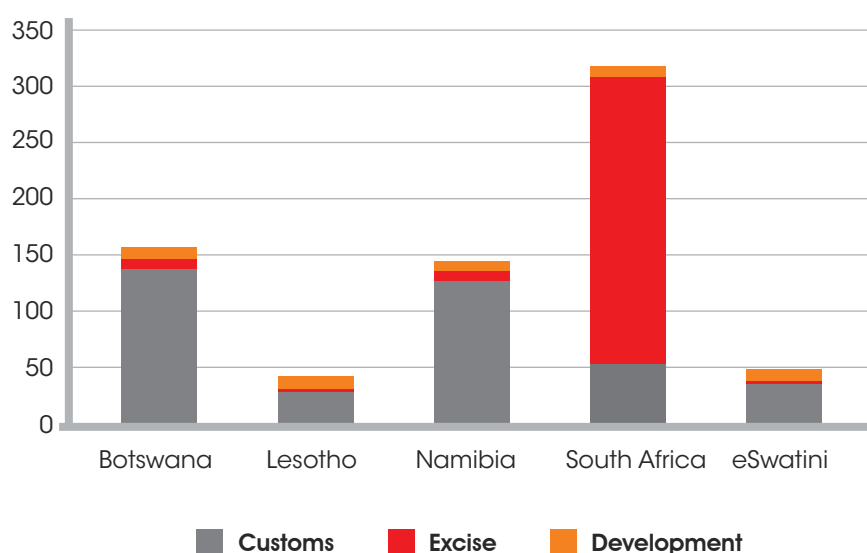
states, which is pooled prior to distribution based on a formula agreed to under the 2002 SACU Agreement. Distribution of customs and excise revenue collections is done through three components:

- an excise component, which uses the share of member state GDP in SACU’s total GDP as a proxy to distribute 85% of excise collections between member states;

- a customs component, which uses the share of intra-SACU imports to determine the distribution between member states of all customs collections; and
- a development component, which distributes 15% of excise revenue collections between member states, based on their development needs and using a measure of GDP per capita as a proxy for this.

A summary of the total estimated distribution of the various components between member states over the 2005/06–2016/17 period is provided in Figure 8.

FIGURE 8 ESTIMATED DISTRIBUTION OF SACU REVENUE POOL BY COMPONENT, TOTAL FOR 2005/06–2016/17 (ZAR BILLIONS)



Note: The data reflects an estimate of SACU pool distributions based on the formula for distribution of pooled customs and excise revenues

Source: Own calculations based on data from National Treasury, 'Budget Reviews', 2005/06–2017/18, <http://www.treasury.gov.za/documents/national%20budget/default.aspx>, accessed 23 July 2018; IMF, 'World economic outlook, April 2018', <https://www.imf.org/external/pubs/ft/weo/2018/01/weodata/weoselgr.aspx>; accessed 23 July 2018; ITC (International Trade Centre), Trade Map, <https://www.trademap.org/>, accessed 23 July 2018

While South Africa has clearly received the largest share of the excise component of SACU pool revenues (given that it has the largest share of GDP in SACU), for Botswana, Lesotho, Namibia and eSwatini (BLNS) the customs component forms the largest share of revenues distributed from the SACU pool. On average, the custom component has made up more than 80% of total SACU pool revenues for the BLNS.

The causes of revenue volatility from the SACU pool revenues are twofold. First, the customs component is inherently more volatile than the excise or development

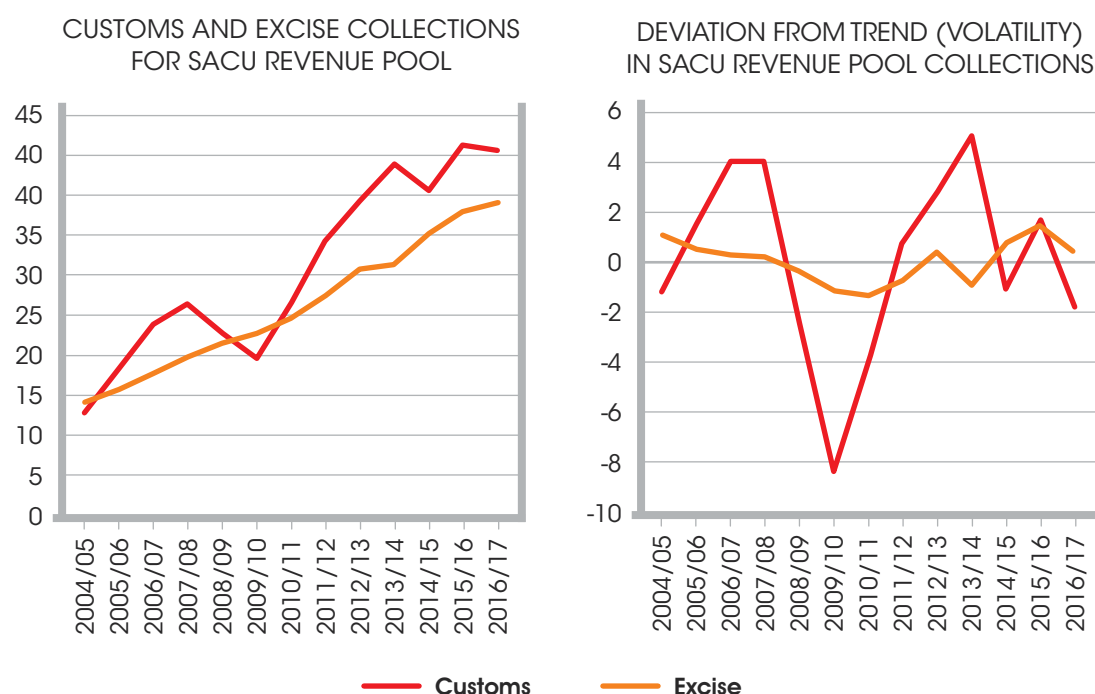
components. Second, the BLNS countries receive a much larger share of customs revenue than they collect, and this amplifies their customs revenue volatility.

The process used to distribute SACU pool revenues also creates uncertainty, as a number of adjustments are made that weaken the link between annual collections and annual payments. These issues are discussed further below.

Inherent volatility in the customs component of the pool: Figure 9 provides a summary of the total collections that contributed to the SACU pool between 2004/05 and 2016/17. Customs collections exceeded excise collections over the period, with the exception of a dip in customs collections in 2009/10.

Customs collections have also been substantially more volatile, measured as the deviation from the historical trend. Customs collections have seen an average absolute deviation of roughly ZAR 3 billion (\$224 million) from the historical trend over this period. By contrast, excise collections have been far more stable, with deviations from the historical trend much smaller and less pronounced. The absolute deviation of excise revenues has averaged less than ZAR 750 million (\$56 million) between 2004/05 and 2016/17.

FIGURE 9 VOLATILITY IN SACU REVENUE POOL COLLECTIONS (ZAR BILLIONS)

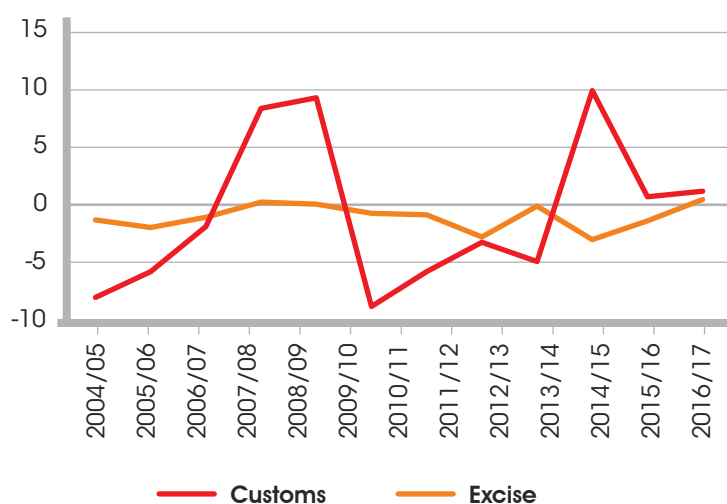


Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

Source: Own calculations based on data from National Treasury, 'Budget Reviews', 2005/06–2017/18, <http://www.treasury.gov.za/documents/national%20budget/default.aspx>, accessed 23 July 2018

The inherent volatility in the customs component of the SACU pool makes forecasting of customs collections especially difficult. As a result, forecast projections of SACU customs collections are far more inaccurate when compared to excise collections. This is highlighted in Figure 11. While the margin of error between projected and actual excise collections has not exceeded ZAR 3 billion (\$224 million) in any year between 2005/06 and 2016/17, the margin of error for customs collections is much greater. There were multiple years between 2005/06 and 2016/17 where the difference between forecast and actual customs collections was close to (or exceeded) ZAR 10 billion (\$746 million).

FIGURE 10 DIFFERENCE BETWEEN FORECAST AND ACTUAL COLLECTIONS FOR SACU CUSTOMS AND EXCISE REVENUES (ZAR BILLIONS)



Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

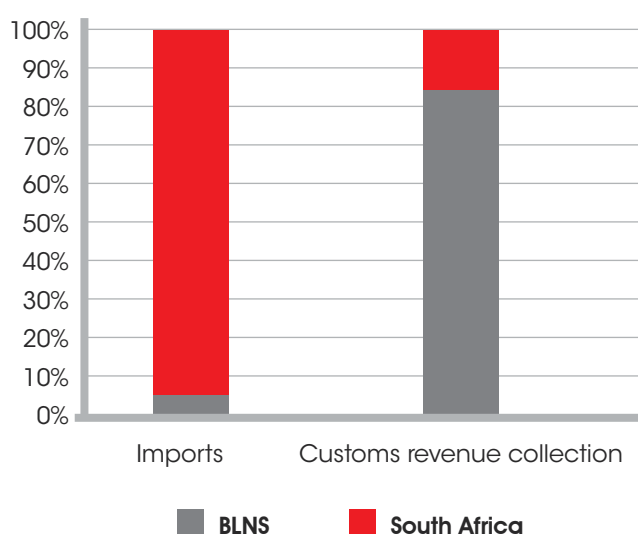
Source: Own calculations based on data from National Treasury

As shown previously, the SACU revenue pool (and specifically, the customs component of the pool) makes up a comparatively small share of South Africa's total revenues. An inaccurate estimate of customs collections therefore does not create significant budgetary or fiscal uncertainty for South Africa. By comparison, because the customs component is the biggest contributor to the BLNS share of the SACU pool, and because the SACU pool is a significant share of BLNS government revenues (especially for Lesotho and eSwatini), difficulties in projecting customs collections have far more severe consequences.

Volatility amplified for the BLNS by the revenue formula: The current formula used to distribute the customs component of revenue is structured in such a way that the BLNS countries receive substantially more customs revenue than they collect (and that is collected on their behalf at South African ports). Ultimately, the rationale for this is based on an implicit agreement that the BLNS should be compensated for conforming to South African trade and industrial policy.¹⁵

As a result, a large portion of the customs pool revenues distributed to the BLNS is based on the collection of taxes raised on goods that are imported by South Africa. This is highlighted in Figure 11, which shows member states' shares of extra-SACU imports (ie, those imports that attract import duties) and of the customs component from the SACU revenue pool.

FIGURE 11 COMPARISON OF MEMBER SHARES OF EXTRA-SACU IMPORTS AND SACU CUSTOMS REVENUES, AVERAGE 2011–2016



Note: Trade data for annual years is compared to customs data for fiscal years, eg, annual 2011 trade data is compared to customs revenues for the 2011/12 fiscal year

Sources: Own calculations based on data from National Treasury and ITC (International Trade Centre), Trade Map, <https://www.trade-map.org/>, accessed 23 July 2018

15 The appropriateness of the SACU revenue-sharing formula has been subject to numerous reviews and debates, while SACU itself has commissioned studies to address concerns around it. For public reviews, see, for example: Edwards L & R Lawrence, 'SACU Tariff Policies: Where Should They Go From Here?', CID (Center for International Development) Working Paper, 169. Cambridge, MA: CID, May 2008; Flatters F & M Stern, 'Implementing the SACU Revenue-Sharing Formula: Customs Revenues', National Treasury Policy Brief. Pretoria: National Treasury, 2005; Grynberg R & M Motswapong, 'SACU Revenue Sharing Formula: The History of An Equation'. Harare: Botswana Institute for Development Policy Analysis, 2003.

Despite only accounting for an average of 5% of extra-SACU imports between 2011 and 2016, the BLNS member states received, on average, 83% of customs revenues that were collected in SACU.

Regardless of the policy and political justifications for this dynamic, the resulting effect of the current revenue-sharing formula is that the customs component of pool revenues forms a substantially large share of BLNS government revenues. However, the size and volatility of these revenues are largely determined by consumption and import patterns in South Africa, which are substantially less reliant on customs duties as a source of revenue.

Any shocks to South Africa's trading (import) conditions have a magnified impact on BLNS government revenues

Because of this, any shocks to South Africa's trading (import) conditions have a magnified impact on BLNS government revenues. The unpredictability (and volatility) of SACU pool revenues for the BLNS can therefore only be addressed if SACU member states can agree on a revised revenue-sharing arrangement that does not directly link such a large proportion of each member's share of pooled revenues to customs collections.

Uncertainty created by the process used to distribute SACU pool revenues:

The process used to distribute SACU pool revenues weakens the link between actual revenue collections and payments made to SACU member states. This process is briefly described below.¹⁶

1. The calculation of actual disbursements to SACU member states is finalised in the December prior to the new fiscal year, based on budgetary estimates. These calculations use prior year trade and GDP data for calculation purposes. (To illustrate, in December 2014, the actual revenue disbursements were finalised for the 2015/16 year, based on audited 2012/13 trade data, 2012 GDP data and budget projections of customs and excise collections for 2015/16.)
2. The payments for that fiscal year are made each quarter and collections for the same fiscal year are pooled by the revenue pool manager, South Africa. (Payments to SACU members for 2015/16 are made quarterly, based on the amounts agreed in December 2014. South Africa pools actual excise and customs revenue collected by each SACU member state for 2015/16.)
3. The difference between the actual disbursements and the actual collections in that financial year is then added to or subtracted from payments agreed to two years after that financial year. (The difference between actual collections in 2015/16 and the actual payments made in 2015/16 [which were finalised in December 2014] is added to or subtracted from the disbursements calculated in December 2016, for the 2017/18 financial year. The distribution of the

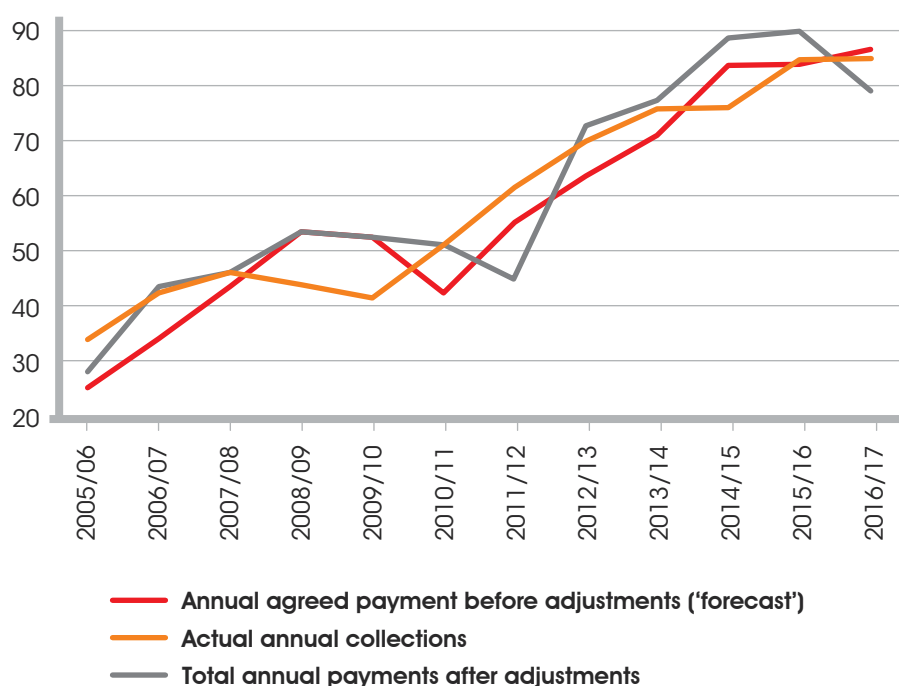
16 Based on discussions with the SACU Secretariat.

difference between actual 2015/16 collections and payments is made using 2012/13 trade data and 2012 GDP data. The distribution of the projected [and agreed] disbursements for 2017/18 is calculated using 2014/15 trade data and 2014 GDP data.)

In addition to this systematic process for calculating disbursements, a number of ad hoc adjustments have been made to payments from the SACU pool. These adjustments were made to account for errors in prior year calculations. As a result of both the systematic and ad hoc adjustments, there are annual differences between the actual payments based on collection estimates (the ‘forecasts’), actual collections and the total payments that include adjustments.

This has the effect of both creating uncertainty in SACU member states’ budgeting processes and weakening the link between actual annual revenue collections and actual payments from the SACU pool. This is reflected in Figure 12.

FIGURE 12 SACU POOL REVENUE FORECASTS, COLLECTIONS AND PAYMENTS (ZAR BILLIONS)



Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

Sources: Own calculations based on data from National Treasury, ‘Budget Reviews’, 2005/06–2017/18, <http://www.treasury.gov.za/documents/national%20budget/default.aspx>, accessed 23 July 2018; SARS (South African Revenue Service), ‘Tax statistics, 2008–2017’, <http://www.sars.gov.za/About/SATaxSystem/Pages/Tax-Statistics.aspx>, accessed 23 July 2018; SACU Secretariat, ‘Annual reports, 2004/05–2016/17’, <http://sacu.int/list.php?type=Annual%20Reports>, accessed 23 July 2018

From Figure 12 it is clear that over the 2005/06 to 2016/17 period there are only two fiscal years where actual payments have equalled forecasts. There are thus consistent and substantial differences between actual collections and actual payments over the entire period. For example, in 2011/12 total actual SACU pool revenue collection was 35% (ZAR 16 billion [\$1.19 billion]) higher than the actual total annual payments made, while actual payments were 18% (ZAR 9.9 billion [\$739 million]) lower than forecast for that year.

In some years, actual payments from the SACU revenue pool have exceeded the forecast and the actual pool revenues collected in that year. For example, in 2014/15 total actual payment from the SACU revenue pool was 6% (ZAR 5 billion [\$373 million]) higher than the forecast, and 17% (ZAR 12.5 billion [\$933 million]) higher than actual collections for that year. The current process for sharing SACU pool revenues clearly adds to the unpredictability and uncertainty of an already volatile source of revenues.

To address these issues and to bring more certainty to the budgeting and forecasting process for SACU member states, several possible solutions have been highlighted in the literature. These include:¹⁷

- adjusting the process for determining distribution by making the forecast the final determinant of distribution, rather than having an additional adjustment process;
- moving to an ‘instantaneous’ pay-as-you-collect system, which would reduce uncertainty over the medium term; and
- spreading the adjustment process over a wider number of years to alleviate the once-off shock impact.

It is important to reiterate that only a complete review of the revenue-sharing arrangement would address the core causes of revenue volatility in the SACU revenue pool, especially for the BLNS

A mechanism to smooth disbursements from the pool, over subsequent periods, could also be implemented, and could operate (in principle) in a manner similar to the adjustment processes used in many countries for fuel price smoothing.¹⁸ It is important to reiterate, however, that only a complete review of the revenue-sharing

17 Mongardini J *et al.*, ‘Building a Common Future in Southern Africa’. Washington, DC: IMF, 2013.

18 For an assessment of fuel pricing adjustment mechanisms see Coady D *et al.*, ‘Automatic Fuel Pricing Mechanisms with Price Smoothing: Design, Implementation, and Fiscal Implications’. Washington, DC: IMF, 2012. While investigating such an approach to the SACU revenue pool is beyond the scope of this study, this is not fundamentally different to the forecast-actual rule employed by some stabilisation funds.

arrangement would address the core causes of revenue volatility in the SACU revenue pool, especially for the BLNS.

ILLUSTRATING THE EFFECT OF DIFFERENT STABILISATION FUND RULES

The effect of a stabilisation fund for SACU member states is illustrated on a historical basis using two different rules. These rules are applied to revenues from the SACU revenue pool, given that this is the common regional revenue source for SACU member states, and since this is the main source of revenue volatility for Lesotho, Namibia and eSwatini.

A basic forecast-actual rule

A basic deposit and withdrawal rule for SACU member states could be applied to the SACU revenue pool based on the difference between actual and forecast collections. Under such a rule, each member state would deposit revenue into a stabilisation fund when actual revenues exceed forecast revenues and withdraw revenue from the fund when actual revenues are below forecast revenues. Such an approach is similar to the operation of many commodity-based stabilisation funds.

This type of rule would add certainty to the budget forecasting process, given that actual SACU pool revenues would be fixed and ‘known’ ahead of time. The level of contributions and withdrawals under such a rule is illustrated in Figure 13. Positive amounts reflect ‘contributions’ to the stabilisation fund in periods where actual revenues exceed forecast revenues. Conversely, a negative amount reflects ‘withdrawals’, where revenue forecasts are higher than actual revenues.

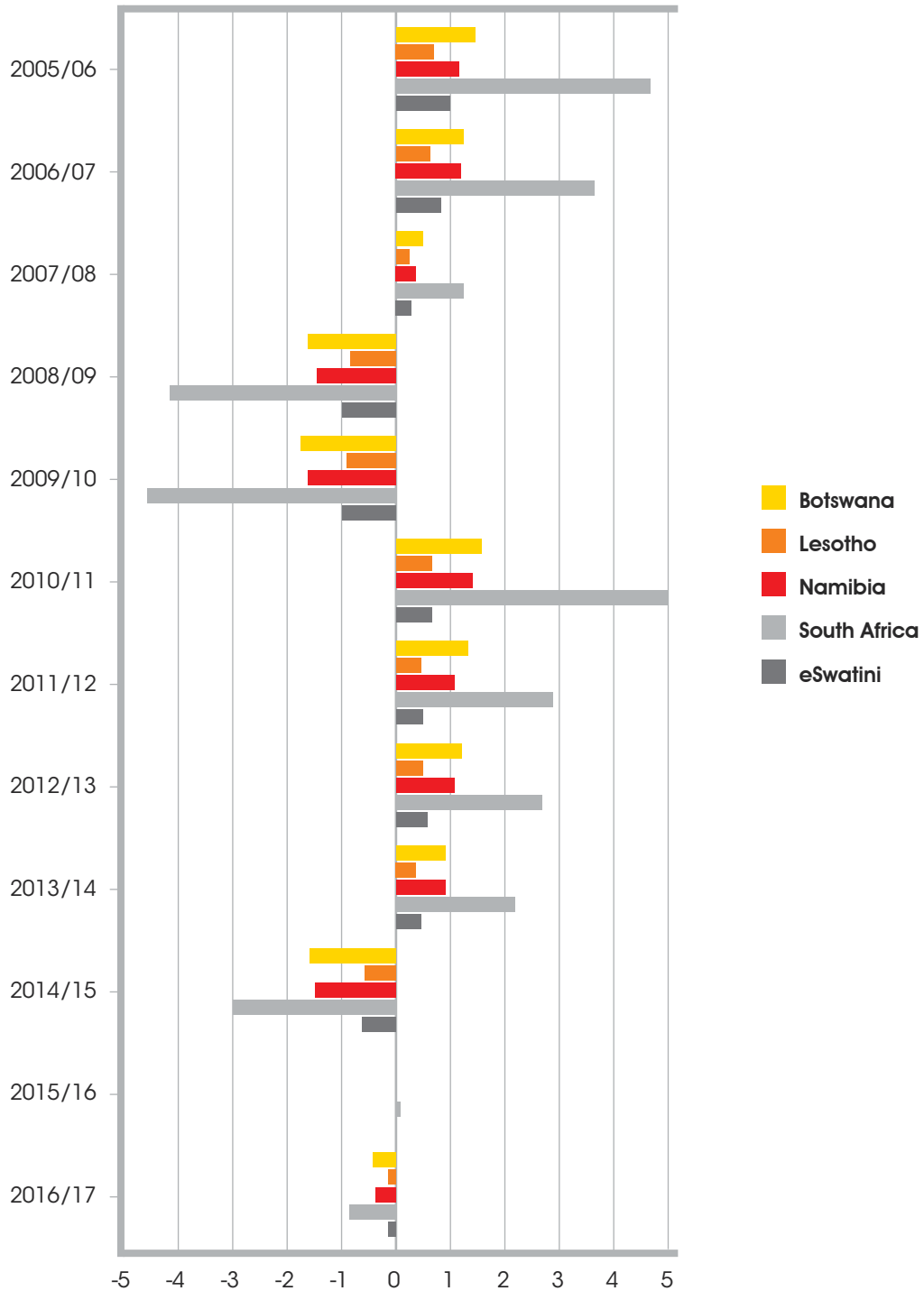
Table 3 summarises the illustrative fund balance with such a rule. Cumulatively, all SACU member states would have net positive contributions to the fund, ie, fund deposits would have exceeded withdrawals over the period 2005/06–2014/15.

TABLE 3 ILLUSTRATIVE STABILISATION FUND BALANCE WITH FORECAST-ACTUAL RULE	
ILLUSTRATIVE CUMULATIVE FUND BALANCES UP TO 2016/17	ZAR BILLION
Botswana	2,769
Lesotho	1,019
Namibia	2,193
South Africa	9,726
eSwatini	1,466
SACU (total)	17,173

Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

Source: Own calculations based on data from country ministries of finance and central banks

FIGURE 13 STABILISATION FUND CONTRIBUTIONS AND WITHDRAWALS BASED ON FORECAST-ACTUAL RULE (ZAR BILLIONS)



Source: World Bank, 'External debt stocks, total (DOD, current US\$)', March 2018, [https://data.world bank.org/indicator/DI.DOD.DECT.CD?view=chart](https://data.worldbank.org/indicator/DI.DOD.DECT.CD?view=chart), accessed 22 June 2018

However, while such a fund would add certainty (predictability) to the budgeting process, it would not necessarily change the overall volatility in SACU member states' total government revenue. This is illustrated in Figure 14 to Figure 18.

FIGURE 14 BOTSWANA REVENUES & BUDGET BALANCE WITH FORECAST-ACTUAL RULE (ZAR BILLIONS)

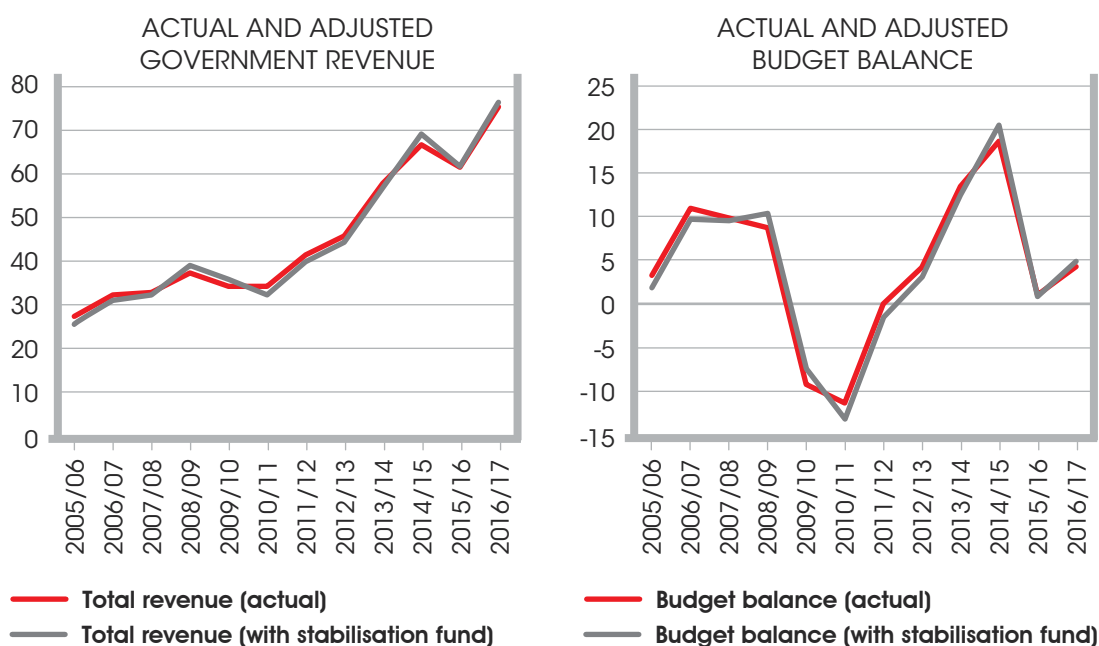
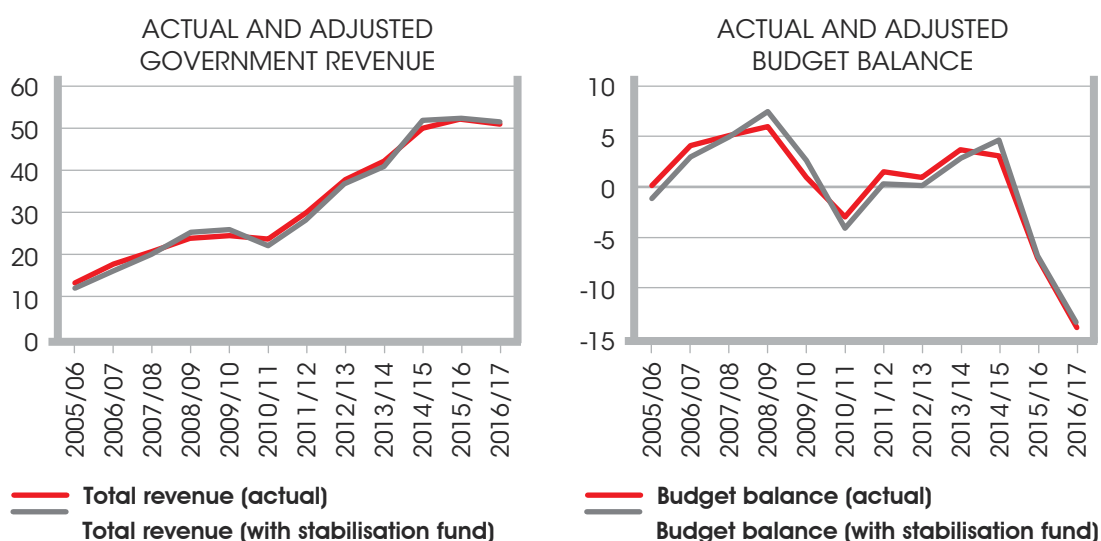


FIGURE 15 NAMIBIA REVENUES & BUDGET BALANCE WITH FORECAST-ACTUAL RULE (ZAR BILLIONS)



Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

Source: Own calculations based on data from country ministries of finance and central banks

FIGURE 16 LESOTHO REVENUES & BUDGET BALANCE WITH FORECAST-ACTUAL RULE (ZAR BILLIONS)

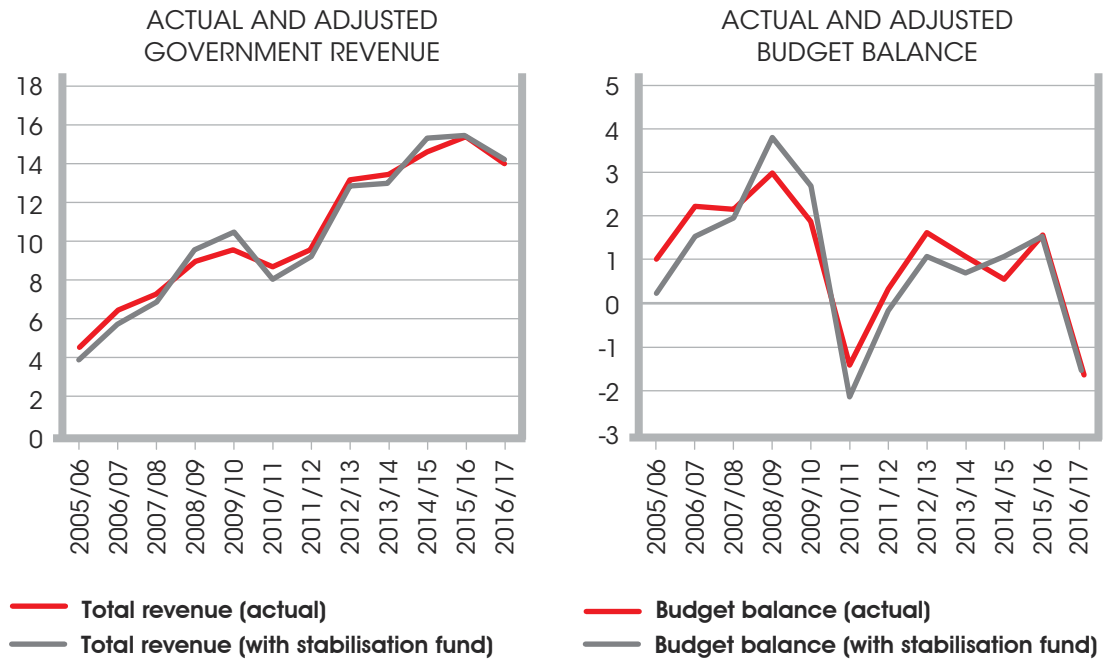
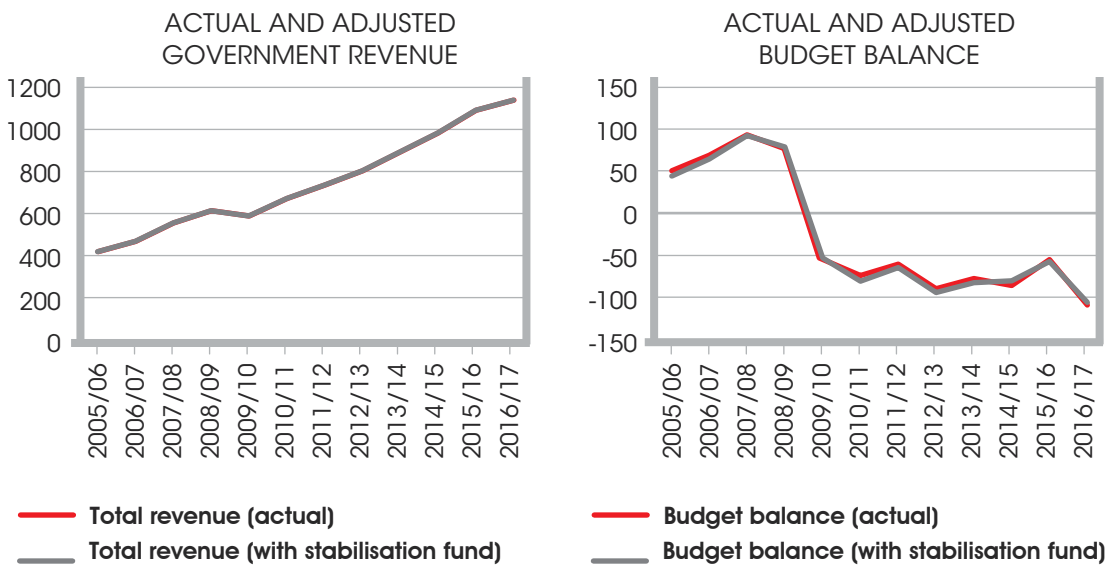


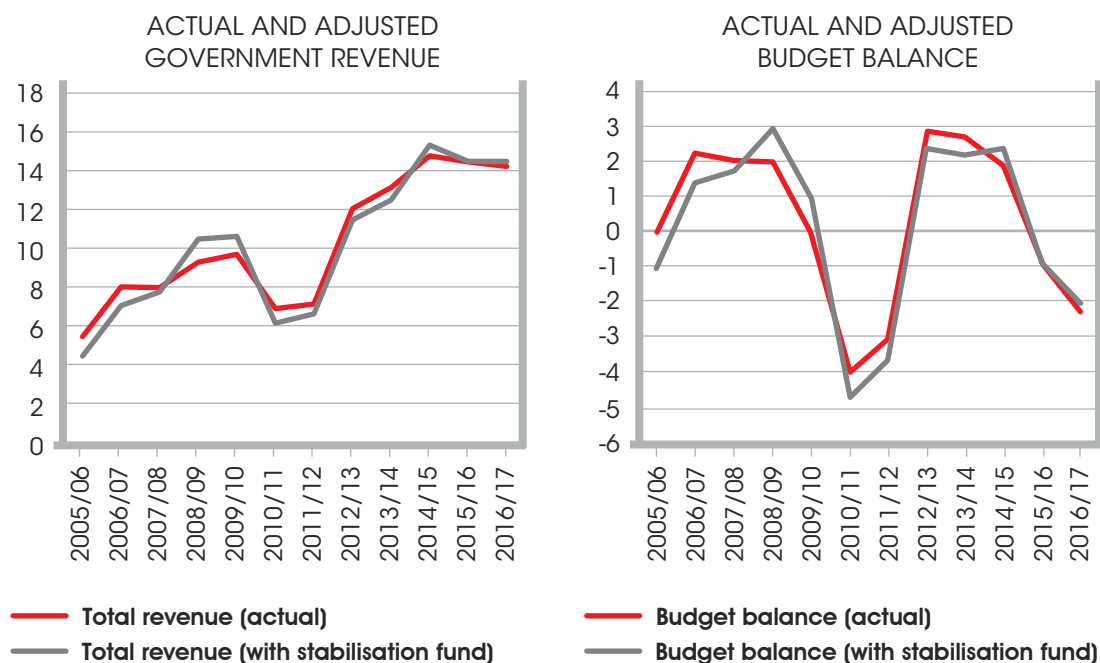
FIGURE 17 SOUTH AFRICA REVENUES & BUDGET BALANCE WITH FORECAST-ACTUAL RULE (ZAR BILLIONS)



Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

Source: Own calculations based on data from country ministries of finance and central banks

FIGURE 18 ESWATINI REVENUES & BUDGET BALANCE WITH FORECAST-ACTUAL RULE (ZAR BILLIONS)



Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

Source: Own calculations based on data from country ministries of finance and central banks

For all countries the volatility of revenue (and therefore the budget balance) does not change significantly and may actually increase in some cases. This is because such a rule does not address the issues of volatility that are inherent in the SACU pool revenues, especially in the customs component of the SACU pool. Such a rule merely provides budgeting certainty by ensuring that the actual revenues equal the estimates of a volatile revenue source.

A stabilisation fund with a budget deficit fiscal rule

Increasingly, countries with stabilisation funds combine the implementation of such funds with a fiscal rule to improve revenue smoothing and ensure budget predictability. Under such a rule, a portion of revenues from a specific source is deposited into the fund. These revenues are then withdrawn when the fiscal rule is triggered.

This is how such a rule might operate in SACU.

- SACU member states deposit up to 30% of annual SACU pool revenues (based on actual payments to SACU member states) into a stabilisation fund, if the budget balance is in a surplus.

- SACU member states apply a fiscal rule to ensure that budget deficits do not fall below 3% of GDP.
- Member states make withdrawals from the stabilisation fund to ensure there is sufficient revenue to adhere to the fiscal rule.
- Where there are insufficient resources available in the stabilisation fund, member states would need to reduce expenditure in order to adhere to the fiscal rule.
- Importantly, it is assumed that member states can only withdraw their own deposits, ie, a member state may not withdraw funds that have been deposited by another member state.
- No assumptions of real investment growth of fund assets are made.

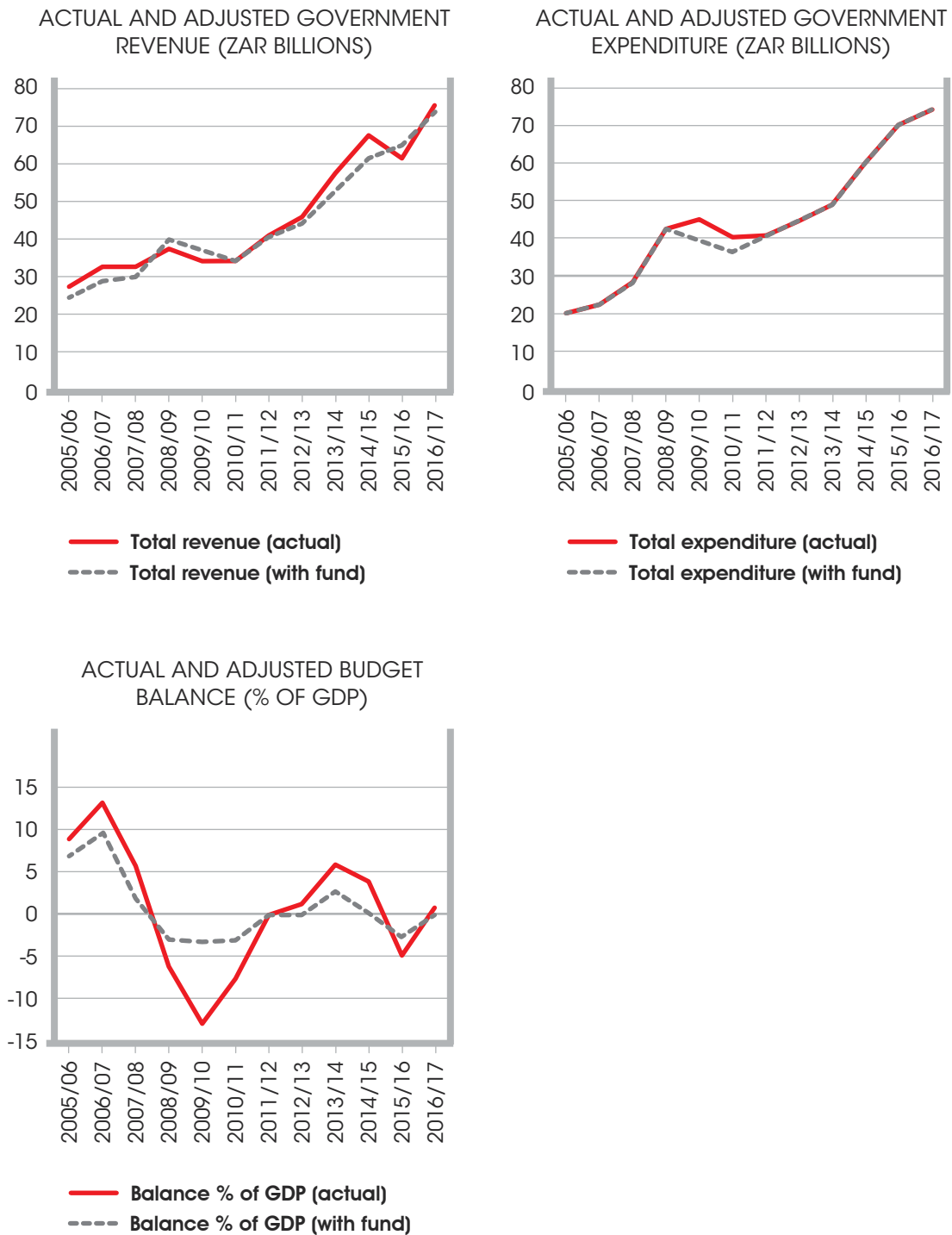
Figure 19 to Figure 23 provide a summary of the application of the above rules, comparing actual revenues, expenditure and budget balances to the estimates of these indicators with the application of a fund. For all SACU member states, revenues are smoothed (although to varying degrees) by the application of the deposit rule.

Importantly, because of the fiscal rule in place, all SACU member states, with the exception of Lesotho, will be required to reduce government expenditure in order to adhere to the fiscal rule. This implies that over the course of the review period, funds deposited into the stabilisation fund are depleted and members are then required to reduce government expenditure in that fiscal year.

In terms of required expenditure reductions, the greatest impact is on South Africa. This is because the SACU pool contributes a far smaller portion of revenues to South Africa's total revenues than other SACU member states, and because over the review period South Africa experienced far fewer years of fiscal surpluses, and relatively more years where fiscal deficits were greater than 3% of GDP.

From a fiscal balance perspective, because of the combination of the deposit rule for the stabilisation fund and the fiscal rule, the budget balance (as a percentage of GDP) is smoothed for all SACU member states. Over the review period, the fiscal rule ensures that budget balances never fall below the deficit floor of 3% of GDP, while the deposit rule reduces the budget surpluses that SACU member states experience.

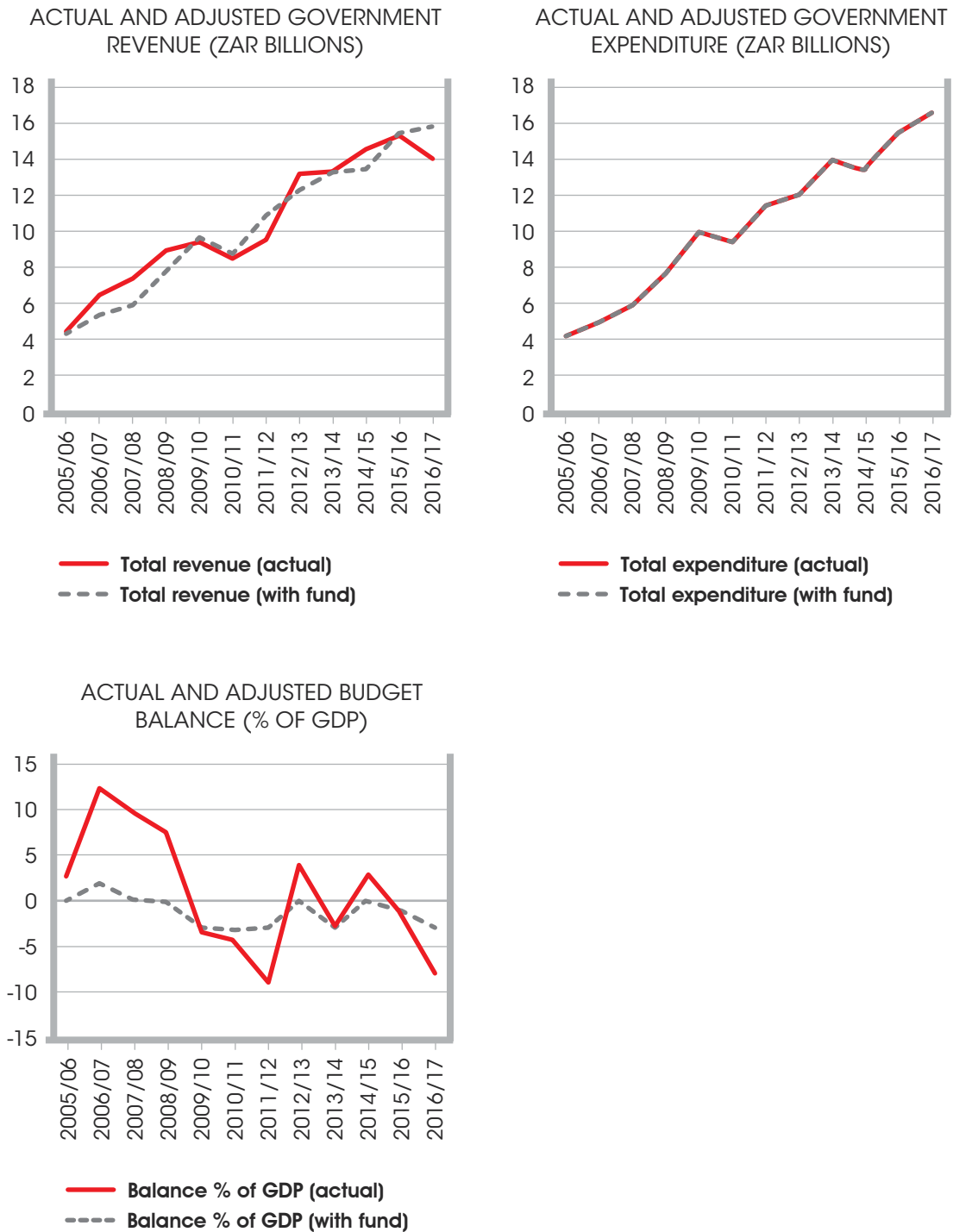
FIGURE 19 BOTSWANA REVENUES AND BUDGET BALANCE WITH DEPOSIT AND FISCAL BALANCE RULE



Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

Source: Own calculations based on data from country ministries of finance and central banks

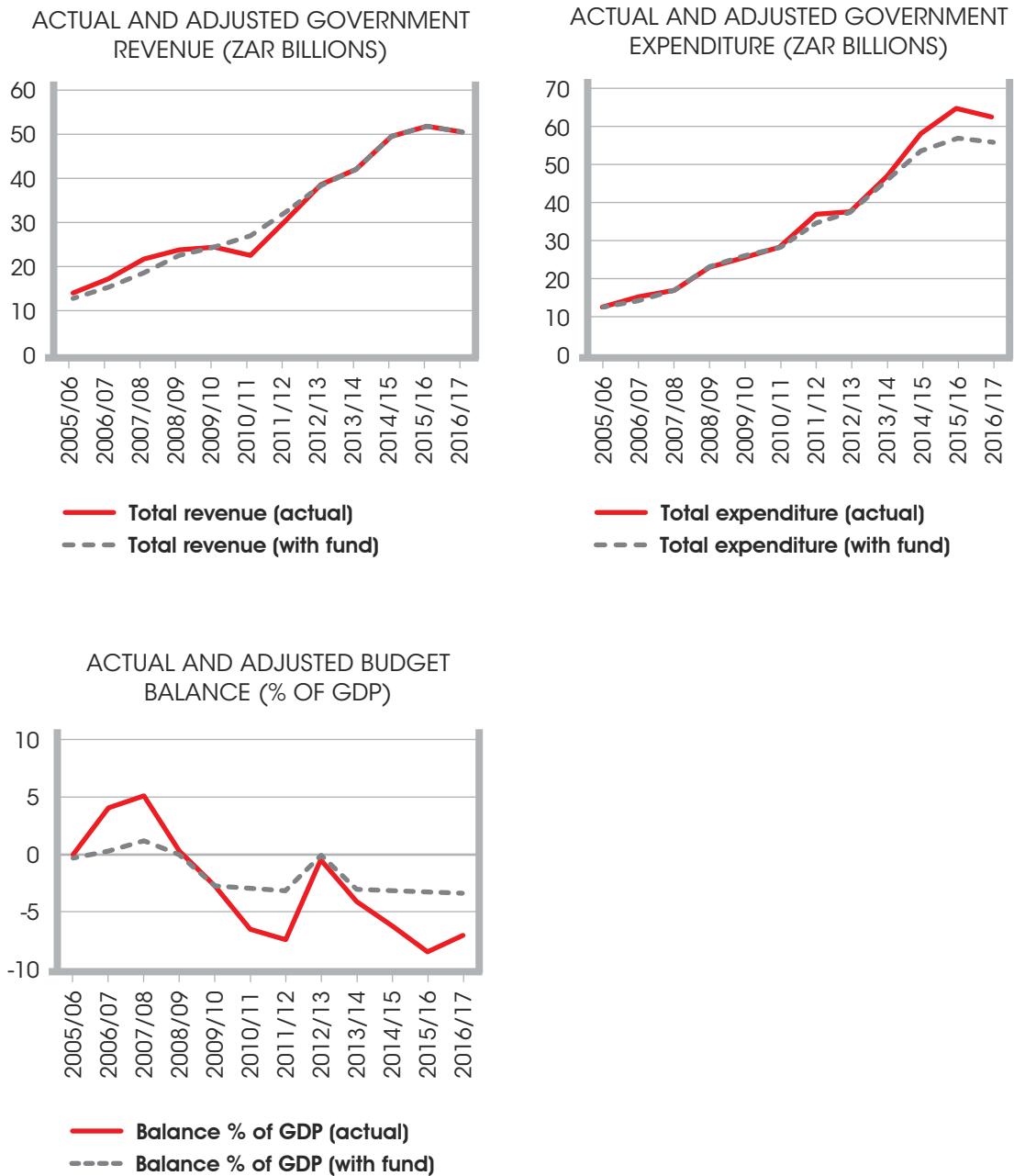
FIGURE 20 LESOTHO REVENUES AND BUDGET BALANCE WITH DEPOSIT AND FISCAL BALANCE RULE



Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

Source: Own calculations based on data from country ministries of finance and central banks

FIGURE 21 NAMIBIA REVENUES AND BUDGET BALANCE WITH DEPOSIT AND FISCAL BALANCE RULE



Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

Source: Own calculations based on data from country ministries of finance and central banks

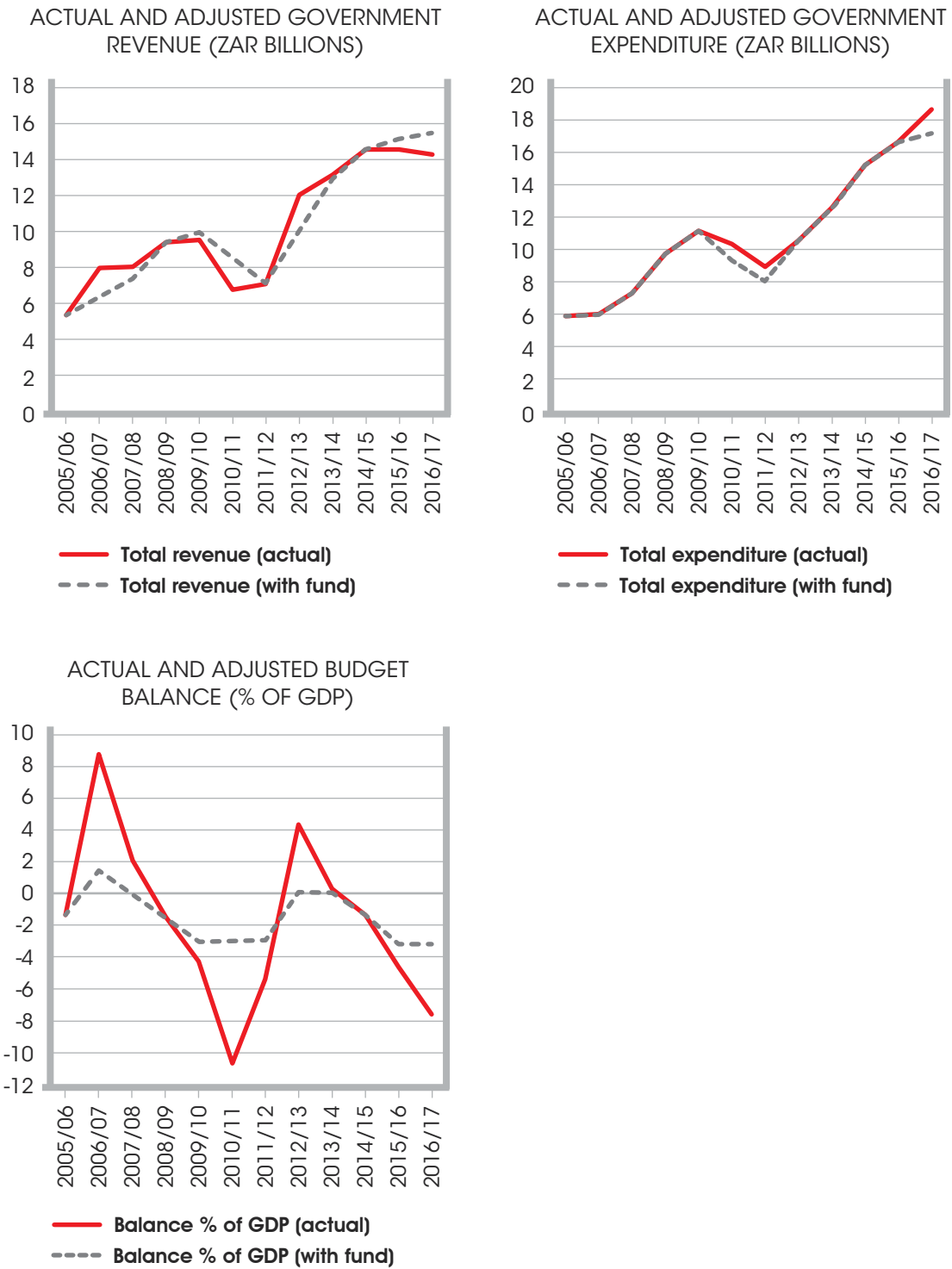
FIGURE 22 SOUTH AFRICA REVENUES AND BUDGET BALANCE WITH DEPOSIT AND FISCAL BALANCE RULE



Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

Source: Own calculations based on data from country ministries of finance and central banks

FIGURE 23 ESWATINI REVENUES AND BUDGET BALANCE WITH DEPOSIT AND FISCAL BALANCE RULE



Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

Source: Own calculations based on data from country ministries of finance and central banks

Table 4 shows that the potential size of the stabilisation fund (based on cumulative deposits and withdrawals between 2005/06 and 2016/17) and the extent to which SACU member states would need to reduce expenditure are determined by the deposit rules and fiscal rules in place. Where a balanced budget rule is in place SACU member states will be required to significantly reduce expenditure.

However, the cumulative balance in the stabilisation fund is zero for a number of SACU member states, regardless of the deposit rule. This is because, over the review period, Namibia, South Africa and eSwatini did not achieve sufficient fiscal surpluses in order to avoid both a full withdrawal of stabilisation funds and a reduction in expenditure.

Where stabilisation fund rules allow a member state to utilise funds deposited by another member state, the cumulative fund surpluses achieved by Botswana and Lesotho could potentially be used by other SACU member states to avoid any necessary expenditure cuts. Such flexibility would, however, undermine the fiscal rules in place and disincentivise fiscal responsibility at a member-state level.

TABLE 4 SENSITIVITY OF FUND BALANCE AND EXPENDITURE REDUCTION REQUIREMENTS TO FISCAL AND DEPOSIT RULES

	BUDGET DEFICIT RULE (MAXIMUM DEFICIT AS % OF GDP)	0%	1%	3%	0%	1%	3%
	DEPOSIT RULE (% OF SACU REVENUES ALLOCATED TO FUND)	30%	30%	30%	50%	50%	50%
CUMULATIVE FUND BALANCE 2005/06–2016/17	Botswana	3,680*	5,586	9,397	7,538	9,443	13,254
	Lesotho	0	0	2,339	0	261	2,626
	Namibia	0	0	0	0	0	0
	South Africa	0	0	0	0	0	0
	eSwatini	0	0	0	0	0	0
TOTAL REDUCTION IN EXPENDITURE 2005/06–2016/17	Botswana	17,213	14,348	9,003	13,051	10,185	4,714
	Lesotho	1,497	25	0	1,211	0	0
	Namibia	46,936	38,543	22,373	45,750	37,357	12,740
	South Africa	1,277,751	981,711	436,105	1,270,227	974,186	412,989
	eSwatini	10,425	7,417	2,977	10,064	7,056	0

* Amounts given in ZAR

Note: The exchange rate at the time of writing was ZAR 13.40/\$1.00

Source: Own calculations based on data from country ministries of finance and central banks

Asset allocation and fund size

To minimise risk it would be desirable for stabilisation funds to be invested in highly liquid assets that have low correlation with the domestic economies, particularly that of South Africa. This is especially important given that the revenue volatility in the BLNS is highly correlated with South African consumption and import cycles. Investing in liquid, offshore assets will reduce the correlation of fund returns to the performance of SACU's economy.

At the same time, the literature makes it clear that non-liquid assets, such as infrastructure and other development-focused investments, are not optimal assets for funds with a narrow stabilisation objective. This is especially true when the fund size is still relatively small, given that a larger proportion of the fund may be required for stabilisation purposes over the short term. Importantly, the investment allocation for a pure stabilisation fund may be markedly different than that for a development fund, where investment horizons may be substantially longer.

As previously noted, the literature also highlights that there is no clear conclusion on an optimal fund size, with many countries choosing to grow stabilisation funds into funds with broader objectives. As seen in the rules illustrated above, the size of the fund will ultimately be determined by the deposit, withdrawal and investment rules in place.

THE CASE FOR A COUNTRY-LEVEL RATHER THAN A REGIONAL STABILISATION FUND

As previously highlighted, there is no evidence that a fiscal stabilisation fund has been established at a multi-country level, beyond a single country's jurisdiction. Even for highly integrated regions such as the EU, the focus has been on the establishment

There is no evidence that a fiscal stabilisation fund has been established at a multi-country level, beyond a single country's jurisdiction

of a loan-based contingency fund rather than a traditional stabilisation fund. The lack of precedent for a multi-country, regional stabilisation fund also makes it difficult to envisage how such a fund would be institutionalised for SACU. While regional development funds do exist, they operate without directly imposing fiscal rules or limitations on country budgets, making the institutional and regulatory structure much simpler. At the same time a less formal, more discretionary regional stabilisation fund is likely to weaken its effectiveness.

Were a regional SACU stabilisation fund to be established, SACU member states would need to:

- determine the exact objectives and mandate for such a fund;

- identify a set of rules for the financing of a stabilisation fund, to which all SACU member states would be held accountable and, regardless of the source of financing (such as the SACU revenue pool), adjust budget expenditure forecasts downward to take into account the portion of revenue diverted to a stabilisation fund, especially in the current fiscal environment;
- establish clear rules and eligibility criteria for fund withdrawals, and determine whether the same rules and criteria would apply to all member states or if these rules would be differentiated across member states based on fiscal and macroeconomic criteria;
- determine how the rules for deposit and withdrawals would relate to SACU member states' fiscal positions: for example, where the fund deposit and withdrawal rules were aligned to fiscal rules an institutional monitoring and enforcement mechanism would need to be established, and this mechanism would need to ensure that each SACU member state adhered to such rules before it could access the regional stabilisation fund; and
- identify, establish, finance and capacitate a suitable institution at the regional level that would be responsible for fund governance and management; an entity responsible for monitoring (and enforcing, where fiscal or budget rules were in place) the fiscal framework of each SACU member state would also need to be established to ensure that fund deposit and withdrawal rules, and any applicable fiscal rules, are adhered to.

Further, as seen in previous sections, the level of government revenue volatility in each SACU member state is significantly different, while this volatility is also driven by different revenue sources. SACU member states are also not equally reliant on either resource revenues or SACU pool revenues to sufficiently justify a regional stabilisation fund. In addition, it is important to note that one SACU member state, Botswana, has already established a fund that has acted as both a savings and stabilisation fund, using diamond commodity revenues to finance it (see Box 2).

BOX 2 BOTSWANA'S EXPERIENCE WITH STABILISATION FUNDS

Botswana has a fairly extensive history with the operation of commodity-based funds. As early as 1972 Botswana established two funds to accommodate the impact of volatile diamond revenues. These were the Public Debt Service Fund (PDSF, where a portion of revenues would be saved for public debt repayment purposes) and the Revenue Stabilisation Fund (RSF, ostensibly a fund with a clear revenue stabilisation objective).

However, Botswana maintained a high level of fiscal discipline and accumulated a significant budget surplus in the three decades subsequent to the establishment of these funds. As a result, the funds were not used for their original purpose, with both the PDSF and the RSF funds instead used to provide subsidised finance to parastatals, city councils and development finance institutions in Botswana. In 2008, given that all finance provided

by the RSF had been repaid and that no further fund transactions were expected to take place, Botswana's auditor-general recommended that it be dissolved. At that time, the RSF held BWP 1.7 billion (\$165 million) in dormant assets.

Alongside this the Pula Fund was established in 1993, and subsequently re-established through the Bank of Botswana Act in 1996. This act provided for the establishment of a long-term investment fund (the Pula Fund) financed both by the central bank's excess foreign exchange reserves and by the government's surplus funds (generated through taxes, royalties and dividends from diamond mining activities). There is therefore a clear demarcation of the 'ownership' of fund assets between the Bank of Botswana and the government of Botswana. While managed by the Bank of Botswana, government funding provided to the Pula Fund is separately reflected in the Government Investment Account, and the government may not withdraw more funding than is available in this account. In 2016 the government's share of the Pula Fund amounted to just over 50% of fund assets.

Based on the act, the Bank of Botswana determines the investment policy of, and the payment of dividends accruing from, the Pula Fund in consultation with the minister of finance and development planning. The Pula Fund invests in long-term, foreign (outside of Botswana) financial instruments.

While the act providing for the establishment of the Pula Fund does not explicitly articulate clear objectives of such a long-term fund, the Pula Fund appears to undertake a number of functions, including fiscal and monetary stabilisation, savings for future generations and the diversification of government revenue. The stabilisation purpose of the Pula Fund is clear, based on the use of the central bank's share of Pula Fund assets to supplement foreign exchange reserves when needed, and the use of the government's share of assets to supplement fiscal revenues when shortfalls occur. This was particularly evident in the period after the financial crisis. In 2008 Pula Fund assets amounted to BWP 51 billion (\$4.95 billion), after which these fell to as low as BWP 39 billion (\$3.77 billion) in 2012 as the government withdrew assets to cover fiscal shortfalls. As of 2016 the Pula Fund had BWP 54 billion (\$5.24 billion) in assets.

a Currency code for the Botswana pula

Source: Bank of Botswana, 'Annual reports, 2006–2017', <http://www.bankofbotswana.bw/index.php/content/2009110614010-annual-report>, accessed 23 July 2018; Auditor General of Botswana, 'Report of the Auditor General on the Accounts of the Botswana Government, 2008'. Gaborone: Auditor General of Botswana, 2008; World Bank, 'Botswana Public Expenditure Review'. Washington, DC: World Bank, 2010; Bank of Botswana, 'Case Study: Botswana's Management of the Pula Fund, Observance of the Santiago Principles'. Gaborone: Bank of Botswana; World Bank, 'Opportunities for Industrial Development in Botswana: An Economy in Transition'. Washington, DC: World Bank, 1993

SUMMARY AND RECOMMENDATIONS

The review of stabilisation funds elsewhere and the exploration of the implications of a SACU stabilisation fund highlight a number of issues.

First, the review of literature on stabilisation funds suggests that such funds are only effective if they have strong governance, institutional and legislative frameworks in place. In particular, stabilisation funds need to have clearly defined deposit and withdrawal rules, with sufficient autonomy and independence to ensure that these rules are adhered to.

Second, the review of stabilisation funds suggests that these funds have predominantly been established by countries with significant commodity revenues. While this does not preclude the use of other revenue streams within a stabilisation fund framework, it does highlight that stabilisation funds have typically been established to counter exogenous commodity shocks to government revenues. For SACU member states that have experienced high levels of volatility and unpredictability in government revenues, this has primarily been a result of an internally agreed formula that is used to distribute the SACU revenue pool. Botswana, the only SACU member state where commodity revenues have been a primary driver of revenue volatility, has had a number of country-level funds in place since 1972 to counter commodity shocks.

Third, there is no evidence of a regional, multi-country stabilisation fund elsewhere. This is because, at the very least, a regional approach would require rules and criteria that are applicable to all member states, and that can be effectively monitored by an external body. SACU member states have significantly different fiscal and revenue profiles and face different levels of overall revenue volatility and unpredictability. This suggests that a regional stabilisation fund would be difficult to agree on and manage in SACU.

Fourth, a stabilisation fund is only one of multiple approaches available to deal with revenue and budget volatility. SACU member states could make use of several other fiscal instruments to address issues of volatility, and to build certainty into the budgeting process. While each of these approaches have their own distinct advantages and disadvantages, it serves to highlight that a stabilisation fund is not necessary to reduce budget volatility in SACU member states, and particularly in the BLNS.

Finally, from the analysis it is clear that the only way to fully address volatility in revenues distributed from the SACU pool would be to revise the current revenue-sharing formula. SACU member states should therefore focus on coming to an agreement on a new and more appropriate revenue-sharing formula, a process that has formed part of SACU's work programme over the last decade.



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