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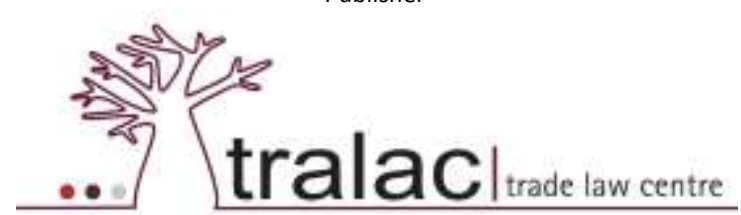
MONITORING REGIONAL INTEGRATION IN SOUTHERN AFRICA

MONITORING  
**REGIONAL  
INTEGRATION**  
IN SOUTHERN AFRICA

YEARBOOK 2011

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Publisher



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## Introduction

### Monitoring the process of regional integration in southern Africa in 2011

*Trudi Hartzenberg, Gerhard Erasmus, André du Pisani*

A number of important trade-related developments took place in southern Africa in 2011. Developments on the rest of the African continent as well as in the global economy had important implications for the southern African region.

Protest action started in Tunisia in December 2010 and quickly spread to a number of African and Middle East countries. This so-called Arab Spring brought focus to simmering discontent regarding fundamental governance issues, not only in this region, but also globally. Economic and social inequality, as well as a range of governance challenges, including lack of transparency and accountability, both in the public and private sectors motivated mass action calling for improved governance as well as measures to support economic growth and development, and specifically also redistribution of economic gains. Governance issues resonate also in the southern African region.

The imperative for rules-based governance, for predictability, transparency and accountability, is as much a national concern as it is a regional development and governance issue. The suspension of the Southern African Development Community (SADC) Tribunal in September 2010 took place in a legally doubtful manner. Since that time all parties enjoying standing in this forum have been denied those important legal remedies which are vital for certainty and predictability in a rules-based system. The detrimental effects go way beyond trade issues. The right of judicial review of disciplinary proceedings is affected, as is the justiciability of all the SADC Protocols. This is a retrogressive step with major consequences for how we are governed in southern Africa. The fact that there has been little public outcry is in itself rather disturbing. And we seem to have forgotten what had caused this crisis in the first place – Zimbabwe’s dismal human rights record and the design flaws in the SADC legal instruments – which allow the perpetrator to veto judicial decisions – since the SADC summit has the final say and all decisions are taken on the basis of ‘consensus’.

A third Southern African Customs Union (SACU) Summit of Heads of State and Government took place in March 2011 in Pretoria, South Africa. Discussion focused on the customs union’s challenges, including the revenue dependence of some of the smaller member states. In Swaziland matters are more complicated because of that state’s dependence on contributions from the SACU revenue pool to fund public expenditure. A decline in payments from the pool caused a crisis for the government and fuelled widespread unrest. These are to some extent *sui generis* SACU issues but they clearly

demonstrate the linkages between development, national stability and regional governance. The region requires strong leadership on many fronts.

This summit identified five priorities for the SACU work programme. Regional industrial development is emerging as a focal point of SACU's programme. The aim is to develop a strategy to address some of the fundamental industrial development asymmetries along the member states. The problem of polarisation of economic development; with South Africa's diversified industrial base attracting further investment, while the smaller countries battle to support fledging firms, some of which are by definition no longer infant industries.

The second area for the work programme is a revision of the revenue-sharing formula. The enormous development asymmetry in SACU finds expression in significant dependence on international trade taxes for fiscal revenue among the smaller member states, while South Africa views the import tariff as an instrument of industrial development, to be used selectively to protect specific industries. The revenue-sharing arrangement therefore continues to bedevil SACU deliberations on a deeper integration again. Getting away from this dilemma proved as much of a challenge in 2011 as ever. Trade facilitation was identified as a priority work area. Despite programmes to support customs harmonisation and cooperation, much remains to be done in the area of trade facilitation. There is cause for concern, as member states appear to be increasing, rather than decreasing, border measures and controls. This runs counter to the very nature of a customs union.

The fourth focal point for the work programme is the development of SACU institutions. As at the end of 2011, there is still no SACU Tariff Board or Tribunal. It does seem as if member states are not keen to develop the institutional infrastructure for effective management of this aspect of the customs union. Strong leadership, especially from South Africa, remains a complicated challenge. The fifth point of focus is the development of a common negotiating mechanism for negotiations with third parties. SACU's negotiating agenda includes negotiations with India, the European Union (EU), and also negotiations to establish the Tripartite Free Trade Area (T-FTA) encompassing the 26 member states of SADC, the East African Community (EAC) and the Common Market for East and Southern Africa (COMESA). The overarching objective of the SACU work programme is regional industrialisation to support regional economic growth and equitable and sustainable development.

Important focus in SADC was on the establishment of the Free Trade Area (FTA). The SADC FTA was launched in August 2008 with the aim of full liberalisation by all member states, except Mozambique, by 2012. Mozambique had negotiated a longer time frame until 2015.

During 2011, SADC considered applications from several member states for derogations from their negotiated tariff phase-downs. Such applications are provided for in Article 3(1)(c) of the Protocol on Trade which provides that member states may apply to the Committee of Ministers of Trade (CMT) for a time-bound grace period from the implementation of tariff and non-tariff barriers. In February 2011 at a meeting of the CMT in Windhoek, Namibia and several member states tabled requests for derogations. An application from Zimbabwe to suspend its tariff phase-down for category 'C' products until 2012 was approved. Tanzania applied for permission to reintroduce duties on sugar and paper imports. It was decided at this meeting that a study to investigate the impact of the derogations should be commissioned to assess what the impact of the derogations would be on intra-SADC trade, with specific focus on the impact on trade between the member states seeking derogations and the region's smaller economies. While these are, of course, important issues, there are more fundamental concerns regarding the very presence of provision for derogations in a free trade agreement. Such matters are far better addressed via the safeguards provided for in the SADC Trade Protocol. Safeguards and trade remedies cannot, however, be introduced without proper prior investigations along the applicable General Agreement on Tariffs and Trade (GATT) rules. That reminds us of deep-seated problems facing regional integration in this part of the world: the incomplete and unconsolidated nature of legal instruments and the absence of proper monitoring mechanisms.

There was very little discussion of the proposed SADC customs union, which according to the Regional Indicative Strategic Development Plan (RISDP), should have been established in 2010. A review of the RISDP was done, late in 2011, by the SADC Secretariat for the period 2005 – 2010. While there is acknowledgement of achievements in a range of areas such as infrastructure development, the holding of democratic elections in several countries and customs cooperation, there is still strict adherence to the linear model of regional integration with unrealistic deadlines. Recognising that the RISDP is a strategic plan and not a legally binding instrument is important; review and adaptation are to be expected as circumstances change. Unfortunately this did not happen, with this review.

The second COMESA-EAC-SADC Tripartite Summit, at which the formal Tripartite FTA negotiations were launched, was held on 12 June 2011 in Johannesburg, South Africa. The T-FTA is to be anchored on three pillars: market integration, infrastructure development and industrial development. The Roadmap for Establishing the T-FTA and the Negotiating Principles, Processes and Institutional Framework were endorsed by the Summit. The first phase of negotiations will cover a trade-in-goods agenda, tariff liberalisation, rules of origin, customs cooperation and customs-related matters, non-

tariff barriers, sanitary and phytosanitary measures, technical barriers to trade, and dispute settlement. It has also been agreed that the movement of business persons will be negotiated as a separate track of negotiations alongside the first phase of negotiations. The second phase will cover trade in services and trade-related issues, including intellectual property rights and competition policy. A time frame of 24-36 months has been set for the completion of the first-phase negotiations. There is no specific time frame yet for the second-phase of negotiations. The negotiations will be conducted in a Tripartite Trade Negotiations Forum (TTNF) which held its first meeting in December 2011 in Nairobi, Kenya.

2011 also saw the Economic Partnership Agreement (EPA) negotiations between the African, Caribbean and Pacific Group of States (ACP) and the EU back on the agenda, with the EU setting a deadline for the completion of the negotiations. The 18 ACP countries that have yet to conclude an EPA have until 1 January 2014 to do so. Since 1 January 2008 the European Commission (EC) has applied an interim regulation to allow the ACP countries that have initialled an EPA to benefit from continued EU market access, but a new market access regulation announced by the EC states that a country will be removed from the regulation if a state indicates that it intends not to notify an agreement; ratification of an agreement has not taken place within a reasonable period of time such that the entry into force of the agreement is unduly delayed; or the agreement is terminated or a state terminates its rights and obligations under the agreement but the agreement otherwise remains in force. The new regulation means that countries, including Botswana, Lesotho, Mozambique, Namibia, Kenya, Zambia and Tanzania, which have either not signed or not implemented their agreements, will be removed from the market access regulation at the beginning of 2014. For the least developed countries in this group, the fall-back position is Everything but Arms (duty-free, quota-free access to the EU market), but for the developing countries in this group (e.g. Namibia and Botswana) this will mean regression to the Generalised System of Preferences (GSP), much less favourable access than they currently enjoy, and less comprehensive coverage. The GSP excludes, for example, beef and table grapes which are important exports to the EU from Namibia, and for Botswana beef is a key export.

At the multilateral level, the Doha Development Round made no discernible progress during 2011. The Eighth Ministerial Conference was held in Geneva, Switzerland, from 15 to 17 December 2011. Russia's accession to the World Trade Organisation was formally approved at the conference, but the current round of negotiations seems no closer to a conclusion. Despite this, WTO issues remain important for the region. Issues of WTO compatibility feature in SACU as regards, for example, Article 26 on infant industry protection, in SADC as regards the discussion on trade remedy provisions in the



Protocol on Trade, and also in the context of the tariff liberalisation negotiations which are just starting for the Tripartite Free Trade Area.

The 17th Conference of the Parties (COP 17) to the United Nations Framework Convention on Climate Change (UNFCCC) and the 7th Session of the Conference of the Parties serving as the Meeting of the Parties (CMP 7) to the Kyoto Protocol was held in Durban, South Africa, from 28 November to 9 December 2011. The talks culminated in a number of positive outcomes and the following matters were agreed: A second commitment period for the Kyoto Protocol from 1 January 2013 to the end of either 31 December 2017 or 31 December 2020; a universal legal agreement on climate change no later than 2015; a web-based registry for developing countries to record mitigation actions; carbon-capture and storage projects under the Clean Development mechanism (CDM) of the Kyoto Protocol; the implementation of the Green climate Fund; and the operationalisation of the Technology Mechanism. Cop 18 and CMP 8 will be held in Qatar from 26 November to 7 December 2012.

South Africa launched its first National Development Plan (NDP) in November 2011. The NDP sets out the vision of the National Planning Commission for South Africa's growth and development to 2030. In addition to strong focus on domestic matters such as the reduction of poverty and inequality, industrial development and employment creation, infrastructure development and the development of a capable state, the NDP also sets out a vision for South Africa's global integration. Two distinct strands of the global integration strategy are African integration and South-South partnerships. Commitment to SACU, SADC and the T-FTA are articulated. As the regional hegemon in southern Africa, South Africa's policies are important for the region's integration agenda.

*Trudi Hartzenberg*

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March 2012

## Chapter 1

# **Climate Change and Trade in southern Africa: An examination of the potential impacts of climate change and climate change response measures on the ability of SADC countries to engage in international trade**

*Sean Woolfrey*

## **1. Introduction**

Significant consensus now exists that the global climate system is in fact warming, even if there remains some debate as to the degree to which human factors are responsible for this phenomenon. What is also clear is that climate change – which is commonly understood to refer to changes in the long-term averages of individual weather states thought to be caused by the warming of the earth’s atmosphere – poses an enormous challenge to the international community and threatens economic development, peace and prosperity in many parts of the globe (WTO-UNEP, 2009).

As political attempts to reach a comprehensive, binding and effective global agreement on climate change mitigation have thus far failed to yield any concrete outcomes, it appears increasingly likely that global warming and attendant climate change trends are likely to continue, and perhaps even accelerate, over the coming decades. Global climate models (GCMs) suggest that future climate change is likely to impact different parts of the globe in different ways, and that southern Africa is likely to be one of the most severely affected regions. This is not only because average temperatures across the region appear to be increasing faster than the global average, but also because countries in the region tend to be highly exposed to climatic variations and lack the resources required to adapt to the consequences of climate change (Collier et al., 2008).

While climate change will impact on southern Africa in a number of ways, affecting, *inter alia*, settlement patterns, biodiversity and human health, this chapter aims to highlight some of the most important ways in which climate change and the adoption of certain climate change response measures by the region’s major trading partners will impact on the ability of countries in southern Africa to produce and trade goods and services. The effects of climate change on the region’s trading capacity is important, as participation in international

trade is generally viewed as vital for promoting economic growth and development. Furthermore, trade is an important driver of the kind of regional integration that is currently being pursued in Africa.

Section 2 of the chapter sets the scene by providing an overview of the current scientific consensus on climate change as a global phenomenon, while Section 3 examines climate change projections for southern Africa, which suggest that the region will be one of those most severely affected by climate change. Next, Section 4 outlines the reasons why many of the countries in southern Africa have relatively weak capacity for adapting to the projected consequences of climate change across the region. Section 5 then highlights the most notable direct and indirect channels through which climate change and the adoption of climate change response measures by southern African countries' major trading partners are likely to affect the ability of countries in the region to trade goods and services. Section 6 contains the conclusion.

## **2. Global climate change**

While there are those who remain sceptical about climate change and its causes, there appears to be significant consensus within the scientific community that the earth's atmosphere is getting hotter and that this is having an effect on the global climate system. The publication in 2007 of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) has done much to strengthen this consensus. The IPCC assessed thousands of peer-reviewed scientific publications and concluded that '[w]arming of the climate system is unequivocal, as evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level' (IPCC, 2007).

The report finds that the average surface temperature of the globe increased by approximately 0.74 degrees Celsius between 1906 and 2005, with an increase of 0.65 degrees Celsius between 1956 and 2005 alone, while the global average sea level rose by an average of around 1.8 millimetres a year between 1961 and 2003, and by an average of approximately 3.1 millimetres a year between 1993 and 2003 (IPCC, 2007). It appears, therefore, that the world is not only warming (and has been doing so for over a century), but also that the rate of change in average temperatures is increasing (WTO-UNEP, 2009).

These increases in average temperatures are prevalent across the globe, but the evidence shows significant regional variation in comparison to the global average. For example, Arctic temperatures have increased at almost double the rate of global average temperature increases over the past century, while both Asia and Africa have experienced warming above the global average (Ibid.). Evidence also suggests that temperature increases and other changes in regional climate systems, such as increased temperature extremes and changes in wind patterns, are affecting natural systems on all continents and in the earth's oceans as well (IPCC, 2007).

The IPCC Report also claims that global warming over the past half a century can be largely attributed to human activity, and concludes that there is a likelihood of more than 90% that 'the global average net effect of human activities is climate warming' (WTO-UNEP, 2009). In particular, the Report states that much of the observed global warming over the last fifty years "is very likely" due to increases in greenhouse gas (GHG) emissions resulting from human activity, often termed 'anthropogenic' GHG emissions (IPCC, 2007).

Since the industrial revolution, there have been significant increases in the levels of anthropogenic GHG emissions, resulting in an increase in the concentration of greenhouse gases such as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) in the atmosphere (WTO-UNEP, 2009). Current global atmospheric concentrations of these gases are far greater than pre-industrial concentration levels. For example, in 2005, the average atmospheric concentration for CO<sub>2</sub> was 379 parts per million (ppm), meaning that there were 379 molecules of CO<sub>2</sub> per million molecules of dry air. Pre-industrial levels of CO<sub>2</sub> concentration were only around 275 ppm (WTO/UNEP, 2009). Changes in the concentrations of GHGs alter the global climate system by affecting the absorption, scattering and emission of radiation within the earth's atmosphere and at its surface, resulting in warming or cooling effects (IPCC, 2007).

Much of this increase in the atmospheric concentration of GHGs has occurred during the second half of the 20th century in response to an acceleration of the rate of GHG emissions during this period. The International Energy Agency (IEA) and the Organisation for Economic Co-operation and Development (OECD) report an approximate doubling of GHG emissions between the 1970s and the early 2000s, while the IPCC report estimates the growth in global

total annual anthropogenic GHG emissions at around 70% between 1970 and 2004 (IPCC, 2007; WTO-UNEP, 2009).

Measured by volume, power generation accounts for the largest contribution to GHG emissions. Industry and fuel combustion are also significant contributors, as is land-use change through deforestation and forest degradation. Other major contributors include agriculture and transportation (WTO-UNEP, 2009). CO<sub>2</sub> accounts for around three-quarters of the warming effect attributed to an increase in the concentration of GHGs in the atmosphere, while CH<sub>4</sub> accounts for around 14% (Ibid.). Increases in CO<sub>2</sub> in the atmosphere result mainly from the burning of fossil fuels, with land-use change another, slightly less significant, contributor. Increased emissions of CH<sub>4</sub> and N<sub>2</sub>O are predominantly due to changes in agriculture and land use, and to fossil fuel use. The emission of ozone (O<sub>3</sub>) and various halocarbons from vehicle exhaust fumes, industrial processes and other sources have also contributed to the increased concentration of GHGs in the atmosphere (Ibid.).

As GHGs tend to remain in the earth's atmosphere for long periods of time, global warming will continue to affect the planet and its climate for many hundreds of years, even if a significant reduction in GHG emissions was brought about today (Ibid.). Indeed, the World Bank estimates that given past GHG emissions, global warming of around 2 degrees Celsius is probably already unavoidable. This is significant, as a 2 to 3 degrees Celsius increase in temperature is often quoted as the upper limit beyond which damaging changes to the global climate system may be unavoidable (Ibid.).

There is much agreement, reflected by the IPCC, the Stern Review and the IEA that a dramatic and timely reduction of global GHG emissions is required in order to limit the severity of future climate change. There is also notable consensus that without a change in current mitigation policies, global GHG emissions will continue to increase significantly over the coming decades (IPCC, 2007). Despite this recognition of a need to diverge from a 'business as usual' scenario, global dependence on fossil fuels and a lack of powerful incentives to reduce deforestation, especially in developing countries, have meant that a binding and effective multilateral agreement to address climate change has thus far proved elusive (Engelbrecht, 2010).

Current estimates – based on factors such as economic growth, population growth, technology development, fossil use intensity and the potential likelihood of global mitigation agreements or initiatives – indicate that GHG emissions are likely to increase by between 25 and 90% over the period 2000 to 2030 (WTO-UNEP, 2009). While a warming of around 0.2 degrees Celsius per decade is projected up to around 2020, projections of warming beyond this point depend on the emission scenario that is used, with climate models estimating an increase in the global average temperature anywhere between 1.4 and 6.4 degrees Celsius over the period 1990 to 2100 (Ibid.).

The result of these increased emissions and rises in global average temperatures will likely involve many changes in the global climate system during the coming decades that will be more significant than any such changes observed during the 20th century (IPCC, 2007). For instance, even a relatively small increase in global average temperatures is likely to result in an increase in the frequency and intensity of extreme weather events such as heat waves and tropical storms (WTO-UNEP, 2009). The distribution of these events is likely to vary considerably across different regions and countries, and their impacts will depend largely on the vulnerability of particular regions and areas to such changes in local climates (Ibid.).

Rising temperatures, changes in the intensity, frequency and distribution of extreme weather events and other changes in local and regional climates resulting from global warming are likely to have a number of detrimental consequences for particular populations and ecosystems around the world. Although not all consequences of climate change are likely to be negative, a number will be, especially for those populations and ecosystems that are inherently vulnerable to such changes. Some of the damaging consequences of climate change may include lower crop productivity and resulting loss of food security, the extinction of certain vulnerable species, damage to coastal areas through erosion and flooding, increased human mortality due to heat stress and the spread of certain diseases, increased water stress from loss of water resources, and population displacement due to droughts, rising sea levels or major floods (IPCC, 2007).

### **3. Climate change in southern Africa**

As stated above, the observable changes in regional climates brought about through global warming in the coming decades are likely to differ from region to region, with some regions likely to be more adversely affected than others. The ultimate impact of these changes on the various regions of the globe is also likely to depend on the vulnerability of the populations and ecosystems existing in each particular region, and the ability of these populations and ecosystems to adapt to climate change. Observed trends and climate model projections both suggest that southern Africa is one of the regions that will be most affected by observable climate change.

Southern Africa's current climate is generally warm, with much of the region experiencing average annual temperatures of above 17 degrees Celsius, and month-to-month variations in temperature tending to be gradual (CSIR, 2011). The region is predominantly semi-arid, exhibiting high variability in inter-annual and intra-seasonal rainfall. There is also a high degree of variation in rainfall across the different parts of the region with many parts prone to frequent droughts and floods (Ibid.). There are various different climate types and regimes across southern Africa, and these are influenced by a number of factors including the major circulation patterns of the southern hemisphere, surrounding ocean currents, semipermanent high-pressure cells and the region's complex topography (Ibid.).

#### *Recent climate trends in southern Africa*

A number of studies examining average minimum and maximum temperature trends have found that southern Africa is getting warmer and that the rate of temperature increase is accelerating (Ibid.). Annual minimum temperatures increased at an average rate of 0.057 degrees Celsius per decade between 1901 and 2009, while annual maximum temperatures increased by an average of 0.046 degrees Celsius per decade over the same period (Ibid.). Since 1976, however, minimum temperatures have increased by 0.27 degrees Celsius per decade and maximum temperatures by 0.25 degrees Celsius per decade, indicating that temperatures in the region have been rising more rapidly in recent years (Ibid.). Within the region, the largest increases in temperature have been recorded in the central interior of South Africa, which experienced an increase of 1.4 degrees Celsius between 1901 and 2002. Other parts of the region, such as south-east Angola, western

Zimbabwe and eastern Tanzania, experienced much smaller changes in average temperatures (Engelbrecht, 2010).

Detecting long-term changes in the region's rainfall patterns and in the frequency and intensity of extreme weather events is more difficult due to existing variability in rainfall patterns and the occurrence of extreme events across the region. A relative lack of data also constrains the ability to analyse and monitor long-term trends in these events (IPCC, 2007). The evidence on rainfall trends in southern Africa drawn from a number of studies is significantly less conclusive than the evidence for average temperature trends. The IPCC reports a decline in precipitation in southern Africa over the period 1900 to 2005 (IPCC, 2007), while the World Trade Organisation (WTO) and the United Nations Environment Programme (UNEP) find, in a joint paper, that parts of southern Africa have become drier (WTO-UNEP, 2009). Kruger (2006) claims that the existing evidence for rainfall trends suggests only that there have been moderate decreases in annual rainfall over parts of southern Africa.

While evidence from a number of studies suggests increases in rainfall variability and in the frequency and intensity of heavy rainfall events and droughts in the region, the Council for Scientific and Industrial Research (CSIR) in South Africa examined time series data on rainfall in southern Africa and found no significant trend towards decreased annual rainfall or changes in variability (CSIR, 2011). Instead, the CSIR's study found that high levels of year-to-year rainfall variability in the region have long been a feature of southern Africa's climate.

#### *Projected climate change in southern Africa*

Changes in the region's average temperatures and rainfall patterns projected by GCMs and 'downscaling' techniques for the middle of the 21st century tend to differ somewhat depending on the particular method or model used to predict such changes (Ibid.). Nevertheless, a number of predictions about future climate change in southern Africa can be – and have been – made.

First, southern Africa (and indeed Africa as a whole) is likely to experience temperature increases greater than the global average (WTO-UNEP, 2009). Climate models are fairly consistent in showing an increase in projected mean, minimum and maximum temperatures



throughout the region, with increases of between 0.8 and 3.6 degrees Celsius predicted for some time between 2030 and 2060 (CSIR, 2011). Second, the annual frequency of very hot days is projected to increase significantly over large parts of southern Africa (Ibid.). Third, increases in annual rainfall are projected for some parts of the region, including Angola, eastern South Africa – which is likely to experience more frequent extreme rainfall events in the future – and parts of east Africa, while much of the rest of southern Africa, including south-western South Africa, western Mozambique and parts of Zambia and Zimbabwe is projected to experience decreases in annual rainfall and in the frequency of extreme rainfall events (Ibid.).

These and other consequences of future climate change and global warming are likely to have a number of significant impacts on the region. For example, decreases in annual rainfall across much of the region will worsen many of the challenges associated with already variable rainfall patterns in southern Africa. Variable and declining rainfall will decrease access to clean water for much of the region's inhabitants, and the IPCC estimates that by 2050 as many as 600 million people in Africa will be exposed to increased water stress (IPCC, 2007). Changing rainfall patterns are also likely to result in an increase in the proportion of arid and semiarid land in southern Africa (Collier et al., 2008). This in turn is likely to decrease agricultural yields, thereby jeopardising food security and exacerbating malnutrition in a number of countries in the region (IPCC, 2007).

Rising sea levels, increased wave height due to increases in wind velocity and increased storm frequency and flooding also pose a threat to southern Africa's coastal areas, including, potentially, to its major coastal settlements such as Dar es Salaam, Maputo, Durban, Cape Town and Luanda (CSIR, 2011). Rising sea levels also threaten coastal ecosystems, such as mangrove swamps and coral reefs, with potentially adverse consequences for the tourism and fishing industries in the region (Ibid.).

Finally, climate change in southern Africa is likely to pose a number of health-related challenges in the region. One of the potential consequences of climate change on human health is increased mortality due to the effects of extreme weather events such as heat waves, floods, storms and droughts (WTO-UNEP, 2009). For example, many parts of the region are projected to experience an increase in the incidences and geographical spread of

malaria, dengue fever, cholera and other food and water-borne diseases which are linked to changes in temperatures, rainfall and extreme weather events (Ibid.). Increased levels of malnutrition due to the direct and indirect impacts of climate change on agricultural production and water resources are another likely consequence of climate change in southern Africa.

These and other impacts of climate change and global warming on the region are likely to be all the more significant given southern Africa's relative lack of development and resources for coping with the challenges that climate change will bring to the region. Indeed, as the IPCC points out, it is precisely because of the region's low capacity for climate change adaptation, coupled with the fact that observable climate change is projected to be relatively significant across much of the region, that southern Africa is likely to be especially affected by climate change (IPCC, 2007).

#### **4. Southern Africa's lack of adaptive capacity**

While southern Africa is in many ways a quite heterogeneous region, encompassing countries with a diverse array of social and physical characteristics, political stability and levels of development, including relatively developed South Africa, oil-producing Angola, agriculture-reliant Malawi, politically dysfunctional Zimbabwe, small island states such as Mauritius and the Seychelles and least developed countries (LDCs) such as Lesotho and Zambia, it is fair to say that, as a whole, the region suffers from a low capacity to adapt to climate change (Mbirimi, 2010).

##### *Adaptive capacity*

Adaptive capacity in relation to climate change refers to the ability of societies (and ecosystems) to cope with and adapt to the physical effects of changes in climate and weather patterns that are likely to result from climate change and global warming. This adaptive capacity is very relevant, as while an entire subregion may be exposed to a particular climate condition or hazard, that condition or hazard will impact different members or populations within that subregion in different ways, depending on their ability to cope with and adapt to the effects of the particular condition or hazard (CSIR, 2011). In

other words, societies and populations (and ecosystems) with weak adaptive capacity are particularly vulnerable to the physical impacts of climate change.

For example, the impact of extreme rainfall events will be less severe for a population residing in an area where physical infrastructure, such as buildings and roads, is of sufficient quality to withstand such an event (WTO-UNEP, 2009). By contrast, a population living in an informal settlement characterised by poor quality dwellings is likely to be far more adversely affected by an incidence of extreme rainfall. Similarly, significant decreases in rainfall and increases in average temperatures are likely to have more adverse impacts on populations and societies that are directly dependent on natural resources for their livelihoods.

Developing countries, and in particular, the poorest and most marginalised communities within these countries tend to have the weakest adaptive capacity and are therefore the most vulnerable to the impacts of future climate change (Ibid.). Climate change is also likely to exacerbate existing challenges faced by countries and communities characterised by existing stresses by, for example, depleting water resources, destroying rural livelihoods and reducing food security and access to sources of energy (Ibid.).

In general, a society's adaptive capacity is determined by a number of socioeconomic characteristics, underlying stresses and institutional factors. Pre-existing stresses on humans and ecosystems, such as those arising from overcrowded urban settlements and insufficient water resources, create significant vulnerabilities to climate change. For example, populations living in overcrowded informal settlements, where the provision of basic services such as water, electricity and sanitation is often lacking, are likely to be vulnerable to a number of adverse impacts from climate-change-related weather events such as incidences of extreme rainfall (CSIR, 2011). One such effect might be the spread of diseases arising from a lack of access to clean water.

The levels of social and economic development of a society also play an important role in determining adaptive capacity. Factors such as political stability, quality of governance, properly functioning social and governmental networks and institutions, public sector provision, entitlements, health, education, income and poverty levels, access to information and technology, market development and the existence of a productive economic base characterised by natural and man-made capital assets all influence a society's ability to

anticipate and cope with the effects likely to be brought about by climate change and global warming (IPCC, 2007).

Adaptive capacity is also often unevenly distributed within societies. Factors such as gender, ethnicity, religion, class and age can, and often do, affect the distribution of resources and give rise to differences in levels of financial capital, health status, educational attainment, access to technology and access to political institutions, all of which affect the ability of individuals and groups to cope with and adapt to significant change (CSIR, 2011).

#### *Sources of poor adaptive capacity in southern Africa*

Studies consistently confirm that southern Africa has relatively weak capacity to adapt to the effects of global warming and climate change, and that the region is highly vulnerable to climate-change-related risks (IPCC, 2007). Much of southern Africa's lack of adaptive capacity stems from the low levels of socioeconomic development that characterise the region. The prevalence of diseases such as HIV/Aids and malaria, high dependency ratios, high levels of unemployment and poverty, weak governance, dysfunctional institutions, low levels of education and a general lack of social and financial capital all contribute to the region's vulnerability to climate change (CSIR, 2011). Similarly, poor infrastructure and ineffective service delivery, especially in the rural areas and sprawling informal settlements in which much of the region's inhabitants live, detract from the region's ability to cope with the effects of climate change.

One of the main sources of the region's vulnerability to climate change, however, is its economic dependence on agriculture, and especially on rain-fed agriculture (Collier et al., 2008). Agriculture is the predominant source of employment in the region, but much agricultural activity is undertaken in marginal or semiarid areas where low and irregular rainfall is already experienced (CSIR, 2011). Further decreases in rainfall are likely to result in many of these areas becoming unsuitable for agriculture, and in reductions in yields in many others. Given the region's reliance on agriculture for subsistence, employment and incomes, such changes are likely to have a significant and adverse impact on the region, increasing unemployment, affecting settlement patterns, reducing food security and potentially giving rise to widespread malnutrition and potentially even famines.

Exacerbating these challenges is the fact that much of southern Africa's agricultural activity involves emerging, small-scale farming, which is generally associated with high risk and uncertainty, fewer capital resources, a lack of management technologies, inability to procure crop insurance and a lack of irrigation infrastructure resulting in a dependence on rainfall (Ibid.). These characteristics hamper the ability of farmers in the region to adapt to future climate change.

Due to factors such as poor business environments, a lack of relevant infrastructure and the prevalence of small internal markets, many of the countries in southern Africa also lack significant industrial and manufacturing sectors. Without such sectors, it is harder for labour and capital to be profitably redeployed in response to declines in agricultural and other sectors adversely affected by climate change (Collier et al., 2008). Southern Africa's reliance on agricultural production, coupled with its lack of manufacturing capacity also means that countries in the region, with one or two exceptions, tend to be highly reliant on the export of a small number of primary commodities. This lack of export diversification increases the region's vulnerability to any effects of climate change that might threaten the production of such commodities

Redeployment of labour and capital between different economic activities and locations in southern Africa is also hampered by barriers to the movement of people. These include informal restrictions relating to strong ethnic identities and the formal restrictions of national boundaries, of which there are many in the region (Ibid.). Access to land is also often a challenge in southern Africa, a region where land rights still often reflect ancestral claims and are often not freely available on the market.

## **5. Climate change and southern Africa's capacity to trade goods and services**

The analysis presented above suggests that the projected effects of future climate change will have a significant impact on the population of southern Africa. The challenges that climate change poses for the region are varied and involve issues such as human settlement patterns, conservation of ecosystems and biodiversity, the need to improve physical infrastructure, the loss of livelihoods and potential threats to human health. Another important challenge arising from climate change in southern Africa is that the effects of such

change threaten the ability of countries in the region to participate in the international trade of goods and services.

*Climate change, trade capacity, economic development and regional integration*

The fact that climate change is likely to directly and indirectly affect the capacity of countries in the region to engage in international trade is important for at least two reasons. First, participation in the global economy, and in particular, the export of domestically produced goods (and services) is considered to be an extremely important means to promoting economic growth and development in developing countries (Ahmed et al., 2008). Since the 1960s and 1970s prominent economists such as Jagdish Bhagwati and Ann Krueger have championed export promotion as a sensible strategy for economic development (Ibid.). Indeed, the idea that an outward-oriented strategy of export promotion leads to economic growth has come to be known as the ‘export-led growth hypothesis’ in the development literature (Ibid.).

While the empirical evidence on export-led growth remains somewhat inconclusive, the stunning success of apparently outward-oriented development strategies in East Asia during the latter half of the 20th century has done much to popularise the belief that export promotion is vital for developing countries, especially as this success starkly contrasts the relatively poor record of many inward-looking economies in Africa and Latin America during the same period.

There are also good theoretical reasons for believing that export performance is a key contributor to economic growth and development, and both neoclassical and new growth theories emphasise the importance of exports in promoting growth and improving efficiency (Ibid.). Export promotion is expected to boost a developing country’s economy in a number of ways. For example, growing exports enhance domestic productivity by: i) allowing domestic firms to take advantage of the increased economies of scale realised through selling outside of small domestic markets; ii) creating positive externalities for other domestic sectors; iii) exposing domestic firms to international competition; and iv) promoting more efficient utilisation of capacity, capital and other resources (Ibid.). Improved export performance also allows for the accumulation of foreign exchange – which can be used to import capital goods and intermediate inputs required for domestic industry

– and the diffusion of knowledge, technologies and management practices through interactions with foreign buyers and learning by doing (Ibid.). Finally, export growth helps to create a stable macroeconomic environment through increases in employment, labour productivity and improved earning power (Ibid.).

The second reason why the impact of climate change on trade capacity is important in southern Africa is that the intra-regional trade of goods and services provides critical impetus to regional integration efforts on the African continent. While increased intra-regional trade is often considered an outcome of regional integration processes, it is in fact also a driver of such processes (which often involve political and economic aims other than increased trade volumes between regional partners). Indeed, one of the prominent early theories of regional integration, neo-functionalism, viewed the process as one in which the economic cooperation necessitated by increasing trade and economic interdependence between countries spilled over into other areas such as security, finance, individual rights and the environment, thereby deepening and broadening ties between regional partners.

While neofunctionalism may not necessarily provide the most accurate interpretation of regional integration as it is currently being pursued in southern Africa and Africa as a whole, it is undeniable that the promotion of trade between countries in the region has been viewed as an important means to securing enhanced integration in Africa. This can be seen, for instance, in the Abuja Treaty's modalities for establishing an African Economic Community (AEC). The Abuja Treaty explicitly envisioned the establishment of regional economic communities (RECs) throughout the continent and the gradual liberalisation of trade in goods within and between these RECs, many of which have now evolved into free trade areas, and in some cases, customs unions (OAU, 1991).

In order to grow exports to both regional and extraregional trading partners a country needs to be able to both produce and market their goods and services. There are two major channels through which climate change is likely to impede the ability of countries in southern Africa to do so, however. First, climate change in the region is likely to have a number of direct and indirect effects on the productivity of the various economies in the region and in their ability to actually produce goods and services. Second, some of the region's major trading partners, such as the European Union (EU), are likely in the future to

adopt measures aimed at mitigating global climate change, but which also serve as barriers to imports from developing countries such as those in southern Africa.

### *Climate change and productive capacity in southern Africa*

This chapter has already hinted at some of the reasons why global warming and associated climate change may be expected to reduce the capacity of countries in southern Africa to produce the goods and services necessary to engage in international trade. Indeed, there are a number of ways in which climate change and its associated effects could have an adverse and cross-cutting impact on the general productivity of the economies in the region.

First, as indicated above, the effects of future climate change and variability will have negative consequences for human health in southern Africa, which in turn will reduce the size and productivity of the region's workforce. For example, extreme temperatures are likely to increase mortality, especially in large and overcrowded urban areas (Collier et al., 2008). Perhaps more significantly, changes in average temperatures and rainfall patterns will alter the geographical spread of certain diseases such as malaria, dengue fever, meningitis and cholera (CSIR, 2011). Population displacement due to loss of arable land, extreme weather events, rising sea-levels or climate-related conflicts may also serve to reduce the health of the region's populations, as will undernourishment brought on by decreasing crop and livestock yields (WTO-UNEP, 2009).

The health-related impacts of climate change will be particularly significant in southern Africa as much of the region's population is already vulnerable to such health threats. This vulnerability stems from the existing prevalence of diseases such as HIV/Aids and tuberculosis, widespread malnutrition, low education and income levels, poor housing and other infrastructure and limited access to and availability of qualified medical personnel and adequate facilities in the region (CSIR, 2011).

Second, climate change is likely to result in much of southern Africa's physical production and trade infrastructure becoming increasingly at risk from damage due to rising sea levels and an increase in extreme weather events such as flooding and tropical storms. The region's ports, buildings, bridges, railways and, in particular, roads – many of which are unpaved and in very poor condition and thus particularly vulnerable to erosion and flooding



– could all face some threat from the effects of climate change (WTO-UNEP, 2009). Damage to the region’s physical infrastructure will make producing and trading goods more difficult and more costly and will be compounded by the fact that resources which may have been used to upgrade this infrastructure could instead be diverted to address other effects of climate change, such as health crises (CSIR, 2011).

Finally, climate change threatens many of the region’s natural resources, such as wild flora and fauna, firewood and water resources. Some of these are vital inputs into a range of economic sectors and industries, while others are crucial for the livelihood of communities throughout the region. Most significant of these resources is undoubtedly fresh water, which is already scarce in what is a largely semiarid region. Water resources in southern Africa are likely to be threatened by climate change through decreased rainfall and increasingly variable rainfall patterns, increased incidences of flooding, and decreased water quality linked to erosion and higher water temperatures (Ibid.).

The resulting water stress is likely to be exacerbated by changes in land use, poor land use management and political pressures to improve water access for many poor communities in the region (Ibid.). Given the importance of water – and certain other resources such as wood – not only to the general wellbeing of the region’s inhabitants, but also to a number of economic activities in the region, including power generation, manufacturing and agriculture, any climate-change-related depletion in such resources is likely to severely impact the region’s overall productive capacity.

#### *The effect of climate change on agriculture in southern Africa*

In addition to the general effects climate change is likely to have on productivity in southern Africa, it is also likely to impact on specific sectors that are important sources of production and exports in the region. Most significant of these is probably the agricultural sector. In addition to playing a critical role in the region’s formal and informal economies, in sustaining rural livelihoods and in contributing to food security, agriculture in southern Africa is a major source of the region’s exports (Ibid.). It is also, however, the sector which is identified by numerous studies as being the most vulnerable to climate change (WTO-UNEP, 2009). This is due to the fact that agriculture is directly dependent on climatic variables such as

precipitation and temperature, with changes in these variables potentially having significant impacts on agricultural productivity (CSIR, 2011).

It is important to note that the impact of climate change on agricultural productivity is not always necessarily negative. Changing rainfall patterns may result in increased precipitation in certain subregions, as is projected for parts of eastern southern Africa, which in turn could improve agricultural productivity in these areas, especially if they are already semiarid (CSIR, 2011). Similarly, moderate temperature rises in mid- to high-latitude regions could have beneficial effects on agricultural output in these regions (WTO-UNEP, 2009).

Southern Africa, however, is largely a low-latitude region, and in such regions even moderate increases in temperature are expected to reduce agricultural productivity (Ibid.). In addition, much of southern Africa – a region which already experiences low and irregular rainfall – is projected to receive less rather than more rainfall as a result of climate change (CSIR, 2011). A number of socioeconomic and technological challenges in southern Africa also contribute to the vulnerability of agriculture. These challenges are largely related to the high proportion of emerging, small-scale farmers in the region, and include low levels of income and education among farmers, a lack of alternatives to agriculture as an economic activity, fewer capital resources and management technologies and inadequate access to financing and crop insurance (CSIR, 2011; WTO-UNEP, 2009). A lack of irrigation infrastructure in the region also results in high dependence on rain-fed agriculture, increasing vulnerability to changes in precipitation patterns (CSIR, 2011).

Due to these factors, significant adverse impacts on agricultural output are projected for Africa as a result of climate change (WTO-UNEP, 2009). Increased temperatures and changing rainfall patterns are expected to decrease crop productivity through impacts on crop yields, growing locations, the length and timing of growing seasons, water scarcity and an increased need for irrigation, reductions in soil quality and the potential spread of pests and diseases (CSIR, 2011). Increases in the frequency, duration and intensity of floods and droughts will also cause direct damage to crops and, in the case of floods, could result in the loss of agricultural land through soil erosion (WTO-UNEP, 2009).

Crop yields, especially along the edges of semiarid and arid areas, are expected to decrease as a result of climate change, as large areas of marginal agriculture are forced out of

production (Collier et al., 2008). Net crop revenues are also likely to be adversely affected. A number of crops, such as wheat, soybean and maize, are vulnerable to increased temperatures and changing rainfall patterns. Much of southern Africa's maize crop already experiences drought stress on an annual basis, but this situation is likely to deteriorate with climate change and could extend southwards, potentially threatening maize production in parts of Zimbabwe and South Africa (Ibid.).

Livestock production in the region is also expected to suffer as a result of climate change. A hotter and drier climate will impact livestock production through changes in the quality and availability of forage, declining water resources and a potential increase in the prevalence of new animal diseases (WTO-UNEP, 2009). Increasing temperatures and attendant heat stress could also impact livestock productivity by inducing behavioural and metabolic changes which affect feed intake, fertility, weight gain and even mortality (CSIR, 2011). Rising temperatures may also have some positive effects on livestock production, however, in particular, through reducing cold stress on livestock where this is currently an issue, and reducing the energy requirements for feeding and housing livestock in heated facilities (Ibid.).

#### *The effect of climate change on other sectors in southern Africa*

Another important industry in southern Africa particularly vulnerable to climate change is the tourism industry. The export of tourism services plays a vital role for many of the economies in the region, due, in particular, to tourism's ability to create low and semiskilled jobs and its ability to bring in foreign exchange. Much of the region's tourism industry, however, is nature-based and reliant on the conservation of biodiversity, local ecosystems and natural water resources, making it particularly vulnerable to the effects of climate change. Increasing temperatures, changing rainfall patterns, coastal degradation and increased incidences of extreme weather events such as heat waves – which have been associated with an increase in wildfire frequency in certain areas – pose a significant threat to the region's biodiversity and ecosystems (WTO-UNEP, 2009).

These climate change impacts, coupled with the spread of alien invasive species which are advantaged by climate change, will affect the habitats of a large number of species in the region, affecting their distribution and threatening many with extinction (CSIR, 2011). It has

been estimated, for instance, that between 25% and 40 % of mammal species in national parks in Sub-Saharan Africa could become extinct as a direct result of climate change (Ibid.). Rising ocean temperatures and increased wave activity are also often associated with the degradation of coral reefs and an associated loss of marine biodiversity, another major tourist draw in the region. Further climate-change-related damage to the region's various ecosystems, as well as any further loss of biodiversity, will almost certainly have an adverse effect on the region's tourism industry.

Fisheries and forestry are yet two more industries that risk being detrimentally affected by climate change in southern Africa. The region's fishing industry, which is already under pressure from over-fishing, is likely to face further challenges relating to the effects of climate change, as the quality and availability of fisheries habitats are likely to be negatively affected by changes in temperatures and rainfall, damage to the shorelines of lakes and reservoirs and to near-shore marine environments, changes in the timing and duration of extreme weather events and increased water temperatures and ocean acidification (Feris, 2010).

The forestry sector, meanwhile, is vulnerable to climate change due to its dependence on land and water availability and the fact that certain commercial tree species may not be able to cope with projected temperature and rainfall changes (CSIR, 2011). Climate change may also result in certain areas becoming climatically unsuitable for the production of such species, although it is also possible that some areas which had previously been unsuitable for commercial forestry may become suitable as a consequence of regional climate change effects (Ibid.).

#### *Climate change response measures and southern African trade*

The second channel through which climate change is likely to affect the ability of southern African countries to export goods and services involves the adoption by the region's major trading partners of policies and measures aimed at mitigating climate change. While such measures often reflect a genuine need to respond to legitimate environmental and climate-change-related concerns, many of them may have very real and detrimental effects on international trade flows, and, in particular, on flows of goods from developing countries to their major markets in the industrialised world.

When taking ‘embodied carbon’ – the sum total of carbon emitted in the production of a good – into account, industrialised countries are generally net importers of carbon emissions, while developing countries are generally net exporters. As more and more global manufacturing and other industrial activity shift to the developing world, this trend is likely to continue, if not increase, at least in the short to medium term (Lee et al.). Industrialised countries are increasingly seeking to use measures such as border carbon adjustments or product standards and labelling regulations to address issues such as embodied carbon and the relocation of carbon-intensive industries to countries with laxer regulatory regimes.

Measures such as these are likely to act as barriers to the flow of goods from developing countries – many of which have not made significant efforts to reduce carbon emissions in domestic industries – to the developed world. This ‘climate protectionism’ threatens the export of non-traditional developing country goods such as manufactures and higher-value agricultural products. For example, border carbon adjustments may impede carbon-intensive manufactures from countries such as South Africa, while product and labelling standards act as a barrier to the export of speciality vegetables and cut flowers from countries such as Kenya (Ibid.).

#### *Border carbon adjustments*

In the absence of a concerted multilateral effort to reduce GHG emissions, some industrialised economies are taking steps to introduce schemes aimed at curbing the emissions of their own firms. In particular, the likes of the EU and the United States (US) have already undertaken, or are currently exploring, the implementation of domestic carbon taxes or emissions-trading schemes. Both measures aim to achieve a reduction in carbon emissions (which make up by far the greatest part of all GHG emissions) through pricing carbon and forcing domestic firms to bear the cost of their own emissions. Carbon taxes do so by introducing a direct per-unit cost for such emissions, while emissions-trading schemes, often termed ‘cap-and-trade’ schemes, involve the introduction of absolute limits on carbon emissions and the allocation of tradable permits granting the right to emit a specific volume of carbon.

Policy makers introducing such carbon pricing measures face increasing political pressure from domestic carbon-intensive industries to prevent the possibility of what has become

known as ‘carbon leakage’. Carbon leakage refers to instances when domestic carbon pricing schemes incentivise the relocation of carbon-intensive firms and industries from economies that impose such measures – which generally increase production costs – to those that do not impose any such costs on carbon emissions. This potentially results in a loss of domestic industries and jobs, but does little to bring about a reduction in overall global emissions (WTO-UNEP, 2009).

Despite the fact that studies have shown the cost of compliance with such measures to be a relatively minor component of overall production costs, it appears increasingly likely that faced with pressure from influential domestic firms, policy makers in many parts of the industrialised world will adopt some type of border carbon adjustments (BCAs) in order to level the playing field for their domestic industries *vis-à-vis* foreign industries which do not face domestic measures imposing costs on carbon emissions (Ibid.). BCAs generally involve either: i) the application of additional import charges or tariffs on products which are similar to domestically produced products subject to a domestic carbon tax; ii) a tax on the carbon embodied in imported energy sources equivalent to that levied on domestic energy sources containing carbon; or iii) a requirement on foreign exporters to purchase emission rights for the carbon embodied in their products in order to meet certain offset requirements (Feris, 2010).

Given the potential protection BCAs would provide to certain domestic industries, there has been some debate as to whether BCAs would violate WTO trade rules. It appears, however, that such measures would be permissible under the WTO’s General Agreement on Tariffs and Trade (GATT) as long as they are applied to all relevant goods, regardless of origin, are not based on differences in non-product-related process and production methods, and do not impose costs in excess of those levied on domestic like goods (Du Plooy & Jooste, 2011). Nevertheless, while BCAs are likely to be permissible under WTO rules, their potential introduction has proven politically controversial due to the effect such measures are predicted to have on the exports of developing countries in particular.

For many developing countries, including most of those in southern Africa, industrial economies such as the EU and the US are vitally important export markets. The adoption of BCAs by these economies would almost certainly involve the imposition of additional border

tariffs on imports from a number of developing countries. The introduction of BCAs by, for instance, the EU – southern Africa’s largest export market – could have an adverse effect on southern Africa’s exports of certain carbon-intensive goods. The impact of such measures, however, is likely to be felt differently by different countries within the region. This is because some countries in southern Africa do not produce and export significant quantities of the types of carbon-intensive products, such as iron and steel, which are likely to be the subject of BCAs. On the other hand, a number of southern African countries, including Botswana, South Africa and Zambia, are heavily reliant on the export of carbon-intensive goods such as minerals and metals.

The country in the region most likely to be affected by BCAs is undoubtedly South Africa, by far the region’s largest and most industrially diversified economy. Due to its reliance on coal-generated power and its numerous energy-intensive industries such as mining, petrochemicals and metals fabrication, South Africa has one of the most carbon-intensive economies in the world (ibid.). The country is the largest emitter of GHGs in Africa, accounting for around 40% of the continent’s total emissions and about 1.5% of global emissions, and has one of the highest *per capita* emissions intensities in the developing world (Chevallier, 2010).

South Africa would in all likelihood be significantly adversely affected by EU BCAs, as these would almost certainly affect South Africa’s exports of carbon-intensive products such as coal, chemicals, paper, iron, steel, copper products and aluminium, which together comprise a large proportion of the country’s exports to the EU, its major export market (Read, 2010). The resulting impact on South Africa’s economy could also potentially have implications for other economies in southern Africa, especially given South Africa’s economic importance to the region (Chevallier, 2010).

#### *Standards and labelling regulations as barriers to southern African trade*

BCAs are not the only climate change response measures which could negatively affect southern Africa’s trade, however. Increasing pressure from consumers in developed countries may lead to the adoption in these countries of various product standards or labelling schemes, which could also have a detrimental effect on exports from southern Africa. Product standards and labelling requirements have often been used to address

market information failures and could become commonly used to address climate-change-related information issues such as the embodied carbon, energy efficiency and ‘food miles’ pertaining to certain imported goods (Lee et al., 2010).

‘Carbon labelling’ is one version of such schemes. Carbon labelling involves the measurement of carbon emissions from the production of a product or service and the conveying of that information to consumers (Brenton et al., 2009). The idea behind carbon labelling is that it provides consumers with the opportunity to exercise their desire to do something about climate change by purchasing goods with lower levels of embodied carbon than other like products. In so doing it provides an incentive to producers to reduce their carbon footprint (Ibid.).

Such schemes may have a negative impact on exports from low-income developing countries, however, as exporters in these countries – many of which are very small operations – often simply do not have the resources required to obtain the measurements and certification usually required to participate in carbon labelling and other such schemes (Ibid.). In addition, many developing countries, such as those in southern Africa in particular, are geographically situated far from their major export markets. This means that they depend on long-distance transportation of their exported goods, adding to the carbon footprint of the final product (Ibid.).

This last point is the source of the frequently mentioned and often contentious ‘food miles’ issue. Not that much is known about the exact structure of carbon emissions throughout international supply chains involving developing country exporters of agricultural and other products, but studies suggest that emissions patterns are highly complex (Ibid.). It may be the case, for instance, that favourable production conditions more than offset disadvantages related to geographical distance from export markets. This is true for Kenyan roses air-freighted to Europe, which have been shown to embody lower carbon emissions than roses produced in the Netherlands where significantly greater amounts of energy are required in the cultivation process (Ibid.)

It may be the case therefore that certain developing country exporters could, in fact, benefit from carbon labelling and other related standards and labelling schemes involving issues such as energy efficiency. What is clear, however, is that if exporters in southern Africa are



to benefit from such schemes – or at least not be significantly adversely affected by them – effort must be put into assisting these exporters to access the technologies, information and processes required in order to participate successfully in such schemes. If such assistance is not forthcoming, many of the region’s relatively small-scale exporters are likely to experience climate change-related standards and labelling schemes as barriers to accessing their traditional export markets.

## **6. Conclusion**

Significant consensus within the scientific and policy communities suggests that climate change is a global phenomenon that humans cannot afford to ignore. Although the nature of climate science is such that it is difficult to predict future climate changes with precision and absolute certainty, the projections from the most reliable existing climate models are that the effects of climate change are likely to be spread unevenly across the globe. Southern Africa is one of the regions that is projected to be hardest hit by rising temperatures, changing rainfall patterns and increasing bouts of extreme weather. Furthermore, these changes will have a profound impact on the region, given southern Africa’s current lack of capacity for climate change adaptation.

This chapter has argued that one important effect of future climate change in southern Africa will be the impact it has on the region’s ability to produce and trade goods and services. Not only will climate change impact directly on the region’s productive capacity, but measures adopted by the region’s major trading partners to deal with climate change could also end up acting as barriers to exports from southern Africa. Moreover, this dampening effect on southern Africa’s trade could easily serve to harm the region’s development and regional integration prospects. This is yet another reason why climate change is such an all-encompassing issue and why those who have an interest in regional integration and economic development in southern Africa should work to improve the region’s capacity to adapt to climate change and to deal with its likely effects.

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## *Chapter 2*

### **Climate change and human security: relevant for regional integration in SADC?**

*Oliver C. Ruppel and Katharina Ruppel-Schlichting*

#### **1. Introduction**

The Southern African Development Community (SADC) has completed 20 years of its existence.<sup>1</sup> During this period, climate change<sup>2</sup> has made itself apparent in powerful ways. From observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level it is evident that warming of the climate system is unequivocal (IPCC, 2007c: 2). As such, the phenomenon of climate change continues to be the subject of scientific and political debate. But how are climate change related concerns embedded in the legal and policy framework of SADC? Two of the objectives behind the establishment of SADC are the acceleration of development and economic growth, and the achievement of sustainable utilisation of natural resources and effective protection of the environment. The attainment of these objectives is hampered and will continue to be hampered by the impacts that climate change has on the environment, the people and the economy in the region.

Southern Africa is home to a large number of poor people; and although poverty in proportionate terms has been declining in most SADC countries, food insecurity, poverty and malnutrition remain a major challenge to socioeconomic development in SADC (SADC, 2011b: iii). Climate change can be considered to be one of the relevant drivers in this regard. The Intergovernmental Panel on Climate Change (IPCC) in its Fourth Assessment Report states that one example for current and possible future impacts and vulnerabilities

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<sup>1</sup> SADC was established in Windhoek in 1992 as the successor organisation to the Southern African Development Coordination Conference (SADCC), which was founded in 1980. SADC currently counts 15 states among its members, namely Angola, Botswana, the Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, the Seychelles, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe.

<sup>2</sup> The definition for climate change which is used for the purpose of this paper is that of the IPCC according to which '[C]limate change refers to a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings, or to persistent anthropogenic changes in the composition of the atmosphere or in land use'. Cf. IPCC (2007c: Annex II).

associated with climate variability<sup>3</sup> and climate change for southern Africa is that food security, already compromised by a number of factors such as HIV/AIDS, poor governance and poor adaptation is likely to be further aggravated by climate variability and change (Boko et al., 2007: 451). Climate change is thus going to add to the already precarious conditions of people within SADC, mostly the poor and vulnerable, which poses a major development challenge for all SADC countries. Moreover, climate change has and will have severe implications for the region's biodiversity on which mostly the poor, and more importantly women, depend for their survival (Ruppel, 2011a: 313). Assessments of water availability, including water stress and water drainage, show that parts of southern Africa are highly vulnerable to climate variability and change (Boko et al., 2007: 451). Taking into consideration that large parts of the agricultural production derive from rainfed production systems susceptible to droughts and floods, the possible impacts of climate change cannot be overemphasised. 70% of the population in the region depend on agriculture for food, income and employment and the agricultural sector contributes to more than 35% of the SADC regional economy (SADC, 2011c: 23).

The aforementioned and many other factors are related to some of the aspects of the encompassing concept of human security, which is severely affected by the impacts of climate change. Seeing that SADC countries have a number of shared identities, regional cooperation has the potential and the responsibility to contribute to mitigating and adapting to the effects of climate change and to enhance human development and poverty reduction in all countries of the region.

From 28 November 2011 to 9 December 2011 the 17th Conference of the Parties (COP 17) to the United Nations Framework Convention on Climate Change (UNFCCC) and the 7th Session of the Conference of the Parties serving as the Meeting of the Parties (MOP 7) to the Kyoto Protocol were held in Durban, South Africa. Already before this meeting it had become very clear that SADC and the African continent needed to push the opportunities presented under climate change negotiations to better achieve development aspirations as climate

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<sup>3</sup> According to the IPCC, '[C]limate variability refers to variations in the mean state and other statistics (such as standard deviations, the occurrence of extremes, etc.) of the climate on all spatial and temporal scales beyond that of individual weather events. Variability may be due to natural internal processes within the climate system (internal variability), or to variations in natural or anthropogenic external forcing (external variability)'. Cf. IPCC (2007c: Annex II).

change prompts significant questions about justice and distribution, also for and within the SADC region (Ruppel et al., 2011). In this context, the draft decision -/CP.17, the so-called Durban Platform for Enhanced Action by the Conference of the Parties, sensibly recognises 'that climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires to be urgently addressed by all Parties, and acknowledging that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response [...]'.<sup>4</sup>

## **2. Human security and climate change: the nexus**

The issue of human security has already been addressed by the founders of the United Nations. However, a milestone of the development of today's concept of human security was the Human Development Report of the United Nations Development Programme in 1994, which formulated new dimensions of the idea of human security (UNDP, 1994: 24). According to this report, the concept of human security is established on two pillars: the 'freedom from fear' factor focuses on protecting individuals from violent conflicts and from denial of civil liberties and ensures freedom of expression and belief. The 'freedom from want' factor emphasises satisfying the basic needs of individuals for food, shelter and clothing. A human security approach focusing on people as the prime referents of security is increasingly being integrated into policy making and jurisprudence (Abass, 2010).

Seven broad interdependent components of human security were originally identified: economic security, food security, health security, environmental security, personal security, community security and political security. Climate change has impacts on all these components of human security, either directly or indirectly, as will be outlined in the following paragraphs.

It has been stated that 'in no other continent are threats to human security more dire and the absence of protection infrastructure more conspicuous, than in Africa' (Abass, 2010). Undoubtedly, this assessment also applies to climate change related threats to human security. It should be pointed out beforehand that, despite Africa's relatively low

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<sup>4</sup> Cf. [http://unfccc.int/files/meetings/durban\\_nov\\_2011/decisions/application/pdf/cop17\\_durbanplatform.pdf](http://unfccc.int/files/meetings/durban_nov_2011/decisions/application/pdf/cop17_durbanplatform.pdf).

contribution to the world's total greenhouse gas (GHG) emissions, Africa is one of the most vulnerable continents to climate change and climate variability (Boko et al., 2007: 435). Climate change is expected to have impacts on various sectors including water, energy, health, agriculture, ecosystems, coastal zones, tourism, settlements, industry and infrastructure. But particularly, climate change and variability have the potential to impose additional pressures on human security along with many socioeconomic factors and to overwhelm adaptive capacities of societies in many world regions, including southern Africa. Interrelating issues between climate change and human security include water stress, land use and food security, natural disasters and environmental migration, to name but a few.

### **3. Impacts of climate change on various components of human security: some hotspots**

The most direct link between climate change and threats to human security is probably the aspect of environmental security, which aims to protect people from the short- and long-term ravages of nature, man-made threats in nature, and deterioration of the natural environment (Bantekas, 2010). Other environmental threats include non-access to clean water resources and air pollution. One major environmental security issue is global warming, caused by the emission of greenhouse gases.

The ultimate damages of climate change may significantly affect economic growth (Lecocq and Shalizi, 2007). The nature of impacts on economic security as one aspect of human security is manifold. Economic security requires an assured basic income for individuals, usually from productive and remunerative work or, as a last resort, from a publicly financed safety net' (UNDP, 1994). The impacts of global warming on the agricultural sector in Africa are probably of most direct and profound nature. Water scarcity for example has a direct impact on many economic development initiatives on the agricultural sector which is undoubtedly an important sector in the economies of Africa, particularly for those, which are not oil-exporting. Climate change has economic impacts on crop and livestock farming systems; warmer and drier climates adversely affect net farm revenues translating into worsening food security situation in the region (Nhemachena et al., 2010).

Another important component of human security is food security, which implies that all people should have access to sufficient, safe and nutritious food at all times (cf. FAO, 1996).

The Food and Agricultural Organisation (FAO) has estimated that in sub-Saharan Africa, the proportion of undernourished in total population accounted for 27% in the period from 2006–08 (FAO, 2011) and undoubtedly, climate change plays a major role in this context. Although the extent and nature are uncertain, increasing temperatures and declining precipitation in Africa resulting from climate change are likely to reduce yields for primary crops in the next two decades, changes, which will have a substantial impact on food security in Africa (Boko et al., 2007). Periods of droughts and floods will have an impact on food availability, food access, and on nutrient access (Ziervorgel et al., 2006). It is predicted that the impacts of climate change such as sea-level rise, droughts, heat waves, floods and rainfall variation, could by 2080 push another 600 million people into malnutrition and increase the number of people facing water scarcity by 1.8 billion (UNDP, 2008). Although the overall cereal production in SADC has increased in recent years, the number of people requiring food and non-food assistance in SADC is estimated to be 4.04 million (SADC, 2011b: 3f.). Climate related factors<sup>5</sup> that have contributed to food insecurity include erratic rainfall, dry spells and floods.

Health security aims to guarantee a minimum protection from diseases and unhealthy lifestyles. Africa is particularly vulnerable with regard to health security as threats to health security are usually greater for poor people in rural areas, particularly children, due to malnutrition and insufficient access to health services, clean water and other basic necessities. Major killer diseases could expand their coverage as a result of global warming. For example, an additional 220 – 400 million people could be exposed to malaria – a disease that already claims around 1 million lives annually (UNDP, 2008). Other examples for climate change related threats to health security include the threat of a further spread of other infectious diseases such cholera and meningitis.

Personal security aims to protect people from physical violence by states or individuals, while community security is concerned with protecting people from the loss of traditional relationships and values and from sectarian and ethnic violence. Political security addresses the question as to whether people live in a society that honours their basic human rights. All

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<sup>5</sup> Further drivers regarding the vulnerability to food insecurity are high prices of fuel; high staple food prices; high prices of agricultural inputs; low incomes; low prices for some of the cash crops; civil unrest in eastern and central DRC; outbreak of livestock diseases and wildlife and human conflict in Namibia, Tanzania, Botswana and Angola (SADC 2011b: 5ff).



these factors are of relevance in terms of violent conflicts and migration. War and conflict are undoubtedly political reasons for migration. The effects of global warming could lead to increased border tensions and conflicts over food and water. The question whether a direct linkage exists between climate-related environmental variability and conflict has attracted much attention and debate. There seems to be consensus, however, in that the environment is only one of several interconnected causes of conflict and is rarely considered to be the most decisive factor (Kolmanskog, 2010). Environmentally induced migration<sup>6</sup> due to the effects of climate change is closely related to the concept of human security. People migrate either temporarily or permanently, within their country or across borders, and have an environmental signal in their reason for migration. Besides low-lying islands and coastal and deltaic regions, sub-Saharan Africa is one of the regions that would be affected by such population movements (Gemenne, 2011). Environmental reasons for migration refer not only to environmental changes but also to natural disasters like floods or droughts. Three types of impacts of climate change on migration have been identified that seem most likely to have an effect on migration patterns: extreme weather events, sea-level rise and water stress (Gemenne, 2011).

The total number of displaced people in Africa increased from 697,066 in 2008 to 1,1 million in 2009, and 1,7 million in 2010 (IDMC, 2011). To estimate the number of people who migrated for climate change related reasons would, however, be speculative, as migration drivers are usually not monocausal but influenced by multiple factors (Smith et al., 2011). Besides war and conflict and environmental factors, further reasons for migration include socioeconomic reasons, for example finding employment, escaping famine or being close to the family as well as institutional settings like intra-household structures, which may determine the gender aspect of migration (Grote and Warner, 2010).

Climate change impacts on size and characteristics of rural and urban human settlements in Africa. The problems associated with voluntary or involuntary environmentally induced migration to Africa's large and intermediate cities will exacerbate as a result from climate change (Ruppel, 2011c). Migration flows can be observed away from flood-prone localities,

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<sup>6</sup> The terminology with regard to environmentally induced migration is varying and inconsistent (see Warner et al., 2010) and creates conflicts of a legal nature, when it comes to the question as to whether or not a person can be classified as a refugee with the legal consequences of international refugee law.

as well as potentially large-scale internal and cross-border mobility away from agricultural zones undermined by changing climatic conditions or declining water availability (UN-Habitat and UNEP, 2010). Environmental and climatic stress not only raises existing inequalities between rich and poor, it also contributes to rural-urban migration on the African continent (Scheffran and Battaglini, 2011). In sub-Saharan Africa, climatic change is considered to be an important determinant of urbanisation growth and climatic conditions push people out of rural/agricultural areas to urban areas (Barrios et al., 2006). African agriculture relies heavily on rainfall for watering crops. The declining rainfall, droughts and floods have the potential of rendering agricultural lands unproductive or making rural settlements inhabitable, which in turn affects the livelihoods of rural residents, forcing them to migrate to the urban areas (Hope, 2011). As a result, African large and medium-sized cities experience extreme population growth. In 2009, almost 40% of Africa's total population of one billion lived in urban areas and it is estimated that by 2030, Africa's collective population will become 50% urban and 60 per cent by 2050 respectively (UN-Habitat and UNEP, 2010).

Africa counts 37 cities with populations above one million, half of which are within low elevation coastal zones. Low-lying cities located on lagoons, estuaries, deltas or large river mouths, such as Maputo or the Cape Flats area of Cape Town are particularly vulnerable to extreme weather events caused by climate change. They are likely to experience storm surges, sea-level rises, increased flooding, (semi-)permanent inundation, coastal erosion, landslides, and the increase of water-borne diseases, which may all have devastating effects on human settlements, especially if no measures have been taken to ensure risk reduction in terms of urban planning, land-use management and the quality of housing and infrastructure (Mosha, 2011). In this regard, the high risk for low-lying urban slums has to be pointed out. Although the proportion of urban slum dwellers is decreasing, informal settlements remain one of the major threats to African urban stability and, by extension, to overall political stability (UN-Habitat and UNEP, 2010). African inland cities are quite exposed higher ambient temperatures and more frequent heat waves, with potential risk of water shortages, damage to infrastructure, and desiccating vegetation, due to the impacts of climate change.

Climate change not only affects populations; increased flooding, more frequent severe storms and rising sea levels increasingly influence the integrity of the built environment

including the supporting infrastructure consisting, amongst others, of roads, transport, water supply, sewers, energy, electrical grids, and telecommunications. Depending on their location and nature of construction, buildings and supporting infrastructure are vulnerable to flooding and other extreme weather events, which increase the likelihood of landslides and building subsidence, especially on clay soils, requiring enhanced construction and infrastructural standards for resistance for initial protection, such as raising foundations of buildings, strengthening roads and increasing storm water drainage capacity (UN-Habitat and UNEP, 2010; Mosha, 2011).

#### **4. The role of regional integration**

The role that regional integration can play with regard to the impacts of climate change is as multifaceted as the concept itself. With reference to the Cotonou Partnership Agreement it has been proposed to define regional integration as ‘the process of overcoming, by common accord, political, physical, economic and social barriers that divide countries from their neighbours, and of collaborating in the management of shared resources and regional commons’ (CEC, 2008: 3). The process of regional integration is thus characterised by arrangements for enhancing cooperation through regional rules and institutions entered into by states of the same region. Particular cornerstones of regional integration within SADC are guided by the objectives as laid down in the constitutive legal document of the SADC, the SADC Treaty, which in its Article 5(a) identifies regional integration as a tool to ‘achieve development and economic growth, alleviate poverty, enhance the standard and quality of life of the people of southern Africa and support the socially disadvantaged’. With climate change being a complex and highly versatile phenomenon, this and further objectives of SADC,<sup>7</sup> are all relevant in terms of climate change and human security.

Some broad aspects of regional integration and their role in climate change mitigation and adaptation should be highlighted.

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<sup>7</sup> As listed in Article 5: ‘evolve common political values, systems and institutions; promote and defend peace and security; promote self-sustaining development on the basis of collective self-reliance, and the interdependence of Member States; achieve complementarity between national and regional strategies and programmes; promote and maximise productive employment and utilisation of resources of the Region; achieve sustainable utilisation of natural resources and effective protection of the environment; strengthen and consolidate the long standing historical, social and cultural affinities and links among the people of the Region’.

Economic development is probably at the core of most regional integration initiatives, including SADC. The free movement of capital, labour, goods and services spur economic growth more effectively in larger and more harmonised markets. But what is the impact of international trade on the environment and our climate in particular and vice versa? The general debate about 'trade versus environment' has been subject to many polarising viewpoints (UNEP, 2005). What can be stated right out, however, is that trade has contributed to the development of today's industrialised nations and can be expected to further contribute to the economies of less developed countries, including African economies. Furthermore, it is beyond doubt that economic growth as a result from trade carries the risk of environmental degradation, particularly through but not limited to the production of goods and emissions resulting from to water, air and land. With regard to climate change, the IPCC in its last Assessment Report (IPCC, 2007b: 10) states that '[M]ost of the observed increase in global average temperatures since the mid-20<sup>th</sup> century is very likely due to the observed increase in anthropogenic GHG concentrations'. The different sectors which contributed to the total anthropogenic GHG emissions in 2004 in terms of CO<sub>2</sub> include energy supply (25,9%), industry (19,4%), forestry (17,4%), agriculture (13,5%), transport (13,1%), residential and commercial buildings (7,9%) and waste and wastewater (2,8%) (Rogner et al., 2007: 105) and are in one way or another all related to economic development resulting from trade. Vice versa, climate change has the potential to negatively affect the ability to trade due to direct and indirect impacts on the productive capacity, particularly on the agricultural sector in Africa due to climate change related water stress, as the area suitable for agriculture and the length of the growing seasons and yield potential, particularly along the margins of semi-arid and arid areas, are expected to decrease' (IPCC, 2007a: 13). The two-way relationship between economic development and climate change, however, not only becomes apparent in terms of the negative effects, which one might have on the other, but in fact, cross-fertilisation between trade and climate change regimes may create synergy effects, potentially beneficial for both, in economic development and climate change mitigation and adaptation.

The stimulation of growth and income levels, for example, potentially enable nations to have opportunities to generate additional resources to address climate change related issues more effectively. The increasing awareness about the negative effects of climate change and

the ongoing communication among international institutions as well as the public dialogue necessarily lead to the rethinking and eventually to adjustments of traditional frameworks. These also lead to fruitful discussions, for example, on new trade and climate change related measures such as carbon labelling or similar standards or regulations or on the imposition of border carbon adjustments, which impose border taxes on the embodied carbon of imported goods, set at the level of equivalent domestic taxes.

Regional integration furthermore provides an opportunity to enhance political stability by establishing regional organisations which play an increasing role in defusing conflicts within and between countries and in promoting human rights. In terms of climate change related matters, such organisations are of the utmost relevance, especially when it comes to climate change related disaster management and environmentally induced migration. In this context, regional integration may serve as a tool to maintain political stability by building trust, enhancing understanding between groups and deepening interdependence.

Regional cooperation in climate change related matters including knowledge and technology transfer is another important link between regional integration and climate change. Besides climate change per se, such cooperation can address further interrelated challenges of a trans-national dimension such as food security, biodiversity, natural resources, and disease and pest control. One example in this regard is the considerable hydroelectric, solar and wind energy potential that exists in southern Africa. Since several SADC countries share relevant resources, such as cross-border river basins, a regional approach is best suited to attract respective investment.

In the light of the fact that the global village with international trade as one foundation has become a reality, it is commendable, that the ‘trade versus environment’ debate has shifted towards the concept of mutual supportiveness between trade and environment or trade and climate change respectively, even though it might – at a first glance – appear to be a forced marriage. Despite many uncertainties which may still surround the risks associated with climate change, it is undisputable that climate change is one of the greatest challenges of our time, which is not only reflected by many international agreements but has also been

emphasised by various political,<sup>8</sup> religious<sup>9</sup> and economic<sup>10</sup> leaders and heads of international organisations<sup>11</sup> and last but not least by the SADC Summit in August 2011 (SADC, 2011a). It is therefore of particular relevance to analyse how SADC links its regional integration agenda to climate change related issues.

## 5. SADC climate change agenda?

It should be stated in advance that as of yet, SADC does not have a specific agenda on climate change per se,<sup>12</sup> though several of its provisions address climate change either directly or indirectly, and the current institutional structure supports climate change related action to a certain extent.

As briefly sketched in the above paragraphs, interrelating issues pertaining to climate change include water stress, land degradation, food security, health security and environmentally induced migration amongst many others. As such, the negative effects of climate change, and thus climate change adaptation and mitigation, must be analysed against the backdrop of SADC environmental law in its entirety. Although the number of climate change related programmes and initiatives<sup>13</sup> is increasing in SADC, much still needs to be done in SADC when it comes to the implementation and enforcement of policy and law.

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<sup>8</sup> E.g. Jacob Zuma, Address to the Informal Ministerial Consultations on COP17 on 9 September 2011: see <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=21490&tid=42441>; Barack Obama and Hu Jintao of China in a joint statement on 19 January 2011 (available at <http://www.whitehouse.gov/the-press-office/2011/01/19/us-china-joint-statement>); Angela Merkel on 24 January 2007 at the World Economic Forum in Davos (see [http://www.bundesregierung.de/nn\\_916176/Content/DE/Bulletin/2007/01/07-3-bk-davos.html](http://www.bundesregierung.de/nn_916176/Content/DE/Bulletin/2007/01/07-3-bk-davos.html)).

<sup>9</sup> 'Preservation of the environment, promotion of sustainable development and particular attention to climate change are matters of grave concern for the entire human family' (Pope Benedict XVI, Letter to the Ecumenical Patriarch of Constantinople on the Occasion of the Seventh Symposium of the Religion, Science and the Environment Movement, 2007. Available at [http://www.vatican.va/holy\\_father/benedict\\_xvi/letters/2007/documents/hf\\_ben-xvi\\_let\\_20070901\\_symposium-environment\\_en.html](http://www.vatican.va/holy_father/benedict_xvi/letters/2007/documents/hf_ben-xvi_let_20070901_symposium-environment_en.html)).

<sup>10</sup> E.g. Bill Gates, chairman and former chief executive of Microsoft at the occasion of the launch of the report titled *A Business Plan for America's Energy Future* on 10 June 2011: 'The world faces many challenges, but none more important than taking immediate and decisive action to develop new, inexpensive clean-energy sources that avoid the negative effects of climate change'.

<sup>11</sup> Including United Nations Secretary-General Ban Ki-moon at the opening of the United Nations General Assembly on 23 September 2009; and jointly by Pascal Lamy, Director-General of the WTO, and Achim Steiner, Executive Director of UNEP in the joint report by the WTO and UNEP on *Trade and Climate Change* in 2010.

<sup>12</sup> The SADC Climate Service Centre is still very weak in terms of capacity.

<sup>13</sup> An overview of subregional climate change programmes in Southern Africa can be found in Chishakwe (2010).

The SADC region is particularly vulnerable with regard to the impacts of climate change as it is one of the poorest in the world and has experienced unusual weather patterns over the past years in terms of drought and flooding (Haensler et al., 2010: 2). This has *inter alia* lead to destruction, loss of crops, livestock and settlements, as well as to displacement and, concomitantly, to an increase in poverty. Predicted impacts associated with temperature increases include a further rise in sea levels, changes in precipitation patterns, and the resultant threat to food security and sustainable development in general, with more people being caught up in the poverty trap – especially in developing countries whose economies are particularly sensitive and vulnerable. It is also expected that the ‘water side’ of climate change is likely to generate a significant impact on national and global economies; and it is not unlikely that this will result in increased local and international conflict (Scholtz, 2010). The interconnectedness and interdependence of water, energy, national welfare and international economies becomes clearer, as climate change progresses around the world.<sup>14</sup>

In the forest sector, SADC member states have decided in a participatory process to develop a programme that addresses the common problems of deforestation and degradation in the region and to formulate joint climate change mitigation measures in order to contribute to the sustainable management of the forests within SADC and to promote poverty reduction and sustainable development. To this end, SADC ministers responsible for Environment and Natural Resources Management have approved the SADC Support Programme on Reducing Emission from Deforestation and Forest Degradation (REDD+)<sup>15</sup>, a programme to support member states in their efforts to combat climate change and achieve their development goals through reduced emissions in the forestry sector. A comprehensive framework for the region to actively participate in and benefit from the carbon market is provided, which will contribute to the social and economic development in the ember states.

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<sup>14</sup> This has for example been addressed at the 32nd SADC Energy Ministers Meeting held in Gaborone, Botswana in May 2011, where Isak Kitali emphasised that the SADC region needed to seriously address the challenges of the diminished surplus power generation capacity. It was also stated that there was need to ensure that the solutions that are pursued will result into sustainable energy development in the region. See <http://www.sadc.int/news/32nd-sadc-energy-ministers-meeting/>.

<sup>15</sup> The programme was approved during the SADC Ministerial Meeting in Windhoek, Namibia on 26 May 2011. See <http://www.sadc.int/REDD/index.php/document-bank/documents/>.

In the absence of a clear climate change agenda on SADC level it is commendable that the SADC Summit<sup>16</sup> underscored the importance of the multilateral dialogue in addressing challenges posed by climate change.

## 6. Relevant SADC law

The SADC Treaty as amended by the SADC Amendment Treaty is the constitutive document from which all subsequent instruments are derived. Ensuing legal instruments are the SADC protocols<sup>17</sup> and legally non-binding instruments such as memoranda of understanding<sup>18</sup>, other agreements<sup>19</sup> and charters<sup>20</sup> and pacts<sup>21</sup>.

In view of the heterogeneity of SADC member states in terms of surface area, population figures, size of the domestic markets, per capita incomes, the endowment with natural resources, the social and political situation, but also the variety of legal systems applied (Ruppel-Schlichting & Ruppel, 2011:305-307), it is of increasing significance for SADC member states to harmonise the law by means of implementation and transformation of SADC protocols aiming to reduce or eliminate the differences between national and SADC community law (Ruppel, 2011 b: 62ff).

### 6.1 The SADC Treaty

SADC was established by signature of its constitutive legal instrument, the SADC Treaty.<sup>22</sup> In terms of SADC community law, the SADC Treaty is the highest source of law within SADC's legal framework. In its preamble, the SADC Treaty determines, *inter alia*, to ensure, through common action, the progress and well-being of the people of southern Africa, and recognises the need to involve the people of the SADC region centrally in the process of

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<sup>16</sup> At the 31st Ordinary Summit of SADC Heads of State and Government held in August 2011 in Luanda, Angola.

<sup>17</sup> SADC protocols are legal instruments of implementation of the SADC Treaty and it is required that two-thirds of member states ratify a protocol before it becomes legally binding.

<sup>18</sup> A Memorandum of Understanding (MoU) is a preliminary legal document describing an agreement between parties.

<sup>19</sup> An agreement is a less formal document dealing with a more specific subject, or narrower range of issues, than a protocol. It is generally used for outlining technical or administrative areas of cooperation. One such example is the Agreement on the Establishment of the Zambezi Watercourse Commission.

<sup>20</sup> A charter is a document incorporating an institution and specifying its rights, privileges and responsibilities. It usually includes the set of principles that form the constitution of the organisation.

<sup>21</sup> A pact is similar to an agreement, although its contents are usually defence or security related.

<sup>22</sup> The consolidated text of the SADC Treaty as amended is available online at <http://www.sadc.int/english/key-documents/declaration-and-treaty-of-sadc/>.



development and integration. SADC envisages ‘... a common future, a future in a regional community that will ensure economic well-being, improvement of the standards of living and quality of life, freedom and social justice, and peace and security for the peoples of southern Africa. This shared vision is anchored on the common values and principles and the historical and cultural affinities that exist between the peoples of southern Africa.’<sup>23</sup>

To this end, SADC’s objectives include the achievement of development and economic growth, the alleviation of poverty, the enhancement of the standard and quality of life, support of the socially disadvantaged through regional integration, the evolution of common political values, systems and institutions, the promotion and defence of peace and security, and achieving the sustainable utilisation of natural resources and effective protection of the environment.<sup>24</sup> Amongst other issues, food security, land and agriculture as well as natural resources and the environment have been identified as areas of cooperation by the SADC Treaty (Article 21.3).

## **6.2 The SADC protocols**

Besides the aforementioned general provisions and objectives in the SADC Treaty, the SADC legal regime becomes responsive to climate change related concerns in various other legal instruments as well. One category of such documents constitutes the SADC protocols. The protocols are instruments by means of which the SADC Treaty is implemented, and they have the same legal force as the SADC Treaty itself. The protocols of particular relevance for climate change will briefly be introduced in the following paragraphs.

### **6.2.1 The Protocol on Energy**

Energy is a defining issue and closely linked with key contemporary global challenges in the SADC region: social development and poverty alleviation, environmental degradation, climate change, food security, etc. Energy efficiency plays an important role in sustainable growth and development. Better energy efficiency can produce substantial benefits both for global economic growth and poverty reduction as well as for mitigating climate change. In

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<sup>23</sup> For SADC’s vision, see <http://www.sadc.int/>.

<sup>24</sup> These are some of the SADC objectives laid down in Article 5 of the SADC Treaty.

the household sector, improved energy efficiency can directly reduce household expenditures on energy services, and therefore directly help to reduce poverty.

The Protocol on Energy<sup>25</sup> strives to outline means of cooperation in the development of energy to ensure security and reliability of energy supply and the minimisation of costs. The protocol does not explicitly refer to climate change. However, it is emphasised that development and use of energy must be environmentally sound (Article 2.8). To achieve this objective, the Guidelines for Cooperation annexed to the protocol *inter alia* propose cooperation in the development and utilisation of energy in the subsectors of wood fuel, petroleum and natural gas, electricity, coal, new and renewable energy sources, and energy efficiency and conservation. The protocol formulates the intention to promote increased production of new and renewable sources of energy in an economically and socially acceptable manner, including biogas, windmills, mini-hydroplants, passive solar design of buildings, photo-voltaic, solar thermal and solar stoves and water heaters. The development of national energy efficiency and conservation plans is encouraged.

On the basis of the SADC Treaty and the Protocol on Energy, the SADC Energy Corporation Policy and Strategy (1996), the Energy Action Plan (1997) and the Energy Sector Activity Plan (2000) have been drafted in order to 'position the energy sector such that the region can derive maximum benefits from a rationalisation of resources and facilities in the region, and to develop initiatives that contribute to building the capacity of energy institutions in the region to participate effectively in future liberalisation of the energy sector, as well as in the regional economy' (SADC, 2009).

Conducive policies are central to the development of sustainable energy generation and markets. Laws governing sustainable energy development and supply cut across many sectors such as mining, forestry, agriculture, environment, water, industry, electricity, and petroleum, and hence require coordination – a complex challenge that is not easily overcome. The energy sector and the provision of electricity for southern Africa's population and industries make for a complex issue. Although the protocol aims to achieve cooperation regarding new and renewable energy resources amongst others, the influence of climate

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<sup>25</sup> The Protocol entered into force on 17 April 1998. Text available at <http://www.sadc.int/english/key-documents/protocols/protocol-on-energy/> or [http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060623\\_protocol\\_energy.pdf](http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060623_protocol_energy.pdf).

change is not included to the equation. In southern Africa, the main emitters of CO<sub>2</sub> are fossil fuel burning (liquid fuels and especially coal in the thermal power stations of South Africa) and deforestation (Chishakwe, 2010). If SADC intends reducing its GHG and carbon emissions a transition to sustainable energy is inevitable. This requires redefining its competitive advantage from attracting energy intensive sectors on the basis of nonrenewable energy (e.g. coal) to building a new advantage around climate friendly technology and energy. What remains a challenge is how emerging regional and national legislation can harmonise and coordinate the work around the issues of sustainable energy. Cross-sectoral coordination and responsibilities need to be streamlined in order to assure decision making to promote energy security in the region through more effective energy trade mechanisms in future. In the same context, policy makers and government officials need to be capacitated to translate international policy to national and local levels, and vice versa. Further emphasis needs to be placed on linking national, regional and international policy making.

### 6.2.2 The Protocol on Forestry

In maintaining the earth's climate, forests play a crucial role as they are an effective sink for the carbon dioxide produced as a result of animal respiration, burning of fossil fuels, and other natural and human-induced phenomena, and release oxygen into the atmosphere. Moreover, forests are home to the majority of terrestrial biodiversity; they provide water, food, and shelter and the livelihoods of many people depend on forests. Sustainable forest management can therefore contribute significantly to sustainable development and human security; and regional approaches towards policy harmonisation and transboundary forest conservation and sustainable use concepts are important mechanisms to attain regional integration.

Within the SADC region, forests cover an area of 357 million hectares, corresponding to about 33%.<sup>26</sup> The basic regional policy for sustainable management of forests in the SADC region is the Protocol on Forestry<sup>27</sup>. It is a set of rules or principles agreed upon by the SADC

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<sup>26</sup> See <http://www.sadc.int/fanr/naturalresources/forestry/management.php>.

<sup>27</sup> The Protocol entered into force on 17 July 2009. Text available at <http://www.sadc.int/english/key-documents/protocols/protocol-on-forestry/> or at [http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060623\\_protocol\\_forestry.pdf](http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060623_protocol_forestry.pdf).

member states on how to integrate and cooperate among themselves in order to commonly conserve and manage the SADC forests and woodlands for the benefit of the SADC people.

The protocol recognises the transboundary nature of forests, the importance of transboundary management strategies, the vital role of forests in protecting water catchments, particularly of shared water courses, and understands that potential harm to these forests is not limited by national boundaries. According to Article 3(1)(f) of the protocol, one of the objectives is 'effective protection of the environment' and the ways listed to achieve the objectives include 'harmonising approaches to sustainable forest management, forest policy, legislation and enforcement'. The guiding principles include the obligation of state parties to 'facilitate, promote and continually improve policy and legal frameworks that promote sustainable forest management' (Article 4(4)).

Recognising the essential role which forests play with regard to maintaining the earth's climate, controlling floods and erosion, and as sources of food, wood and other forest products, the protocol's primary objective is to promote the development, conservation, sustainable management and utilisation of all types of forests and forest products in order to alleviate poverty and generate economic opportunities. To this end, the protocol in Article 3(2)(a) *inter alia* addresses issues of common concern including deforestation, genetic erosion, climate change, forest fires, pests, diseases, invasive alien species, and law enforcement.

Furthermore, states are called upon to facilitate the gathering and monitoring of information, and the sharing and dissemination of information, expertise and technology concerning forests; and to harmonise approaches to sustainable forest management, forest policy, legislation and enforcement, and issues of international concern. State parties are encouraged to undertake national forest assessments, which should amongst others include data on climate, environment and uses of forest products (Article 9). However, such assessments are subject to the availability of funds and human resources. Trade and investment are to be promoted based on the sustainable management and utilisation of forests and the rights of communities are to be strengthened by facilitating their participation in forest policy development, planning, and management. The protocol

emphasises that traditional forest-related knowledge must be protected and requires mechanisms to ensure the equitable sharing of benefits from forest resources.

### 6.2.3 The Protocol on Health

Health largely depends on a minimum protection from diseases and unhealthy lifestyles. Many people in southern Africa are particularly vulnerable with regard to health threats as these threats are usually greater for poor people in rural areas, particularly children, women and indigenous groups due to malnutrition, insufficient access to health services, lack of clean water and other basic necessities (UNDP, 2008).

The adverse impacts of climate change on health, combined with poverty, poor policy and institutional frameworks, make Africa one of the most vulnerable continents to climate change and climate variability. Human health could be further negatively impacted upon by climate change and climate variability. The Protocol on Health<sup>28</sup> was primarily adopted in order to enhance cooperation in addressing the health problems and challenges facing member states through effective regional collaboration and mutual support. The protocol does not explicitly refer to climate change. However, as a clean environment can provide best for the health of the regions' population, state parties undertake to collaborate, cooperate and assist each other in a cross-sectoral approach in addressing regional environmental health issues and other concerns, including toxic waste, waste management, port health services, pollution of air, land and water, and the degradation of natural resources (Article 23).

### 6.2.4 The Protocol on Mining

The SADC region is extremely rich in natural resources, including minerals, which can contribute to accelerating the economic and social development and growth. The mining industry in SADC contributes about 60% of foreign exchange earnings and 10% of gross domestic product and the share of mineral exports in total exports in SADC accounted for 29.1 % (Twerefu, 2009). On the one hand, the mining industry is vulnerable to climate change as reduced water levels or severe floods might negatively affect mining activities. On

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<sup>28</sup> The Protocol entered into force on 14 August 2004. Text available at <http://www.sadc.int/english/key-documents/protocols/protocol-on-health/> or [http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060623\\_protocol\\_health.pdf](http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060623_protocol_health.pdf).

the other hand, mining activities may have a negative impact on climate due to related deforestation, land degradation and the release of emissions into air, soil and water. It is therefore of utmost importance for SADC states to ensure a balance between mineral development and environmental protection. The Protocol on Mining<sup>29</sup> strives to harmonise national and regional policies and strategies related to the development and exploitation of mineral resources through developing human and technological capacity, including collaboration between the mining industry and training institutions, *inter alia*. The protocol takes up the issue of environmental protection in Article 8, which encourages member states to ‘promote sustainable development by ensuring that a balance between mineral development and environmental protection is attained’. Measures to ensure environmental protection include environmental impact assessments (especially in shared systems and cross-border projects), and sharing information on environmental protection and rehabilitation.

#### 6.2.5 The Revised Protocol on Shared Watercourses

Southern Africa is projected to suffer a decrease of water resources due to climate change; Higher water temperatures and extreme weather events resulting in droughts and floods affect water quality and exacerbate water pollution. Moreover, changes in water quality and quantity resulting from climate change are expected to lead to decreased food security and increased vulnerability of the rural poor (Bates, 2008). Water resources management is therefore required in order to develop suitable mitigation and adaptation strategies. The Revised Protocol on Shared Watercourses<sup>30</sup> amends and clarifies the text of the preceding Protocol on Shared Watercourse Systems<sup>31</sup>. The scarcity of water restricts ‘economic development and social upliftment’ in the SADC region (SADC, 2011d). Successfully managing water resources in southern Africa will contribute to reaching SADC’s vision of sustainable development in the region: ‘The people of southern Africa call for a desirable future in which the region’s environment is conserved among all the competing uses of

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<sup>29</sup> The Protocol entered into force on 10 February 2000. Text available at <http://www.sadc.int/english/key-documents/protocols/protocol-on-mining/> or [http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060629\\_protocol\\_mining.pdf](http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060629_protocol_mining.pdf).

<sup>30</sup> The Protocol entered into force on 22 September 2003. Text available at [http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060629\\_protocol\\_shared\\_watercourses.pdf](http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060629_protocol_shared_watercourses.pdf).

<sup>31</sup> Text available at <http://www.sadc.int/english/key-documents/protocols/protocol-on-shared-watercourse-systems/> and at [http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060629\\_protocol\\_shared\\_watercourse\\_systems.pdf](http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060629_protocol_shared_watercourse_systems.pdf).

water, recognising the constraints inherent in natural ecosystems so that the environment can be sustainably improved, used and managed in the spirit of social and environmental justice' (SADC, 2011d).

This protocol recognises international consensus on a number of concepts and principles related to water resource development and management in an environmentally sound manner. The protocol acknowledges the Helsinki Rules, the UN Convention on the law of the Non-Navigational Uses of International Watercourses and Agenda 21 concepts and facilitates the establishment of shared water agreements (Ruppel and Bethune, 2007).

The protocol does not explicitly refer to climate change but aims to foster closer cooperation for judicious, sustainable and coordinated management, protection and utilisation of shared watercourses and advance the SADC agenda of regional integration and poverty alleviation. In order to achieve the objective, this protocol, by virtue of Article 2, seeks to promote and facilitate the establishment of shared watercourse agreements and shared watercourse institutions for the management of shared watercourses;<sup>32</sup> advance the sustainable, equitable and reasonable utilisation of the shared watercourses; promote a coordinated and integrated environmentally sound development and management of shared watercourses; promote the harmonisation and monitoring of legislation and policies for planning, development, conservation, protection of shared watercourses, and allocation of the resources thereof; and promote research and technology development, information exchange, capacity building, and the application of appropriate technologies in shared watercourses management.

Recognising the principle of the unity and coherence of each shared watercourse, SADC states undertake to harmonise the water uses in the shared watercourses and to ensure that all necessary interventions are consistent with the sustainable development of all watercourse states and observe the objectives of regional integration and harmonisation of their socioeconomic policies and plans.

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<sup>32</sup> Various bilateral and multilateral water commissions within the SADC region have been established, such as the Permanent Okavango River Basin Water Commission (OKACOM); the Zambezi River Commission (ZAMCOM); the Permanent Water Commission (PWC); and the Orange-Senqu River Commission (ORASECOM).

State parties are obliged to respect the existing rules of customary or general international law relating to the utilisation and management of the resources of shared watercourses. According to Article 3.4 of the protocol, state parties commit themselves to maintain a proper balance between resource development for a higher standard of living for their people and conservation and enhancement of the environment to promote sustainable development.

Of particular relevance with regard to climate change related concerns is Article 4 on planned measures; environmental protection and preservation; management of shared water resources; prevention and mitigation of harmful conditions; and on emergency situations. Watercourse states in their respective territories undertake to utilise a shared watercourse in an equitable and reasonable manner taking into account the interests of the watercourse states concerned, consistent with adequate protection of the watercourse for the benefit of current and future generations, and they participate in the use, development and protection of a shared watercourse in an equitable and reasonable manner. Such participation includes both the right to utilise the watercourse and the duty to cooperate in the protection and development thereof, as provided in this protocol. Furthermore, state parties have to take all appropriate measures to prevent the causing of significant harm to other watercourse states. Where significant harm is caused to another watercourse state, the state whose use causes such harm is to take all appropriate measures to eliminate or mitigate such harm and, where appropriate, to discuss the question of compensation.

Even though climate change is not explicitly mentioned in the protocol, it should be noted that at the meeting of the Committee of SADC Water Ministers in Maseru, Lesotho in September 2011, it was stated that ‘climate change has also seen us facing more intense and frequent extremes of weather such as droughts and floods, thus necessitating coordinated management of our shared water courses and resources. For the SADC region with its multiplicity of shared watercourses, issues of cooperation and joint planning and management of the development and utilisation of our shared resources is of paramount importance’.<sup>33</sup>

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<sup>33</sup> Opening Remarks by the Deputy Executive Secretary – Regional Integration Engineer Joao Caholo at the SADC Ministers Responsible For Water Meeting and the Regional Strategic Water Infrastructure Investor/Donors



### 6.2.6 The Protocol on Trade

As stated earlier, it is a two-way relationship that exists between trade and climate change. Trade may have negative effects on greenhouse gas emissions, for example, due to increased emissions resulting from production and transportation; but climate change, on the other hand, might affect production patterns and international trade flows, for example, due to water shortages or extreme weather events. Climatic or geophysical conditions which might constitute a comparative advantage for specific countries today may in future alter as a result of climate change and lead to shifts in the pattern of international trade. Furthermore, climate change may ‘increase the vulnerability of the supply, transport and distribution chains upon which international trade depends’ (WTO and UNEP, 2009). As such, trade and climate change related policies need to be drafted and implemented in a mutually supportive way. So far, climate change has not explicitly been anchored in the primary legal trade instruments, neither within the legal framework of the World Trade Organisation (WTO)<sup>34</sup> nor by the SADC Protocol on Trade.<sup>35</sup>

The primary objective of the latter is to liberalise intraregional trade in goods and services to ensure efficient production within SADC, reflecting the dynamic comparative advantages of its members states, contributing towards the domestic, cross-border and foreign investment climate, and enhancing the development, diversification and industrialisation of the region. Environmental conservation in general, however, is integrated (in comparable style as it has been done within GATT Article XX) in that the protocol provides for general exceptions from the protocol’s principles in order to ensure the conservation of exhaustible natural resources and the environment (Article 9(h)). Furthermore, member states undertake to make compatible their respective standards related measures, so as to facilitate trade in goods

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Conference. See

[http://www.sadc.int/files/1013/1678/2942/REMARKS\\_BY\\_DES\\_AT\\_SADC\\_MINISTERS\\_OF\\_WATER\\_MEETING\\_and\\_DONORS\\_CONFERENCE\\_MASERU\\_SEP\\_2011\\_22h00.pdf](http://www.sadc.int/files/1013/1678/2942/REMARKS_BY_DES_AT_SADC_MINISTERS_OF_WATER_MEETING_and_DONORS_CONFERENCE_MASERU_SEP_2011_22h00.pdf).

<sup>34</sup> ‘The WTO does not have a specific agenda on climate change per se, though several of its provisions and work in some of its Bodies overlaps with steps required to address climate change’, stated by WTO Deputy Director-General Harsha V. Singh in his opening address at the at the Trade and Climate Change Symposium, organised jointly by the International Centre for Trade and Sustainable Development (ICTSD), the WTO and the South African Department of Trade and Industry, in Durban, South Africa on 5 December 2011. See [http://www.wto.org/english/news\\_e/news11\\_e/envir\\_05dec11\\_e.htm](http://www.wto.org/english/news_e/news11_e/envir_05dec11_e.htm).

<sup>35</sup> Text available at [http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060623\\_protocol\\_on\\_trade.pdf](http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060623_protocol_on_trade.pdf).

and services within SADC, however, without reducing the level of protection of human, animal or plant life or health, or of the environment (Article 17).

Regional trade can be a powerful source of economic growth. But trade does not automatically mean economic growth, let alone poverty reduction or sustainable development. The ability to benefit from regional trade and foreign investment is dependent on a number of factors, particularly the quality of the policies and institutions on the ground. Thus, trade should be considered as a means to an end, but not as the end in itself: An effective SADC trade regime must first and foremost be friendly to the environment, poverty reduction and sustainable development. Sustainable development is also an objective of the Doha Development Round, the latest multilateral round of negotiations to further open up world trade. The negotiations could help remove environmentally harmful trade-distortionary measures and promote greater access to environmental goods and services at a cheaper cost (WTO, 2011). Yet after more than 10 years of repeated negotiation failures the Doha Development Round is unlikely to be concluded in the near future. It has even been contended that the 'WTO risks its future by keeping Doha alive'.<sup>36</sup>

#### 6.2.7 The Protocol on Transport, Communications and Meteorology

Considering that transport, communications and meteorology are a prerequisite for economic growth and development, the Protocol on Transport, Communications and Meteorology<sup>37</sup> aims to establish efficient, environmentally and economically sustainable, fully integrated infrastructures for the transport, communications and meteorology sectors.

Member states acknowledge that they are members of the World Meteorological Organisation (WMO) and, through their national meteorological services, they constitute an integral part of the regional and global system or network of the WMO's programmes and structures, in particular the World Weather Watch programme (Article 12.1). Within the regional and international cooperative system of the WMO, members are encouraged to provide adequate legal frameworks and appropriate financial support to the national meteorological services to establish an integrated network of observation, data processing

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<sup>36</sup> Cf. <http://www.taipeitimes.com/News/editorials/archives/2011/12/31/2003522031>.

<sup>37</sup> The protocol entered into force on 6 July 1998. Text available at [http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060629\\_protocol\\_comm\\_transport\\_met.pdf](http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060629_protocol_comm_transport_met.pdf).

and communications systems and enhance the provision of meteorological services for general and specialised applications in the region and internationally (Article 12.2). Such a cooperation framework obliges member states to *inter alia* strengthen their weather and climate monitoring systems, improve public and specialised weather services, promote sustainable development with the emphasis on climate change and protection of the environment, and strengthen meteorology research capacity in the region.

The protocol emphasises that sustainable development is to be promoted with an emphasis on climate change and protection of the environment. These aims are to be achieved by means of strengthening the capabilities of national meteorological centres in climate applications and advice; enhancing existing environmental monitoring activities; optimising the use of regional structures; and fostering an awareness of the contributions which can be made by national meteorological centres to planning sustainable development in agriculture, forestry and related areas (Article 12.7). The SADC Climate Service Centre is placed under the SADC Secretariat in Gaborone, Botswana.

### **6.3 The Regional Indicative Strategic Development Plan (RISDP)**

Apart from the treaty and protocols, SADC also provides other instruments at different levels. These are not binding, and do not require ratification by SADC member states. In March 2001, the Heads of State and Government approved the restructuring of SADC institutions by means of a Regional Indicative Strategic Development Plan (RISDP)<sup>38</sup>. The RISDP reaffirms the commitment of SADC member states to good political, economic and corporate governance entrenched in a culture of democracy, full participation by civil society, transparency and respect for the rule of law.

The focal point of the RISDP is thus to provide strategic direction with respect to SADC programmes and activities, and to align the strategic objectives and priorities of SADC with the policies and strategies for achieving its long-term goals. The RISDP is indicative in nature, merely outlining the necessary conditions that should be realised towards achieving those goals. The purpose of the RISDP is to deepen regional integration in SADC. The RISDP has identified gaps and challenges in existing policies and strategies, and used them to reorient

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<sup>38</sup> Text available at <http://www.sadc.int/english/key-documents/regional-indicative-strategic-development-plan/> or <http://www.tralac.org/2011/03/24/sadc-legal-texts/#RISDP>.

those policies and strategies. In the light of the identified gaps and challenges, Chapter 4 of the RISDP focuses on a number of priority intervention areas of both cross-sectoral and sectoral nature that are critical for the achievement of SADCs objectives, in particular in promoting deeper regional integration, integrating SADC into the world economy, promoting equitable and balanced development, eradicating poverty and promoting gender equality, protecting the environment and strengthening sustainable development.

In order to attain these goals, SADC will *inter alia* need to harmonise policies, legal and regulatory frameworks for the free movement of factors of production and to implement policies to attain macroeconomic stability and build policy credibility. The RISDP has identified environment and development as cross-sectoral priority intervention areas, as these present opportunities for the region to advance its programme of action in environment and natural resources management and forge harmonisation of and compliance to environmental policies, standards and guidelines by pursuing the strategic objectives outlined in the RISDP.

The RISDP in its Chapter 2 on the socio-economic situation in SADC acknowledges the link between poverty and climate change: 'Apart from lack of adequate capital assets, the rates of return on the physical, human and social capital of the poor are generally low due to low physical productivity and low prices for their goods and services, which are the by-products of:... Climate change and desertification, soil erosion and degradation, water pollution and scarcity, and depletion of forests and other natural resources caused by inappropriate agricultural practices, urban development and growth of population.'

#### **6.4 The Declaration on Agriculture and Food Security**

With the 2003 Declaration on Agriculture and Food Security<sup>39</sup>, Heads of State and Government gave substantial means to some specific objectives laid down in Article 5 of the SADC Treaty, namely the promotion of sustainable and equitable economic growth and socioeconomic development to ensure poverty alleviation, with the ultimate objective of its eradication and the achievement of sustainable utilisation of natural resources and effective protection of the environment. With this declaration, SADC member states committed

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<sup>39</sup> Text available at [http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060629\\_declaration\\_agric.pdf](http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/20060629_declaration_agric.pdf).

themselves to promote agriculture as a pillar of strength in national and regional development strategies and programmes, in order to attain their short-, medium-, and long-term objectives on agriculture and food security.

Climate change has not been explicitly formulated into the declaration. However, the declaration covers a broad range of human rights relevant issues including the sustainable use and management of natural resources and human health. Right so, because increasing temperatures and declining precipitation in the region resulting from climate change are likely to reduce yields for primary crops in the next decades, changes, which will have a substantial impact on food security in SADC, although the extent and nature is still uncertain (Boko et al., 2007).

## **7. Institutional framework**

Aside from the sector specific institutions that are established by the various SADC protocols, one important cross-sectoral entity with regard to climate change within the SADC institutional framework is the Food, Agriculture and Natural Resources (FANR) Directorate under the umbrella of the SADC Secretariat. Its functions include the coordination and harmonisation of agricultural policies and programmes in the SADC region, in line with priorities in the RISDP. Focus areas of the FANR are agricultural research and development; environment and sustainable development; food security; and natural resources management.

Furthermore, the work of the SADC Climate Service Centre (CSC) should be particularly highlighted in terms of an institutional climate change structure in SADC. The CSC is placed under the SADC Secretariat and has the mandate to contribute to mitigating of adverse impacts of extreme climate variations on socioeconomic development. Through the CSC, SADC organised the Fifteenth Southern Africa Region Climate Outlook Forum (SARCOF-15), in Windhoek, Namibia in August 2011. The SARCOF process is continuing to transform into an effective and reliable source for climate information and prediction services in order to fully exploit their potential for enhancing multisectoral, social and economic development. SARCOF-15 is a collaborative effort between the CSC, SADC DRR Unit, World Bank-GFDRR, World Meteorological Organisation (WMO), Food and Agricultural Organisation (FAO), International Strategy for Disaster Reduction (ISDR), Office of Coordination of Humanitarian

Assistance (OCHA), and other partners.<sup>40</sup> However, although the CSC organises the Climate Outlook Forum (SARCOF), it is still very weak in terms of capacity, lacking resources to adequately carry out its mandate.<sup>41</sup>

## **8. Gaps and challenges**

One major challenge within the legal framework of SADC in respect of climate change related issues is the fact that there is no climate change agenda per se. Although some relevant provisions can be found in various sectoral legal instruments, there is at this stage no clear legally binding roadmap focusing on climate change, nor a consolidated climate change strategy or action plan. Some important topics related to the effects of climate change are not covered by the protocols at all. The legal gap concerning the group of themes around environmentally induced cross-border migration must be pointed out in this context.

One further challenge with regard to implementation is the lack of financial and human resources. National forest assessments, for example, as encouraged by Article 9 of the Protocol on Forestry, which would be supportive in terms of climate change adaptation and mitigation, are subject to the availability of funds and human resources. This unfortunately makes it rather unlikely that such measures will ever be taken. The non-binding character of legal instruments other than the SADC Treaty and the protocols is a further obstacle. With regard to climate change, this is particularly true for the provisions contained in the RISDP and the Declaration on Food Security. This leads us further to the problem of enforcement. Given that, in the legal sense, only provisions of a binding nature can be enforced, the SADC Treaty and its protocols are pivotal to enforcing environmental provisions within SADC. The supreme judicial institution within SADC is the SADC Tribunal, which was established in 1992 by Article 9 of the SADC Treaty. The inauguration of the tribunal and the swearing in of its members took place on 18 November 2005 in Windhoek, Namibia. The judicial body began hearing cases in 2007. The tribunal has the mandate to adjudicate disputes between states, and between natural and legal persons in SADC. Furthermore, it has jurisdiction over all matters provided for in any other agreements that

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<sup>40</sup> See <http://www.sadc.int/news/sarcof-15-announcement/>.

<sup>41</sup> Such was the message of SADC official B. Garangonga at the First Climate Change and Development in Africa (CCDA-1) Conference organised by the United Nations Economic Commission for Africa, the African Union Commission and the African Development Bank in Addis Ababa, Ethiopia, 17-19 October 2011.

member states may conclude among themselves or within the community, and that confer jurisdiction to the tribunal.<sup>42</sup> In this context, the SADC Tribunal also has jurisdiction over any dispute arising from the interpretation or application of protocols relevant to climate change. The tribunal was primarily set up to resolve disputes arising from closer economic and political union (Viljoen, 2007: 503). However, recent cases before the tribunal<sup>43</sup> have demonstrated that it can also be called upon to consider other implications of economic policies and programmes (Ruppel, 2012).

At present, the SADC Tribunal is no longer operational as SADC Heads of State and Government suspended the tribunal's work in 2010. This will (at least) continue to be the case until August 2012 after relevant legal instruments have been reviewed and amended. In any event, it is uncertain whether SADC leadership will be progressive enough to take appropriate initiatives ensuring judicial stability in the region. The dealings around the tribunal's suspension reflect that the rule of law is in a state of flux in SADC. The recent dissolution of the SADC Tribunal is most obviously linked to the continued Zimbabwean non-compliance with the tribunal's judgments.

## **9. Overlapping and emerging regimes**

### **9.1 The EAC-COMESA-SADC Tripartite Initiative**

In October 2008 the leaders of the East African Community (EAC), the Common Market for Eastern and Southern Africa (COMESA) and SADC held the first COMESA-EAC-SADC Tripartite Summit of Heads of State and Government. The First Communiqué<sup>44</sup> was signed, in which the participants agreed to deepen the cooperation between the three African Regional Economic Communities (RECs). The vision is the creation of a single market. To achieve this goal the Tripartite Summit agreed on a programme of harmonisation of trading arrangements amongst the three RECs, free movement of business persons, joint implementation of inter-regional infrastructure programmes as well as institutional arrangements on the basis of which the three RECs would foster cooperation. The development of the merger will be based on three pillars, namely market integration based

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<sup>42</sup> See Article 15(2), Protocol on the Tribunal and Rules of Procedure thereof.

<sup>43</sup> See *Mike Campbell and Another (PVT) Limited v The Republic of Zimbabwe* SADC (T) 2/2007.

<sup>44</sup> See COMESA-EAC-SADC (2008).

on the Tripartite Free Trade Area; infrastructure development to enhance connectivity and reduce costs of doing business; and industrial development to address the productive capacity constraints.<sup>45</sup> If successful, a single market will integrate '26 Countries with a combined population of nearly 600 million people and a total Gross Domestic Product (GDP) approximately US\$1,0 trillion'.<sup>46</sup> Today's Tripartite Initiative members represent more than half of the AU population and GDP.

A Tripartite Free Trade Area is envisaged by 2016. The negotiations are expected to take place in two phases: in the first phase, trade in goods and free movement of business people will be addressed; in the second phase, trade in services, intellectual property rights, competition policy, trade development and competitiveness will be discussed. The outcomes of both phases have greatest significance for the environment in the single market and it will be seen whether the Tripartite initiative will also bring prosperity to the people that have so far been left behind in Sub-Saharan Africa. Transforming society will require comprehensive legal, political, social, and economic reforms and development initiatives, such as investing more in education, public services, and infrastructure, enhancing participation in trade and protecting the environment for present and future generations. Moreover, it will be seen whether the Tripartite initiative will push the regional integration agenda to empower the poor and reduce pressures such as underdevelopment, unemployment, environmental neglect, health emergencies, and strife.

The approach of the 2010 draft Agreement Establishing the COMESA, EAC and SADC Tripartite Free Trade Area<sup>47</sup> to protect the environment is congruent to that followed by the WTO. Environmental interests are considered within the system of general exceptions. The draft agreement in its Article 40 provides for a number of general exceptions to the basic principle of nondiscrimination to allow countries in certain circumstances to take account of economic and/or noneconomic interests and values that compete with free trade. Amongst others, these exceptions justify measures necessary to protect human, animal or plant life or health as well as measures relating to the conservation of exhaustible natural resources,

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<sup>45</sup> Cf. Second Communiqué of the COMESA-EAC-SADC Tripartite Summit of Heads of State and Government *COMESA EAC SADC TRIPARTITE* (2011).

<sup>46</sup> Ibid.

<sup>47</sup> Text available [http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/Draft\\_Tripartite\\_FTA\\_Agreement\\_Revised\\_Dec\\_2010.pdf](http://www.tralac.org/wp-content/blogs.dir/12/files/2011/uploads/Draft_Tripartite_FTA_Agreement_Revised_Dec_2010.pdf).



provided that ‘such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade’.

With regard to climate change, EAC, COMESA and SADC have initiated discussions towards the establishment of the COMESA-EAC-SADC Tripartite Climate Change Programme to facilitate their long-term vision of working together.<sup>48</sup> In December 2011, in the course of the COP17 United Nations Climate Change Conference in Durban, South Africa, the EAC, COMESA and SADC launched a joint five-year Programme on Climate Change Adaptation and Mitigation.<sup>49</sup> In order to enhance economic and social resilience, the programme aims to address the impacts of climate change in the region through successful adaptation and mitigation actions and to harmonise existing climate change programmes.

Key issues of the programme<sup>50</sup> include the increase of investments in climate resilient and carbon efficient agriculture and its linkages to forestry, land use and energy practices, and vulnerability assessment and disaster risk reduction amongst others.

## **9.2 The BRICS Partnership and the BASIC Group**

Two further multilateral groupings should be mentioned briefly, as they have put climate change high on their agenda. These are the BRICS Partnership (with Brazil, the Russian Federation, India, China and South Africa<sup>51</sup>) and the BASIC Group (with Brazil, South Africa, India and China). Although South Africa is the only SADC member in both these groupings, such cooperation may still be relevant for the SADC region, at least indirectly, especially since SADC countries often rely on South Africa’s engaging capacity.

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<sup>48</sup> This was announced by the EAC Deputy Secretary General, Productive and Social Sector, Mr Jean Claude Nsengiyumwa, at the 4th Special Africa Ministerial Conference on Environment (AMCEN), held in Bamako, Mali on 15-16 September 2011. See <http://www.inamibia.co.na/news-and-weather/15-africa/2528-comesa-eac-sadc-tripartite-climate-change-programme.html>.

<sup>49</sup> See <http://www.eac.int/about-eac/eacnews/878-tripartite-climate-change-initiative.html>.

<sup>50</sup> The programme has received \$20 million funding from the Royal Government of Norway, the European Union Commission and UK Department of International Development (DfID).

<sup>51</sup> Prior to South Africa’s first attendance of the summit in 2011, the group was named BRIC (Brazil, Russian Federation, India and China). South Africa had received a formal invitation from China to join in 2010. The first BRIC summit was held in 2009 in Yekaterinburg in Russia, the second BRIC summit in 2010, in Brasília, Brazil.

On 14 April 2011, the leaders of the BRICS states signed a joint declaration on global economy, international financial issues and developmental affairs in Sanya, China.<sup>52</sup> BRICS is neither an international organisation nor a trade bloc in terms of a regional (or preferential) economic community. So far, BRICS is merely a forum that is believed to become an economical powerhouse in future seeing that it covers an enormous population; and while China and India are considered to be the 'world's factory', and the 'world's office' respectively (Fujita, 2006), Russia became to be known as the 'world's gas station', and Brazil as the 'world's farm'. In this context, South Africa could serve as the 'gateway to Africa' and its rich natural resources (Van den Bosch, 2011).

The BRICS partnership is of economic and political importance in many regards, and it is predicted that the BRICS economies could become a much larger force in the world economy (Wilson et al., 2010). The five BRICS states have more than a quarter of the world's land area and almost the half of the world's population living on their territories. The Sanya BRICS Declaration contains various linkages with regard to trade, environment and climate change. The declaration emphasises that '[I]n the economic, financial and development fields BRICS serves as a major platform for dialogue and cooperation'<sup>53</sup> and the group has agreed to continue further expanding and deepening economic, trade and investment cooperation among BRICS countries.

Furthermore, BRICS countries, by signing the declaration have committed themselves 'to assure that the BRICS countries will continue to enjoy strong and sustained economic growth supported by our increased cooperation in economic, finance and trade matters, which will contribute to the long-term steady, sound and balanced growth of the world economy'. The declaration refers to environmental matters with climate change leading the way. Climate change is considered to be 'one of the global threats challenging the livelihood of communities and countries'. In this regard and pointing out the principle of equity and common but differentiated responsibilities, BRICS leaders have committed themselves 'to work towards a comprehensive, balanced and binding outcome to strengthen the implementation of the United Nations Framework Convention on Climate Change and its

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<sup>52</sup> Text of the declaration available on <http://in.china-embassy.org/eng/xwfw/xxfb/t815431.htm>.

<sup>53</sup> See para 6 of the Sanya Declaration. Text available at <http://in.china-embassy.org/eng/xwfw/xxfb/t815431.htm>.

Kyoto Protocol’ and to enhance ‘practical cooperation in adapting our economy and society to climate change’. Moreover, cooperation has been envisaged in order to ‘reach new political commitment and achieve positive and practical results in areas of economic growth, social development and environmental protection under the framework of sustainable development’.

According to the declaration, BRICS is committed to support a strong, open, rule-based multilateral trading system embodied in the WTO and a successful, comprehensive and balanced conclusion of the Doha Development Round. Moreover, concerning excessive volatility on commodity prices, BRICS supports the international community in strengthening cooperation to ensure stability and development of physical market by reducing distortion and further regulate financial market. BRICS considers safe nuclear energy as an important element in future energy supply and supports the development of renewable energy as being a part of a future energy mix of BRICS countries. Accelerating sustainable growth of developing countries is one of the major world challenges and therefore BRICS sees growth and development as central to addressing poverty and to achieving the United Nations Millennium Development Goals (MDG). Infrastructure development in Africa and its industrialisation within the framework of the New Partnership for Africa’s Development (NEPAD) is a major objective of the BRICS members.

Since 2009, the so-called BASIC group of countries embarked on cooperation in the international climate change negotiations. ‘Carried by the weight of their increasing economic and geopolitical influence, the BASIC countries – both individually and collectively – are rapidly moving to the centre stage of international politics. Their increased influence in international climate diplomacy was clearly seen for the first time at the Copenhagen Climate Conference (COP15)... The foundation of the BASIC cooperation can be traced back to a common ‘third world’ identity formed during several decades in the G77 group of developing countries, in which the four BASIC countries have each played leading roles... Since COP15, BASIC ministers responsible for climate-related issues have met quarterly, suggesting that the group is committed to continued cooperation. From the joint statements issued after the meetings, two clear patterns emerge: first, a call for a second commitment period of the Kyoto Protocol; and, second, an effort to build bridges with and show support for the rest of the G77. The discussions therefore seem to generate agreement on a few

broad principles, but have so far been unable to settle the finer details needed to articulate concrete contributions for the international negotiating process' (Hallding et al., 2011).

## **10. Conclusion**

Africa as a continent is considered to be one of the most vulnerable continents to climate variability and change because of multiple stresses and low adaptive capacity. It is probably fair to say that this also applies to the SADC region. It is beyond doubt that the direct and indirect impacts of climate change constitute a risk to various aspects of human security in SADC. The impacts of global warming on the agricultural sector are probably of a most direct and profound nature. Water scarcity has a direct impact on many economic development initiatives on the agricultural sector which still is one of the most important sectors in the economies of SADC. Climate change has economic impacts on crop and livestock farming systems; warmer and drier climates adversely affect net farm revenues translating into worsening food security situation in the region.

Increasing temperatures and declining precipitation resulting from climate change are likely to reduce yields for primary crops in the next two decades, changes which will have a substantial impact on food security, although the extent and nature are still uncertain. Periods of droughts and floods will have an impact on food availability, food access, and on nutrient access. The impacts of climate change such as sea-level rise, droughts, heat waves, floods and rainfall variation could push even more people into malnutrition and increase the number of people facing water scarcity.

Increased environmental migration due to the effects of climate change is considered a new phenomenon, unprecedented in its scale and scope, but closely related to the concept of human security. Besides low-lying islands, coastal and deltaic regions are expected to be affected by climate change induced migration.

Climate change and human security are most relevant for regional integration in SADC. Regional cooperation has the potential and the responsibility to contribute more to climate change mitigation and adaptation and to enhance human development and poverty reduction in all countries of the region. Although the primary objective of RECs like SADC might be to liberalise intraregional trade, this cannot be done without addressing the diverse aspects of

climate change. That this aspect is increasingly being realised is reflected by numerous statements and speeches of SADC officials in the run-up to and during the recent United Nations Climate Change Conference in Durban as well as by the last Communiqué of the SADC Summit. Within the legal and policy framework, however, a more sustained commitment with regard to climate change is needed so as to promote a more person-based process of integration.

Although some programmes to combat climate change are being initiated on SADC level, for example in the forestry sector, this may be insufficient for future changes in climate. The SADC legal framework provides for a broad bandwidth of provisions with high relevance for environmental protection in general. With regard to climate change in particular, a clear and consolidated climate change agenda addressing pressing issues such as cross-border migration is lacking, however. The various SADC protocols eventually offer some foundations; however, the lack of financial and human resources seems to hamper effective implementation, not to mention the current lack of judicial enforcement due to the suspension of SADC's only judicial body, the SADC Tribunal. All the more commendable it is that on the level of the Tripartite Initiative between the EAC, COMESA and SADC, activities focusing on climate change adaptation and mitigation seem to come more to the fore.

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*Chapter 3*

**The role of regional cooperation in climate change mitigation and adaptation  
in southern Africa**

*Sean Woolfrey*

**1. Introduction**

Elsewhere in this volume it has been demonstrated that climate change poses significant challenges for southern Africa (Woolfrey, 2012). The best available scientific evidence suggests that the changes in weather patterns brought about by climate change are likely to be more significant in the region than in many other parts of the globe (IPCC, 2007). The difficulties posed by such changes are compounded by the fact that southern Africa exhibits relatively weak capacity for adapting to the effects of climate change. As a result, climate change is projected to have significant and adverse social and economic consequences for the region and its inhabitants.

It is quite likely, for instance, that climate change will result in a reduction in the region's capacity to produce and export goods and services, in turn impairing its ability to achieve industrial and economic development and to achieve meaningful regional integration on the African continent (Woolfrey, 2012). This chapter seeks to turn that analysis on its head and to argue that while climate change may threaten economic development and regional integration in southern Africa, regional cooperation – either under the framework of formal integration processes and institutions, or not – can play, and is already playing, an important role in climate change adaptation in the region.

Section 2 of the chapter provides a brief summary of the likely impacts of climate change in southern Africa, while Section 3 clarifies the concepts of climate change adaptation and mitigation and argues that southern Africa should focus its climate change response efforts on adaptation-related measures. Section 4 then highlights some of the areas in which regional cooperation and integration processes and structures can serve as an effective response to climate change by identifying existing regional institutions that are already playing such a role. Section 5 provides the chapter's conclusion.

## **2. Climate change and its effects on southern Africa**

The findings of numerous global climate models (GCMs) suggest that the impact of global climate change is likely to be spread unevenly across the globe, and that southern Africa – indeed Africa as a whole – is one of the regions that will experience relatively large climate change-related effects (WTO-UNEP, 2009). Observed trends and climate model projections show that southern Africa – a predominantly semi-arid region with high rainfall variability – has already experienced significant increases in temperature and will continue to do so in coming decades (CSIR, 2011). High rainfall variability is also projected to persist, with some parts of the region expected to experience increased rainfall, while other parts become significantly drier. Increases in the frequency and intensity of extreme weather events such as heat waves and floods may also result from climate change in the region (Ibid.).

These climate-change-related shifts in the region's weather patterns are likely to have adverse effects on the economies, populations and ecosystems of the region. Reduced rainfall over significant parts of southern Africa, for instance, will increase water stress, and will result in a loss of land suitable for agriculture as well as reduced crop and livestock yields (Ibid.). Human health in the region may be threatened by increased malnutrition, decreased access to clean water and the spread of diseases such as dengue and malaria (Ibid.). Physical damage to coastal areas may also result from rising sea levels and more frequent and intense extreme weather events.

The social and economic impact of these effects will be exacerbated in southern Africa by the region's lack of capacity for coping with and adapting to the physical effects of changes in climate and weather patterns that are likely to result from climate change and global warming. This lack of adaptive capacity in southern Africa arises largely from the low levels of socioeconomic development in the region. High levels of unemployment and poverty, weak governance, ineffective institutions, a largely uneducated population and a general lack of social and financial capital all contribute to the region's vulnerability to climate change (Ibid.). Similarly, poor quality infrastructure, especially in rural areas and informal settlements, detracts from the region's ability to cope with the effects of climate change, and magnifies the threat posed by extreme weather events.

Other sources of vulnerability to climate change in southern Africa stem from the dependence of much of the region's economies and populations on agriculture, the economic sector that is likely to be most affected by climate change, and the lack of economic diversification in the region which prevents the redeployment of labour and capital that might alleviate losses of comparative advantage in agriculture (Collier et al., 2008). Southern Africa's lack of manufacturing or industrial capacity also means that countries in the region tend to be highly reliant on the export of a small number of primary commodities. This lack of export diversification increases the region's vulnerability to any effects of climate change that might threaten the production of such commodities.

Given the likely effects of climate change in southern Africa and the region's vulnerability to such effects, climate change poses significant challenges for the region involving a number of issues, such as human health, conservation of ecosystems and biodiversity and destruction of livelihoods. It has been shown too, that climate change is likely to have a significant and largely negative effect on the ability of countries in southern Africa to engage in international trade, as changing weather patterns directly and indirectly affect the productive capacity of countries in the region, and the proliferation of border carbon adjustments and other forms of 'climate protectionism' in the region's main trading partners reduces export flows from the region (Woolfrey, 2012). This effect on the region's ability to export goods and services will also negatively impact southern Africa's regional integration and economic development prospects.

### **3. Mitigation versus adaptation**

Given the challenges climate change poses for southern Africa, there is clearly a need for countries in the region to devote resources to the development of adequate and appropriate climate change response measures in order to minimise the adverse effects of climate change on the region's populations and economies. A number of different activities, policies and processes have been proposed or adopted around the world in order to respond to climate change, and these measures are generally categorised as relating to climate change mitigation or climate change adaptation (CSIR, 2011).

Mitigation generally involves measures which seek to reduce the rate and magnitude of climate change and its effects by reducing or eliminating the causes of climate change

through, for example, reducing greenhouse gas emissions or conserving and increasing 'carbon sinks' such as oceans or forests (WTO-UNEP, 2009). Adaptation, on the other hand, refers to measures which aim to reduce the negative impacts of climate change or, in some cases, to exploit any potential benefits it may bring, by increasing the capacity of humans and ecosystems to cope with climate change and its associated effects (Ibid.).

International and multilateral action and policy processes addressing climate change have largely focused on mitigation, reflecting a belief – widely held until the late 1990s – that a coordinated, international effort to reduce greenhouse gas (GHG) emissions would be sufficient to prevent the most detrimental impacts of climate change (Ibid.). The best known example of multilateral action on mitigation is the Kyoto Protocol adopted under the United Nations Framework Convention on Climate Change (UNFCCC). The protocol committed parties to GHG emissions reductions relative to 1990 levels, but has proved fairly ineffective in bringing about global emissions reductions, largely due to missed reductions targets and a lack of support from certain large emitters.

Climate change adaptation measures which seek to improve the capacity of societies and communities to cope with and adapt to the physical effects of climate change tend to be more relevant at the national and subnational level as the costs, scope and effects of such efforts tend to be more localised than mitigation measures. For example, the improvement of housing and water infrastructure in a particular province, town or village might reduce the vulnerability of the people who live in that particular province, town or village to climate-change-related health impacts, but it would have little direct effect on populations living in other countries or regions.

#### *Why southern African countries should prioritise adaptation over mitigation*

There are at least five good reasons why countries in southern Africa should focus their climate change response strategies on adaptation rather than on mitigation. The first two reasons have already been touched on and will not be dealt with in any detail here. Essentially the first reason is that, as has already been mentioned, climate change is likely to have particularly significant observable effects on weather patterns across southern Africa, and hence there is a pressing need for the populations in the region to be able to adapt to these consequences of climate change. The second reason is that the region's current

capacity for adapting to and dealing with such consequences is currently very weak in comparison to that of many other, more economically developed, regions. Significant resources thus need to be devoted to improving the region's adaptive capacity.

The third reason why adaptation should be the focus of African countries' response to climate change is that adaptation does not receive the same levels of attention as mitigation at the global level. Unlike mitigation efforts, adaptation measures are generally limited to a smaller geographical area or population (Sharan, 2008). Because of this, mitigation tends to receive more global interest while adaptation is left to individual countries and regions and limited philanthropic efforts by the global community (Ibid.). Global action on adaptation is therefore weaker than global action on mitigation, and there exists a significant scope and need for local, national and regional adaptation efforts (Ibid.).

The fourth reason why southern African countries should focus on adaptation is that the responsibility for global warming and attendant climate change rests largely with the industrialised countries and therefore they should be the ones burdened with the costs associated with mitigation efforts. Mitigation as a response to climate change only makes sense if one accepts that scientific consensus is correct about the anthropogenic nature of global warming and climate change. If this is the case, however, and the concentration of GHGs in the earth's atmosphere is indeed the major cause of current and projected climate change, then it seems only fair that those countries that have contributed the most to accumulated GHG emissions should be the ones making the biggest effort to reduce current and future emissions.

Historically, industrialised countries have been the biggest emitters of carbon dioxide and other GHGs and, while the emissions of certain developing countries have grown alarmingly in recent years, industrialised countries are responsible for the major part of accumulated past emissions (WTO-UNEP, 2009). Furthermore, with the exception of relatively industrialised South Africa, no countries in southern Africa currently produce high levels of GHG emissions by global standards. According to United Nations statistics, South Africa was the world's 13th biggest emitter of carbon dioxide (CO<sub>2</sub>) in 2008, contributing 1.45% of global CO<sub>2</sub> emissions in that year, but Kenya, the next biggest emitter in sub-Saharan Africa



in 2008, only ranked 98th on the list of global emitters, contributing just 0.03% of global CO<sub>2</sub> emissions in that year.<sup>1</sup>

The issue of responsibility for past and current emissions would not be so relevant were it not for the fact that reducing current and future emissions entails significant costs, both in real terms and in terms of the opportunity costs involved. All other things being equal, an increase in industrial and economic activity tends to result in an increase in GHG emissions. It is likely, therefore, that efforts to stimulate much-needed industrial development and economic growth in southern Africa will be accompanied by increases in the region's GHG emissions. Any attempts to reduce or limit industrial emissions through, for example, a tax on CO<sub>2</sub> emissions, will make industrial activity more costly and will inhibit economic growth and development in the region.

Given that much of the cause of climate change is attributed to the industrial and economic activity that has occurred in the developed world since the industrial revolution, it would be somewhat perverse for countries that have not yet had a chance to embark on such industrialisation – such as many of those in southern Africa – to devote significant resources to climate change mitigation measures that significantly reduce their own chances of industrialising and enjoying the fruits of an industrial economy, especially if this is done as a result of coercion by the industrialised world.

The final reason why countries in southern Africa should focus their climate change response strategies on adaptation is that, with a couple of exceptions, there is little scope in the region for mitigation measures that would have a significant impact on the rate and magnitude of global climate change. This is because, as highlighted above, only one country in the region – South Africa – is a significant emitter of GHGs from industrial activity. For much of the rest of the region, any reductions in emissions made by 'greening' industrial activity would be pretty much insignificant at a global level.

Apart from South African industry, the only area in which southern Africa is becoming a globally significant contributor to GHG emissions is that of land-use change, and, in particular, de-forestation. Certainly, action could and should be taken to reverse this trend,

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<sup>1</sup> See the United Nations Millennium Development Goals Indicators. Available online at: <http://mdgs.un.org/unsd/mdg/SeriesDetail.aspx?srid=749&crid>.

but measures which seek to limit or reduce emission from deforestation could also form part of an adaptation strategy that focuses on the sustainable management of natural resources in the region. In other words, climate change adaptation, especially measures involving the preservation of valuable forest resources, could be used to achieve many of the same goals as similarly focused mitigation schemes.

All this does not mean, however, that mitigation should be completely ignored in southern Africa. On the contrary, action should almost certainly be taken on certain mitigation-related issues, such as South Africa's reliance on coal-generated electricity and the rapid deforestation in the Congo basin (Collier et al., 2008). Similarly, not all mitigation measures will necessarily have a negative effect on economic development within the region. Indeed, some mitigation-related measures, such as the introduction of carbon trading schemes or the promotion of climate-friendly technologies, could provide significant opportunities for economies in the region. It is also true that there is often significant overlap between mitigation and adaptation efforts, and the distinction between them is not always as clear as is sometimes implied in the literature.

Nonetheless, given the relatively limited availability of resources such as finance capital and managerial and technical skills in the region, it is likely that in responding to climate change, some measures will need to be prioritised over others. This section has argued that if this is indeed the case, then countries in the region should, in general, give priority to measures that promote adaptive capacity rather than those with a primary focus on mitigation. Not only is the need for adaptation more urgent in the region, but there appears to be widespread agreement in the climate change literature that, unlike in the case of mitigation, the benefits of climate change adaptation generally do outweigh the costs (WTO-UNEP, 2009).

#### **4. Regional approaches to climate change adaptation in southern Africa**

It was argued in the previous section that the main focus of African countries' efforts to respond to climate change should be actions that improve their ability to adapt to the effects of climate change. It was also suggested that because adaptation efforts generally have a more localised focus – and thus tend to receive less attention than mitigation efforts at the global level – there is a definite need for individual countries, including those in

southern Africa, to take matters into their own hands when it comes to adaptation. Even if more focus were put on adaptation at the global level, efforts undertaken at a more localised level would almost certainly be more responsive and effective due to proximity, knowledge of local conditions and opportunities, and other operational advantages.

That this point has been widely grasped is evident in the fact that numerous countries around the globe have made efforts in recent years to embed climate change adaptation into national policies and initiatives. While such efforts are undoubtedly needed, there are good reasons for thinking that southern African countries – and possibly those in other parts of the world as well – could also benefit greatly from developing and implementing climate change adaptation measures at a regional level, either through intergovernmental cooperation or initiatives undertaken by regional secretariats or other institutions. In its most recent Assessment Report, the Intergovernmental Panel on Climate Change (IPCC) stated that regional institutions responsible for, *inter alia*, research and development, promoting cooperation on development-oriented actions and financing climate change response measures are needed to support national and subregional climate initiatives (IPCC, 2007). The IPCC also suggested that the 'cumulative effect of regional action may well determine the speed and effectiveness of global responses to climate change' (ibid.).

Most of the specific impacts of climate change will be neither global in nature nor confined within the borders of a single country. A number of countries – including many southern African countries – share common resources with their neighbours. Many countries are also likely to face similar constraints and climate-change-related challenges as their neighbours, and will often need to respond to these challenges in a similar manner to their neighbours (Sharan, 2008). In addition, climate change shocks to a region as a whole are likely to be considerably smaller than those to individual countries within that region (Collier et al., 2008). All this suggests that many aspects of climate change should be understood as having a regional public good nature, and that regional collective action is required to respond to climate change (Sharan, 2008).

Regional cooperation on climate change adaptation can help overcome the challenges southern Africa faces in supplying regional public goods due to the extreme political subdivision of the region (Collier et al., 2008). Compared to action by individual countries,

regional collective action offers greater potential for leveraging the benefits of economies of scale, something that is vitally important in a region characterised by limited resources in terms of finance, capital, skills and technology (Sharan, 2008). Furthermore, cooperation on certain adaptation issues can also serve to create the functional spillover of cooperation in other areas, thereby strengthening regionalism and regional integration processes in southern Africa. While there are numerous specific channels through which regional action can play an important role in climate change adaptation in southern Africa, the rest of this section will focus on three areas of cooperation which are already receiving attention in the region. These are the following: i) providing climate information; ii) managing natural resources; and iii) facilitating the movement of capital, goods and persons.

#### *Providing climate information*

In order for the societies within a particular region to be able to adapt to and cope with the likely effects of climate change, they need to be provided with relevant and up-to-date information regarding current and projected climate trends in their region and the likely impacts and risks of climate change and of a potential increase in climate variability. Knowledge of potentially available climate change response measures can also serve an important role in helping to improve the ability of a society to adapt to climate change. National governments and other policy makers require accurate climate information in order to devise appropriate and effective national policies and initiatives to improve adaptive capacity, while at a more localised level, individual communities and private actors require access to such information to be able to adapt their livelihoods in order to be more resilient to future climate-change-related shocks (CSIR, 2011).

One area in which the need for such information is likely to become increasingly important in southern Africa is that of agriculture. Farmers in the region, and especially small-scale farmers, are highly dependent on information regarding climate trends, and climate change is only likely to make information regarding the suitability of particular crops and livestock to changing climate patterns even more critical (Collier et al., 2008). In addition, research into the development and deployment of drought-resistant crops is likely to be crucial in ensuring the future of agriculture in certain parts of southern Africa.

It is generally accepted that the public sector has a key role to play in the provision of this kind of information to private actors. For example, the generation of information on crop suitability for a particular climate is a public-good subject to market failure as there are strong incentives for individual farmers to free ride on others' efforts to obtain this information. Many governments therefore provide agricultural extension services, which are likely to become even more important as the need for adaptation in the southern African agricultural sector increases (Ibid.). However, it is also the case that while individual farmers face an incentive to free ride on others' efforts to finance research into suitable crops, individual governments in southern Africa face an incentive to free ride on the research efforts of neighbouring countries facing similar constraints. In many respects, research into improving the adaptive capacity of agriculture is a regional public good (Ibid.).

Relevant and vital climate-change-related information can be gained through a number of channels including scientific research, the rollout of pilot projects on adaptation or disaster risk mechanisms, the research and development of new technologies, crop varieties or resource management methods, and the examination of international best practice. The importance of such information – not only for agriculture but also for many aspects of climate change adaptation – combined with its regional public-good nature suggest that there is an important role for regional cooperation and regional institutions in both generating and disseminating climate-change-relevant information.

This is particularly true for southern Africa, as, due to weak education systems, under-resourced public sectors and an inability to retain skilled personnel, the region is characterised by limited resources in terms of scientific and other relevant skills. This has resulted in climate change information not being easily accessible in the region, and being provided in a way that minimises its usefulness for local-level planning (CSIR, 2011). The need to improve access to relevant and useful climate information through regional cooperation has been recognised by governments in southern Africa, however. The Southern African Development Community (SADC) has set up a Science, Technology and Innovation Implementation Framework to Support Climate Change Response, and at a March 2011 meeting to discuss this programme, SADC member states highlighted increased access to climate change information as a priority undertaking (Ibid.).

One notable example of a regional approach being taken to the generation and dissemination of climate-change-related information in the region, albeit for Africa as a whole and not just for southern Africa, is the Climate for Development in Africa (ClimDev-Africa) Programme, a joint initiative of the African Union Commission, the United Nations Economic Commission for Africa and the African Development Bank (UN, 2009). The programme seeks to overcome the lack of necessary climate-change-related information and analysis in Africa and to upgrade the capacities of institutions and stakeholders in the region so as to improve climate-related data and observation, information services, policies and risk-management practices in a number of climate-sensitive sectors (Ibid.).

The ClimDev-Africa Programme is to be implemented at regional, subregional and national levels and with active involvement from regional economic communities, regional climate institutions and resource management organisations, national weather, climate and water services and other public authorities, research institutions and civil society organisations (Ibid.). A ClimDev-Africa Programme Special Fund, meanwhile, will aid the generation and dissemination of climate information, will facilitate an improvement in the ability of policy makers and policy support institutions to use climate information in wider development programmes, and will support the implementation of pilot adaptation measures that demonstrate the value of using climate information for development.

#### *Managing natural resources*

Another area in which a regional approach to climate change adaptation is likely to prove very important for the populations of southern Africa is the management of natural resources, such as the region's fresh water sources, forests, fisheries and vulnerable coastal areas and other ecosystems. As with the provision of climate information, certain aspects of natural resource management, such as the development and rollout of pilot projects and specific management policies and techniques, have a regional public-good nature. The most important reason why a regional approach needs to be taken for managing southern Africa's natural resources, however, is that many of these resources are not confined within the borders of just one particular country, but are instead shared by two, or more, neighbouring countries in the region.

This is particularly true of southern Africa's fresh water resources, over 70% of which are shared between two or more countries in the region (SADC, 2011). Many of the region's major lakes, including Lake Malawi (Nyasa) and Lake Tanganyika, have shorelines on multiple countries, while the drainage areas of the 15 major river basins in southern Africa cover approximately 70% of the region's land surface (Granit, 2000). Many of the most important river basins in the region, including the Congo (Angola, Democratic Republic of Congo (DRC), Tanzania and Zambia), Limpopo (Botswana, Mozambique, South Africa, Zimbabwe), Okavango (Angola, Botswana, Namibia, Zimbabwe), Orange (Botswana, Lesotho, Namibia, South Africa) and Zambezi (Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zimbabwe and Zambia) river basins are shared by four or more countries in the region (Malzbender & Earle, 2007).

These shared river basins and other sources of fresh water in the region are very important to the economies of southern Africa. They serve as an input into various activities such as irrigation, fishery, hydropower and tourism, and are crucial to numerous economic sectors, including agriculture, industry, mining and power generation (Ibid.). Furthermore, water resources play a vital role in sustaining the region's populations and in contributing to food security, poverty alleviation and the maintenance of rural livelihoods (Ibid.).

Much of southern Africa is semi-arid and subject to highly variable rainfall, meaning that the sustainable and equitable management of water resources in the region is crucial for sustaining the region's populations and ecosystems. Some of the projected effects of climate change in southern Africa, including decreased rainfall over much of the region, continued high rainfall variability and an increase in the duration and intensity of extreme weather events, are likely to increase water stress in the region, increasing the threat of water shortages, biodiversity loss, and the potential for violent conflict over increasingly scarce water resources. The fact that many of these undesirable consequences would have potentially destabilising regional effects suggests that the sustainable management of southern Africa's shared water resources is an important regional public good, and that regional cooperation on this issue is much needed.

Fortunately, this point has been grasped by governments in southern Africa, and a number of regional instruments have been developed in order to support the joint management of

shared water resources. In 2005 SADC adopted a Regional Water Policy (RWP) to guide the sustainable and coordinated development of national and transboundary water resources in the SADC region (SADC, 2011). This policy is given effect by a Regional Water Strategy (RWS), a long-term planning instrument currently being implemented regionally through the third SADC Regional Strategic Action Plan on Integrated Water Resources Development and Management (RSAP III) (Ibid.).

RSAP III, as the official SADC Water Programme, aims to facilitate the implementation of the SADC Protocol on Shared Watercourses, which entered into force in 2003, and to create an enabling environment for regional water resource governance, management and development, through integrated water resource management at the community, national, river basin and regional levels (Ibid.). The Protocol on Shared Watercourses explicitly recognises the importance of regional efforts to ensure the sustainable management of southern Africa's shared water resources, and calls for the establishment of shared watercourse agreements and institutions (Ibid.).

The SADC regional approach to water management has had notable success in facilitating negotiations on river basin management in southern Africa, and all shared river basins located fully within the SADC region have now adopted cooperation frameworks based on the Protocol on Shared Watercourses (Ibid.). Such regional cooperation on the sustainable management of fresh water and other important natural resources is likely to continue to play an important role in building southern Africa's capacity to adapt to the effects of climate change.

#### *Facilitating the movement of goods, capital and people*

Regional cooperation and, in particular, the integration of national markets in the region can also help improve southern Africa's capacity for climate change adaptation by facilitating the movement of goods, capital and people between countries in the region. Among other things, climate change is likely to alter the relative productivities and comparative advantages of different locations, even within a particular geographical region (Collier et al., 2008). If the integration of regional markets is undertaken in such a way that trade creation outweighs trade distortion, then the increased trade arising from such initiatives can help economies in the region to adjust to these changes, and to pre-empt any climate-change-



related trade protectionism adopted by traditional trading partners in the industrialised world (WTO-UNEP, 2009).

Agricultural production, an activity of vital importance to many of the populations and economies in the region, is likely to be the sector most affected by climate change in southern Africa, but greater intraregional trade in agricultural products can assist countries in the region to adapt to shifting demand and supply patterns (Ibid.). In particular, there is significant scope in southern Africa for the cross-border trade of staple foods from areas of surplus production to areas facing food shortages as a result of climate change and its associated effects (World Bank, 2012). This is because differences in weather patterns entail minimal correlation in agricultural productivity between countries in the region, as evidenced by the difference in agricultural productivity of southern Malawi, a persistent food deficit area, and nearby northern Mozambique, a productive maize-growing area (Ibid.).

The extent to which increased intraregional trade can contribute to adaptation and the alleviation of periodic national food shortages in southern Africa depends on the capacity of agricultural price signals to accurately reflect demand and supply forces (WTO-UNEP, 2009). Currently, the use of non-tariff measures such as subsidies and temporary quantitative export restrictions in the region greatly distorts these price signals and thus hampers the cross-border trade of staple foods. One important role for regional integration is therefore to ensure the liberalisation of trade in basic foodstuffs within the region.

Liberalisation of trade between countries in the region can also aid the region's adaptive capacity in other ways by, for example, reducing the region's reliance on industrialised export markets, many of which may seek to reduce imports from developing countries as a way to reduce global carbon emission; providing an impetus for industrial development and economic diversification out of primary commodities production, thereby lessening the importance of climatically vulnerable agricultural production in the region; and facilitating the transfer of new technologies from more to less developed countries in the region.

In addition to promoting increased trade through trade liberalisation, deeper regional integration in southern Africa can serve to eradicate or significantly reduce official and informal barriers to cross-border investments and migration, thereby facilitating the

relocation of labour and capital from areas which become less productive due to climate change to those which are left relatively better off (Collier et al., 2008). Migration, in particular, is likely to become an increasingly important issue as the effects of climate change reduce the capacity of certain parts of the region to sustain human settlement and economic activity. Given the presence of restrictions on migration such as strong ethnic identities and numerous national boundaries in southern Africa, regional efforts to address this issue are likely to be critical in preventing potential conflict over land and other natural resources threatened by climate change (Ibid.).

A number of regional integration initiatives which should facilitate the movement of goods, capital and persons in southern Africa are already underway. The Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC) and SADC are in the process of establishing a tripartite free trade area (T-FTA) encompassing the three regional communities, which would result in an integrated market of 26 countries and over 600 million people. One of the main pillars of the process is the integration of the various national and regional markets involved, and among the specific objectives of the integration process are the elimination of 'all tariffs and non-tariff barriers to trade in goods', the liberalisation of trade in services, and the facilitation of cross-border investment and movement of business persons (COMESA-EAC-SADC, 2010). While the T-FTA integration process is still at an early stage, it certainly has the potential to contribute positively to improving the region's capacity to adapt to the effects of climate change.

## **5. Conclusion**

This chapter has made the argument that while climate change poses significant threats to southern Africa, the adoption of regional instruments and other forms of regional cooperation and integration can serve to improve the region's capacity for dealing with these climate-related threats. It has been claimed, for instance, that regional institutions need to play an important role in generating and disseminating information on the risks associated with climate change and the best ways to deal with these specific risks. It has also shown how regional integration – through facilitating the cross-border movement of goods, capital and people – and regional cooperation on the management of important natural

resources can be vital in making the region less vulnerable to the projected impacts of climate change.

Regional initiatives can also support climate change adaptation in southern Africa in many other ways by, for example, addressing issues such as the spread of diseases and the destruction of shared or common ecosystems; enhancing the ability of countries in the region to lobby for technical assistance from industrialised countries and a more favourable multilateral climate change regime; promoting industrial and economic development; and creating more effective disaster risk management systems. Regional integration can also serve as a basis for improving the region's infrastructure, especially as the development and maintenance of this infrastructure is undoubtedly a regional public good. The development and distribution of energy is another area in which regional efforts can take advantage of significant scale economies.

While this chapter has argued that countries in southern Africa should prioritise climate change adaptation over mitigation, and has therefore focused specifically on regional approaches to adaptation, regional initiatives and institutions can also aid in climate change mitigation. In particular, regional financial institutions and development banks can be used to improve the region's ability to provide and access finance for carbon emission reduction schemes. Other regional mitigation initiatives, such as a regional carbon trading scheme, may also be feasible.

In conclusion, two final points should be made in relation to regional cooperation and climate change adaptation. First, adaptation measures are not usually adopted solely as a response to climate change. In most cases they are undertaken as part of larger sectoral or national initiatives relating to issues of planning and policy development (WTO-UNEP, 2009). This would suggest that an important way of promoting regional adaptation efforts would be to integrate these into regional integration initiatives such as those undertaken as part of the T-FTA integration process. Second, regional efforts to address climate change adaptation in southern Africa need not be the sole preserve of intergovernmental and supranational institutions. There is undoubtedly scope for other public entities, educational institutions and civil society bodies throughout the region to come together in order to promote and support regional climate change adaptation. Indeed, the participation of such organisations

should help ensure a more comprehensive and effective approach to climate change adaptation in southern Africa.

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*Chapter 4*

**Structural policies to counter marginalisation in southern African integration**

*Dirk Hansohm*

**1. Introduction**

Political and economic regional integration has been a core policy objective of virtually all African countries since their independence. Southern African countries are planning to integrate ever deeper. Both COMESA and SADC are in the process of establishing customs unions (in form of the Southern African Customs Union – SACU).

However, actual policy implementation did not keep pace with these plans: The trade integration process constantly faces delays.

Possibly the main reason for this is the (perceived or real) danger of marginalisation in the integration process as understood by the small and the poorer countries. By far the largest and in some respects the most developed country, South Africa is perceived by many as obtaining the main benefits, while the other countries in the periphery are locked into a weaker position, and denied the possibility of catching up, of changing their economic structure towards industrialisation. But the challenge relates not only to inter-country, but also to intra-country inequality. These countries may also face higher inequality in their societies. This argument of possible or certain polarisation is the starting point of this study.

This article discusses whether COMESA and SADC have established any mechanisms to counter the marginalisation tendency that is inherent in the process of regional integration, especially in the customs unions. As a basis for this, in a first step both the insights of economic geography and the experiences of the European Union (EU) are discussed in the following section.

Principally, one can distinguish between simple compensatory transfers (from core countries to marginal ones) and explicit structural policies. Both will be discussed. Particular emphasis will be laid on industrial policy that is usually at the core of such structural policies.

While regional integration is very much in vogue and, when it comes to trade, certainly surpasses multilateral integration, the EU is the region that so far has the most experience in deep regional integration. This alone makes it worthwhile to look at its experiences. Furthermore, the EU is explicitly giving attention the objective of convergence of poorer countries. Its mechanisms to counter marginalisation are considerable and long-standing. Last but not least, SADC has quite literally taken the EU as a model.

In a second step, Section 3 presents some data to give at least intuitive answers to the question: Have the smaller and less developed countries indeed been marginalised over the last two decades – decades that have seen substantial economic integration between countries in the region irrespective of the progress of institutional integration?

In the light of these arguments and this evidence, Section 4 discusses the mechanisms with which SADC and COMESA are planning to counter marginalisation. The conclusion summarises some lessons that may be taken from the discussion for pursuing regional integration in southern Africa.

## **2. Integration of unequals: economic theory and international experiences**

What does the economic science say on the effects of integration of unequal economies? In short, there is no conclusive answer. Different approaches with different assumptions arrive at different expectations.

Neoclassical theory expects a catch-up of poorer countries. It has no place for polarisation as it assumes that through comparative advantage, freer trade tends to disperse production. Every deviation from equilibrium triggers counterforces which restore the system to equilibrium. This results in equalising factor prices. A market economy has an inherent tendency towards spatial equilibrium. In this perspective, poorer countries will catch up by opening up to world trade and actively taking part in the globalisation process. In a context of smoothly operating markets, cheap labour in the developing countries attracts increasingly mobile capital. In the process of development, wage costs rise.

The opposite view is taken by polarisation theories. In contrast to neoclassical theory, these assume an increasing gap over time between a core of developed and industrialised

countries and a periphery of poor and agricultural economies, the development of each depending on the other. Circular cumulative processes arise and these processes are based on feedback, which puts the system further off balance. Forward and backward linkages lead to increasing deviations from spatial equilibrium.

On balance, theory does not give a definite answer to the question to whether a poor economy will tend to converge to richer ones in integration or whether countries will polarise. There are both centripetal (concentrating) and centrifugal forces at work. The balance of these forces determines the fate of regions and countries.

In general terms, centripetal forces include economies of scale, knowledge spillovers or other technological externalities, labour market pooling effects, and linkages between buyers and sellers as firms will want to locate close to buyers.

Centrifugal forces include congestion effects, rising land-rents, pollution, and other negative externalities associated with concentration of economic activities such as rents, land prices, prices of labour, and demand from dispersed consumers.

The relative power of these forces will be different according to specific goods and services, as these centripetal and centrifugal forces change over time. They may, for instance, change according to development of relative wage costs, learning effects, and so forth.

Overall, important factors that determine polarisation include:

- Scale economies versus transport costs.
- Share of activities that are (for production technique or demand factors) relatively equally distributed; share of non-tradables.
- Mobility of labour force.
- Spillovers (externalities that may be of a spatial nature) between the regions.

Numerous studies find long-term convergence, but a likely tendency of some divergence first, before spill-overs set in. Another possible outcome is bipolar distribution with large firms for bulk, but small niche firms with outsourcing, networking, and subcontracting.



The effect of growth on the centrifugal versus centripetal forces is also conditional on other factors and circumstances.

Lower trade costs and cheaper access to foreign markets should reduce the disadvantage of small countries and regions; but they could still be worse off if increased factor mobility induces capital and firms to leave, even at small differences in returns and profits (Braunerhjelm et al. 2000: 26).

The world as it is defies the simple view of equilibrium and catching-up, and this does seem to prove polarisation. The writings of the new economic geography of Krugman and others provide the basis for a more nuanced view. This literature emphasises path dependency (which was nonexistent in neoclassical theory). Polarisation is a possibility, not a necessity.

What are the implications for economic policy? On the positive side, there is no pre-determined fate. There is now wide agreement that simply opening up and leaving development to the market is unlikely to result in catching-up. The fact that the World Bank endorses the opinion that while openness helps a great deal, it has to be introduced with care (World Bank 2009), is evidence that this view is now mainstream. Circular causation, unevenness, and spillovers make for a world in which policies can make a difference to markets: well-executed policies can set these transformations in motion or speed them up (World Bank 2009). Economic policy can play an important role. However, there are at least four caveats:

1. The interaction between different factors is complex. As compared to doing nothing, policies can also – and easily – go wrong and do more harm than benefit. Experience has shown ample evidence for this.
2. There is a possibility to learn from other countries' experience – positive or negative. However, this does not mean (as is too often misunderstood) that these can serve as a blueprint. On the contrary, the local circumstances need to be understood and taken care of. These include not only the resource endowments, but also the political economy.
3. The capacity for policy making in poor and particularly in small countries is limited and usually overestimated. This necessarily increases the risk of policies going wrong.

4. Empirical research is necessary to establish the applicability of those lessons and the potential effects of policies on the economy. The limited availability of data in poor countries and low analytical capacity increase the constraints to effective policy making.

On the basis of current knowledge it is arguable that while one may doubt necessity, efficiency and usefulness of a policy to counter polarisation, a case for it cannot be generally ruled out. In principle, measures that aim at convergence can take one of two forms: they can be compensatory, i.e. funds are given (to poorer countries or regions) to compensate them for the costs they incur from being part of a regional integration scheme, and it is left to the respective state what to do with these funds. Alternatively, the region can undertake, at a regional or national level – or both, active policies that aim for structural change addressing the basis of the polarisation.

Compensatory policies are, seemingly, straightforward in calculating the cost and allocating the agency to fix the problem. However, in practice, it is not so easy to calculate the costs. First, data on the economies of poor countries are notoriously limited and unreliable. More importantly, calculating the direct static effects of liberalisation will miss the dynamic effects that will be more important in the longer term.

But the most powerful critique of the use of compensatory mechanisms is their nature as rents. This means that they are likely to reward unproductive activities, and they create interests to maintain, rather than to overcome, them.

Structural policies that address the underlying forces of marginalisation are more in tune with economic thinking. Industrial policy is at the core of these policies. The efforts to industrialise have been at the core of the first generation of development policies, focusing on import substitution and infant industry protection. However, these policies have not been very successful in many countries but rather led to the creation of expensive and inefficient industries that served the consumers badly and proved to be a heavy burden. In the course of the structural adjustment policies of the 1980s and 1990s, market-led export drives swept away industrial policies that became anathema. It was pointed out that it was not possible for bureaucracies to assume dynamic comparative advantages for the future.

However, there has lately been a revival and restoration of industrial policies among the options of development strategy. Some observers have pointed out that in reality industrial policies have always been practised – including by those countries such as the United States of America (US) that are thought to be mostly market-led. By taking the failures of the past into consideration, new approaches regard industrial policies more as a process than a fixed strategy. Government and the private sector together need to investigate the causes for the market failures and how best to respond to them. One of the difficulties of industrial policy can be seen as the paradox that while they are most needed in countries with weak markets, these are also usually the countries with weakest capacity to undertake such a policy.

Industrial policies are usually influenced by national governments. However, for the sake of balanced development in a region one might argue that it is best or even necessary to implement industrial policies at the regional level. However, while successful industrial policy is difficult enough on the national level, it is all the more difficult on the regional level beyond the nation state.

In fact, there have been regional initiatives for some time (Marti and Ssenkubuge 2009). However, all these regional activities did not go beyond consultation – they stopped short from properly coordinating the national policies, not to mention formulating or even implementing a common regional industrial policy. Arguably, to a large degree, this lack of concrete industrial policy at the regional level simply reflects the difficulties, in the presence of deficient policy making and administrative structures on the national level, of agreeing to regional agreements. This is compounded by the weak organisation of the private sector – weak on the national level and almost non-existent on the regional level (TRADES 2011).

The question of which agents on which level (local, national or regional) are best to act in which area of policy has received far too little attention in the discussion of regional integration. The principle of fiscal federalism (Buchanan 1950) might be applied: the region should focus on policy areas where economies of scale are large and internalising externalities are important. It should delegate to national level, or even to lower levels, the policy prerogatives where heterogeneity of preferences is predominant relative to the benefit of scale.

## **2.1. European Union**

To date, the EU is by far the most developed region in terms of common policies and a common market. It is useful to consider the EU as an example to learn from – both positively and negatively. The EU has impressive results to show in terms of actual integration and raising living status, also and in particular in the poorer countries that are catching up with the richer ones. At the same time, the current deep debt crisis in some countries has unearthed fundamental deficiencies in the institutional set-up of the currency union, the deepest form of economic integration that the majority (17) of the 27 EU countries) enjoy. Partly due to the colonial links between Africa and Europe, African states have looked very much to the EU as a model for regional integration. And in addition, the EU has strong compensatory mechanisms.

However, at the same time, we have to keep in mind the particularities of the EU model and its member countries that set it apart from southern Africa. First, the strong driving force that pushed the EU forward was political rather than economic: the wish to build a lasting peace after two devastating world wars. Second, the EU member states are and were at a higher level of economic development when embarking on regional integration. This meant that markets were much more developed, allowing smooth transactions. Economic integration promised much more immediate and substantial benefits from integration. It also allowed the EU to undertake its massive convergence programme.

In contrast, most African states have a much less differentiated production structure and tend to produce competing rather than complementary products. Furthermore, most of the EU member states have a pronounced state history with the result that nation building does not compete with building a region. Nevertheless, it is also possible that Africa policy makers have strong – perhaps even stronger – political and security motives for regional rather than economic integration.

Reducing welfare differences across the EU regions and countries has been one of the main EU objectives since its foundation. Substantial funds have been invested to achieve it. The EU cohesion policy, built into the treaties since 1986, has been given the objective of reducing the gap in the different regions' levels of development, in order to strengthen

economic and social cohesion of the region and to boost the emergence of a regional identity.

Structural Funds are at the heart of the EU cohesion effort, and absorb almost one-third of the EU budget. EU cohesion policy has three key financial arms: the European fund for regional development (ERDF), the European social fund (ESF) – that can be grouped as 'structural funds', and the cohesion fund (CF). While the first two are allocated to regions (within countries), the third is targeted at lagging countries. Structural funds and the cohesion fund represent on average 29% and 7% respectively of the EU budget in the period 2007–2013 (Santos 2009).

The convergence objective aims to stimulate growth and employment in the least developed regions. It highlights innovation and the knowledge-based society, adaptability to economic and social changes and the quality of the environment and administrative efficiency. It is financed by the ERDF and the ESF as well as the CF and targets the least developed member states and regions.

The areas eligible for the convergence objective combine the regions eligible on a regional criteria basis (GDP is less than 75% of the EU average) and member states that are eligible for the CF on a national criteria basis (GNI less than 90% of the European average (EC 2007: 13).

To what degree have the aims of the cohesion policy been reached? A large number of studies have been undertaken to analyse many angles of this question. First of all, an overall trend of convergence is recognisable. However, this does not necessarily mean that the cohesion policy has been the cause of this.

According to a study of 2003 (Petraikos et al. 2003), both concentration and dispersion processes are in operation at both the national and the EU level, and possibly at any level of aggregation. This implies that the arguments presented by the two sides of the 40-year old debate referred to above are both correct and empirically valid. This is true as much for the mainstream and highly celebrated neoclassical model as for the 'cumulative' approach. There is only a difference of time horizon. 'Neoclassical' effects tend to be stronger in the long-term, while cumulative effects follow the economic cycle and are more effective in the

short- to medium-term. The question of the relative strength of these two opposite forces of spatial change at different levels of aggregation remains open and should be the subject of further research.

To the following is stated in a recent study (Bickenbach et al. 2010):

The stylized facts reveal a broad aggregate trend towards structural convergence in the EU-15. The by far most important drivers of this convergence have been the sectoral structural change from highly concentrated agriculture and manufacturing industries towards dispersed services, and a continuing dispersion of services. The manufacturing sector, by contrast, worked against this structural convergence as it has become spatially more concentrated. The stylized facts also reveal that virtually all countries and most of their regions participated in this structural convergence. The speed of aggregate structural cohesion slowed down considerably in the early 1990s, however.

The EU is an example for the hypothesis that regionalisation is associated with both a decrease in between-country inequality, and an increase in within-country inequality. The analysis of variance shows that the net effect is negative, and that within-country inequality now comprises a larger proportion of total income inequality (Beckfield 2008).

A comprehensive study on the dangers of polarisation in Europe found a process of regional specialisation of economic activity in the EU integration process, but emphasised that 'this specialisation need not imply polarisation of Europe into rich and poor regions, those with jobs and those without. Three main types of outcome are conceivable: dispersion, concentration, or regional stagnation. The concentration outcome is regarded as very unlikely. Growth and cohesion are not to be seen as enemies. Unless misguided policies determine otherwise, they are allies. 'If polarisation is to be Europe's fate, it is likely to come from ill-conceived policy responses rather than from the underlying nature of European industry' (Braunerhjelm 2000: 9).

There are different findings and evaluations about the contributions of the EU measures to the progress in conversion. Some (including the European Commission, of course) argue that they were important, others point to the negative impacts and tend to think that this

progress was rather achieved in spite of the EU measures, while a third group relativises their importance. Most useful and practical are probably those that show the limitations of available data to provide sound studies to certify the link between EU expenditures and incentives and development results.

But whatever the success of the EU's structural funds, they are mired in numerous shortcomings and inefficiencies. Their declared aims are economic growth and regional convergence, but these goals do not always complement each other. Allocation of structural funds is not efficient from a pure growth standpoint and, although with enlargement cross-country transfers have increased significantly, on average almost twice as much redistribution still occurs within regions as opposed to between regions (Santos 2008).

Structural funds regulations have proved ineffective in preventing negative fiscal policy reactions to their fungibility because of conceptual inadequacies, existence of too many loopholes, large time lags between policy implementation and evaluation, lack of sanctions, inconsistency with Cohesion Fund regulations implicitly allowing fungibility of transfers (Herve 2001).

This fiscal outcome can be explained by rational behaviour of governments: existing EU transfer provisions provide perverse incentives to governments for whom real convergence may be only one objective among others. The perspective of transfer reduction/elimination after crossing certain income thresholds incites the pursuit of fiscal policies that slow down the process of real convergence (Herve 2001). In conclusion, in most cases the fiscal policy reactions are more likely to have been detrimental than conducive to long-run growth - Ireland being the exception. Concerning the financing of productive public expenditure, the cohesion countries have become ever more dependent on EU transfers.

While a case for regional policy cannot be denied, the EU arguably largely overstates the need for such a policy at EU level. In view of the large amount of taxpayers' money affected, and in view of the doubts concerning the extent of the cohesion problem as well as concerning the efficacy of regional policy to solve it, more careful empirical investigation is required (Krieger-Boden 2002).

All in all, in the view of critics two underlying problems plague current EU institutions: first, the effect of overlapping jurisdictions between different levels and actors, resulting from layers of agreements reached with a heavy emphasis on balancing. The Lisbon Treaty has tried to resolve the first, with mixed results; second, the tendency of dirigiste and high faith in government intervention and policy coordination (Alesina et al. 2005).

The EU regional policy, the structural funds as well as the control of national state aid for regions, in spite of recent reform efforts do not comply with the recommendations arising from recent knowledge (as discussed in previous section). The EU structural policy violates the principle of subsidiarity, the principle of correspondence (by its additionality concept), and the principle of competition (by overstating the principle of coordination). The control of national regional aid has become an instrument of integrating this aid into an all-embracing European regional policy, thereby destroying the accountability for policy measures and disregarding the differing functions regional policy has to fulfil at the EU level as compared to the national, regional or local level (Krieger-Boden 2002).

Confusion is created by the multiple objectives of current EU cohesion policy and by the political horse-trading over levels of aid granted to different member states and regions. In fact, a significant part of EU structural funds involves – in net economic terms – simply transferring funds between individuals within one and the same region (Santos 2009).

EU policies that aim to foster economic growth and to reduce disparities have value. But these objectives need to be targeted with distinct and suitable instruments. The separation of the growth and redistribution functions of structural funds is therefore desirable. In terms of redistribution, structural funds should aim at fostering cross-country economic and social convergence, leaving subnational allocations to member states. In terms of growth, investment should be primarily targeted at energy, trans-national networks and research.

Regional (EU) level arrangements as the stabilisation and growth pact or the benchmarking in the system of open coordination can, when the incentives and sanctions are set rightly, support breaking incrustations, strengthen growth powers and alleviate undesirable developments. On the other hand, wrong incentives, as found with the structural funds, will provoke suboptimal public and private decisions. In conclusion: a weak economic



performance is no irreversible fate. Top rankings in economic competition and in the catching-up process do not come automatically as well (Fuchs and Scharrer 02).

Finally, the EU needs to improve its capacity to assess the performance of structural funds and EU policies more generally (Santos 2008). Data is inadequate to really measure and isolate effects of EU grants. The European Commission (EC) needs to build appropriate data collection procedures into programme design and into the management and reporting process for the structural and cohesion funds. 'Worrying a bit more about getting good quality data for evaluation studies and a bit less about already cumbersome accounting and administrative controls is likely to be an excellent investment.' (Fuente 2010)

Convergence, while it occurred, was highly conditional on the quality of national policies and abilities. The mixed and controversial results of the EU interventions and the conditional convergence point to the importance of the policies at national level and their quality. Some EU countries managed to converge on a high employment level in meeting the stabilisation and growth pact while overcoming the welfare gap in the EU. Important for this was the institutional arrangement at the national and EU levels. Countries with high regulation density and a pronounced distribution mentality had weak growth dynamics, employment, and budget consolidation (Fuchs and Scharrer 2002).

Ireland is perhaps the best example of catching up, raising from Europe's poor house to a higher per capita income than the large EU economies before its deep financial crisis hit in 2007. At the root were policy consistency over a long time, investments in education and technology, and the lowering of transport costs. These reduced the costs of Ireland's marginal position in Europe, and increased its mobility of labour. An important ingredient was also a sectorally selective policy: incentives only for successful (Braunerhjelm 2000).

In conclusion, the following lessons could be taken from the experience of the EU policies to counter marginalisation in the EU integration process:

- There is a slow convergence process happening in the EU.
- However, it is conditional on the quality of national policies, and, secondly, this success cannot be on a one-to-one basis ascribed to the EU cohesion policy.
- It also is accompanied by a tendency for divergences at national level.

- A process of both concentration and dispersion is in operation at both national and EU level.
- There are a number of shortcomings of the structural funds.
- Their effectiveness is low as compared to the spending.
- The design of the structural policies invites perverse national reactions because of fungibility of funds.
- Confusion is created by the multiple objectives of current EU cohesion policy.
- There are also multiple, both overlapping and competing, instruments.
- Concerning the financing of productive expenditures, the cohesion countries have become ever more dependent on EU transfers.
- Confusion is created by the political horse-trading over levels of aid granted to different member states and regions.
- Much of the funds involve simply transfer funds between individuals within one and the same region – this leads to inefficiency.
- Negative factors in national policies/set-ups include regulation density and distribution mentality.
- As success in catching-up is conditional on national policy, so is polarisation.
- Data is inadequate to provide definite evaluation of EU cohesion policy.
- The importance of governance regarding growth and development for integration is emphasised (deeper regional integration concerns domestic policies)

### **3. The record of integration and development**

Wherever deeper economic integration is considered, the danger of marginalisation, that is polarisation between poorer and richer countries, is perceived. The previous section has shown that neither the theory nor EU experience gives a simple clearcut answer.

Has polarisation or catching-up actually happened in southern Africa, a region that, despite the many constraints, has in fact integrated to quite some degree? This section looks at

available data to give some preliminary answers. The following tables show data for the 26 countries of Eastern and Southern Africa (ESA) that are members in the three eastern and southern African economic groupings of COMESA, EAC, and SADC.

Convergence versus divergence can be seen in several dimensions. The simplest one is pure economic growth. The comparison on a per capita basis (for the years 1990, 2000 and 2010) gives a quite diverse result (see Table 1). More populous countries are not richer: of the five most populous countries only one (South Africa) is also among the five richest countries. Of the 24 countries compared (no data is available for Libya and Zimbabwe), three had a higher per capita income than South Africa in 2010. Five have a higher income than the second biggest economy, Egypt.

Comparing the changes over the two decades and taking South Africa as a benchmark, half of the countries had a higher growth. This includes not only oil-rich countries (such as Angola and Sudan), but also post-conflict countries (such as Ethiopia, Mozambique and Uganda).

How have the countries that are bordering South Africa done? According to the marginalisation fear, they should have done worse, in particular those that are in a customs union (SACU) with South Africa. In effect, the fears of marginalisation are also virulent in these countries. In fact, only one SACU member (Lesotho) has done worse. The other three have grown much faster than South Africa; nevertheless, it is arguable that this is still not high enough to close the gap in a short enough period. Botswana has a higher per capita income than South Africa and the other two are catching up. Mozambique has grown very much (admittedly from a very low basis), and only Zimbabwe has done worse, but not because of its neighbourhood to South Africa (rather, for domestic reasons).

A additional perspective is gained by looking at the changes in the size of the national economies. This shows that the vast size of South Africa (it comprised 40% of the region's economy in 1990) has been declining in the process to 36% in 2010 (although slightly increasing during the last decade). However, the combined share of the five biggest economies increased (from 74,9% to 78.6%). Of the remaining countries, seven increased their share, while six decreased – the remaining countries registered no change. Overall, the table shows a number of marked changes over the twenty years – no clear relationship to size can be recognised.

It is today recognised that income alone does not sufficiently reflect human welfare. The status of health and education also has to be measured. These can be proxied by life expectancy and literacy (see Table 2). Indeed, this data shows some independence from income – the picture of welfare looks different. Concerning education, all countries but two have shown marked increases, most very substantial. But only four have higher literacy than South Africa. The figures on health show some dramatic declines in life expectancy for six countries, mainly in southern Africa, but also in Kenya. Presumably this is due to HIV/AIDS. The data also does not show a better record for the larger economies.

As discussed above, the quality of governance is related and is an important factor in countries that have been able to catch up. Also, while simple trade of final products does not depend on governance, quality of governance is important for being able to integrate deeper. Probably the five most important elements of governance measured by the World Bank's governance indicators are shown in Tables 3 and 4: voice and accountability, government effectiveness, regulatory quality, rule of law and control of corruption. The results also illuminate the fact that results are complex and not clearly related to size. The overall improvement of the country group's governance indicators is quite mixed: considerable numbers of countries move in either direction. While the majority of countries moved up during the past 20 years (two-thirds of countries in rule of law), both in government effectiveness and control of corruption, more countries deteriorated than improved.

Did the larger countries perform better? On voice and accountability, four of the five best performing countries (all but South Africa) are small. With respect to government efficiency, one other large country – Ethiopia – is in the top group. On regulatory quality, among the larger countries (both in terms of population and economy), only South Africa is among the top five countries. For control of corruption, there is none of the big countries among the best. Overall, South Africa does not have the best rankings in any.

It is interesting while disturbing that in many cases the better performing countries are deteriorating, converging with the worse. Is this a negative externality of regional integration? This would certainly need more analysis.

The other governance indicator considered was the development of political rights and civil liberties by the Freedom House (Table 8). These are also interesting both for the level of rights and liberties as well as for the development over time. On the first, again among the big countries, only South Africa belongs to the top five. On the development over time, it is encouraging that the vast majority of countries improved their performance. This trend holds irrespective of size.

**Table 1: Gross National Income per capita and relative changes in Gross Domestic Product 1990–2010**

		GNI per capita and its change					GDP (US\$ million)			GDP share of total group			
		1990	2000	2010	%change 2000/ 1990	%change 2010/ 1990	1990	2000	2010	1990	2000	2010	Change
Angola	19,1	1910	1900	5400	-0,5%	182,7%	10260	9129	84391	3,7%	2,5%	8,4%	↑
Botswana	2,0	4870	7920	13710	62,6%	181,5%	3792	5632	14857	1,4%	1,5%	1,5%	↑
Burundi	8,4	350	320	400	-8,6%	14,3%	1132	709	1611	0,4%	0,2%	0,2%	↓
Comoros	0,7	870	930	1080	6,9%	24,1%	250	201	541	0,1%	0,1%	0,1%	→
Congo, DR	66,0	420	210	320	-50,0%	-23,8%	9350	4306	13145	3,4%	1,2%	1,3%	↓
Djibouti	0,9	1970	1600	2440	-18,8%	23,9%	452	551	1049	0,2%	0,1%	0,1%	↓
Egypt	81,1	2280	3710	6160	62,7%	170,2%	43130	99838	218912	15,5%	27,0%	21,7%	↑
Eritrea	5,3	380	570	540	50,0%	42,1%	477	633	2117	0,2%	0,2%	0,2%	→
Ethiopia	82,9	390	460	1030	17,9%	164,1%	12083	8180	29717	4,3%	2,2%	3,0%	↑
Kenya	40,5	980	1130	1630	15,3%	66,3%	8590	12691	31409	3,1%	3,4%	3,1%	→
Lesotho	2,2	1060	1260	1840	18,9%	73,6%	541	745	2132	0,2%	0,2%	0,2%	→
Libya	6,4	n/a	10710	16740	-	-	28905	33897	62360	10,4%	9,2%	6,2%	↓
Madagascar	20,7	720	790	950	9,7%	31,9%	3081	3878	8721	1,1%	1,0%	0,9%	↓
Malawi	14,9	400	580	850	45,0%	112,5%	1881	1774	5106	0,7%	0,5%	0,5%	↓
Mauritius	1,3	4370	8060	13670	84,4%	212,8%	2653	4583	9729	1,0%	1,2%	1,0%	→
Mozambique	23,4	270	420	920	55,6%	240,7%	2463	4248	9586	0,9%	1,1%	1,0%	↑
Namibia	2,3	2920	4010	6380	37,3%	118,5%	2350	3909	12170	0,8%	1,1%	1,2%	↑
Rwanda	10,6	520	580	1150	11,5%	121,2%	753	1735	5628	0,3%	0,5%	0,6%	↑
Seychelles	0,1	9460	15340	21050	62,2%	122,5%	369	614	937	0,1%	0,2%	0,1%	→
South Africa	50,0	5549	6610	10280	19,1%	85,3%	112014	132878	363704	40,2%	35,9%	36,1%	↓
Sudan	43,6	680	1130	2020	66,2%	197,1%	12409	12366	62046	4,5%	3,3%	6,2%	↑
Swaziland	1,2	2660	3710	4950	39,5%	86,1%	1115	1490	3645	0,4%	0,4%	0,4%	→
Tanzania	44,8	590	760	1420	28,8%	140,7%	4259	10186	23057	1,5%	2,8%	2,3%	↑
Uganda	33,4	400	670	1240	67,5%	210,0%	4304	6193	17011	1,5%	1,7%	1,7%	↑
Zambia	12,9	829	870	1370	4,9%	65,3%	3288	3238	16193	1,2%	0,9%	1,6%	↑
Zimbabwe	12,6	n/a	n/a	n/a	n/a	n/a	8784	6607	7474	3,2%	1,8%	0,7%	↓

Source: <http://data.worldbank.org/indicator>

Note: GDP absolute in US\$ and relative change in %, GNI per capita PPP: absolute in US\$ and relative changes in %

**Table 2: Literacy rate and life expectancy (1990–2009)**(source: <http://data.worldbank.org/indicator>)

	Literacy rate, adult total (% of people ages 15 and above)					Life expectancy at birth, total (years)				
	1990	2000	2009	Compared to SA	1990- 2010	1990	2000	2009	Compared to SA	1990- 2010
Angola	n/a	67,4	70	-	↑	41,1	45,2	50,3	-	↑
Botswana	68,6	81,2	84,1	-	↑	64	50,8	53		↓
Burundi	37,4	59,3	66,6	-	↑	46,2	46	49,4	-	↑
Comoros	n/a	68,5	74,2	-	↑	55,6	57,9	60,2	+	↑
Congo, DR	n/a	67,2	67	-	↓	46,8	45,7	47,8	-	↑
Djibouti	n/a	n/a	n/a	n/a	-	51,4	53,9	57,1	+	↑
Egypt	44,4	55,6	66,4	-	↑	62	69,1	72,7	+	↑
Eritrea	n/a	52,5	66,6	-	↑	48,2	56	60,1	+	↑
Ethiopia	27	35,9	29,8	-	↑	47	51,7	58,1	+	↑
Kenya	n/a	73,6	87	-	↑	59,3	52,3	55,8	+	↓
Lesotho	n/a	86,3	89,7	+	↑	59,3	47,6	46,7	-	↓
Libya	77,4	86,2	88,9	+	↑	68,1	72,5	74,5	+	↑
Madagascar	n/a	70,7	64,9	-	↓	50,7	59,7	66,2	+	↑
Malawi	48,5	64,1	73,7	-	↑	47,1	46	52,7	+	↑
Mauritius	79,9	84,3	87,9	-	↑	69,4	71,7	72,9	+	↑
Mozambique	n/a	38,7	55,5	-	↑	43,2	47,2	49,3	-	↑
Namibia	75,8	85	88,5	-	↑	60,8	57,7	61,6	+	↑
Rwanda	57,9	64,9	70,7	-	↑	32,8	46,5	54,7	+	↑
Seychelles	87,8	91,8	91,8	+	↑	70,7	73	73	+	↑
South Africa	n/a	82,4	88,7	0	↑	61,5	54,8	51,6	0	↓
Sudan	n/a	60,1	70,2	-	↑	52,5	57	60,8	+	↑
Swaziland	n/a	79,6	86,9	-	↑	59,3	48,7	47,9	-	↓
Tanzania	59,1	69,4	72,9	-	↑	50,6	50,4	56,6	+	↑
Uganda	56,1	86,1	73,2	-	↑	47,4	46,1	53,1	+	↑
Zambia	65	68	70,9	-	↑	47,5	41,9	47,8	-	↑
Zimbabwe	83,5	n/a	91,2	+	↑	60,5	44,6	48,5	-	↓

Source: <http://data.worldbank.org/indicator>

**Table 3: Voice and accountability, government effectiveness, and regulatory quality (rank) and their change**

	Voice and accountability				Government effectiveness				Regulatory quality			
	1996	2000	2010	Direction	1996	2000	2010	Direction	1996	2000	2010	Direction
Angola	4,8	7,7	14,7	↑	20	3,4	12,4	↓	7,8	3,9	17,2	↑
Botswana	74,5	68,3	59,7	↓	68,3	70,7	67,5	↓	75	72,1	67,5	↓
Burundi	5,3	3,4	21,8	↑	2,9	4,9	12,9	↑	4,4	12,3	11,5	↑
Comoros	27,9	18,8	34,6	↑	2,9	7,3	1	↓	13,7	9,3	5,7	↓
Congo, DR	3,9	2,4	9	↑	3,4	1	1,4	↓	2,9	2	3,3	↑
Djibouti	17,3	28,9	14,2	↓	17,1	10,1	15,3	↓	18,6	21,6	25,4	↑
Egypt	25,5	24,5	13,3	↓	50,7	46,8	40,2	↓	52,4	35,8	46,9	↓
Eritrea	7,7	10,1	0,5	↓	11,2	12,2	6,2	↓	13,7	15,2	1,4	↓
Ethiopia	14,4	19,2	15,1	↑	6,3	15,6	42,6	↑	8,8	12,7	21,1	↑
Kenya	32,7	25,5	39,8	↑	43,4	35,1	35,9	↓	36,3	37,3	48,8	↑
Lesotho	29,8	34,1	41,2	↑	52,2	49,3	42,1	↓	35,8	34,3	28,7	↓
Libya	8,7	5,8	2,8	↓	19	10,2	9,6	↓	3,4	4,4	10	↑
Madagascar	41,8	51,9	28	↓	31,2	28,8	23	↓	17,2	31,9	30,6	↑
Malawi	42,8	44,2	43,6	↑	33,7	41,5	41,1	↑	39,2	40,7	31,6	↓
Mauritius	73,6	79,8	69,7	↓	63,4	70	75,6	↑	50,5	70,1	76,6	↑
Mozambique	39,9	45,7	45	↑	52,7	38,5	38,8	↓	27	42,7	40,7	↑
Namibia	63	59,6	57,8	↓	69,3	61,5	59,3	↓	64,7	61,3	54,5	↑
Rwanda	6,3	7,2	10,9	↑	11,2	27,8	54	↑	7,4	13,7	47,9	↑
Seychelles	53,4	49	53,6	↑	75,6	56,1	62,2	↓	62,3	17,2	32,1	↓
South Africa	74	70,2	65,4	↓	79	75,6	65,1	↓	65,2	68,6	62,7	↓
Sudan	2,4	2,9	4,3	↑	12,2	9,3	6,7	↓	8,3	8,3	7,2	↓
Swaziland	11,5	9,1	12,8	↑	27,8	25,9	36,4	↑	42,7	32,4	28,2	↓
Tanzania	26	36	46,4	↑	24,9	40	37,8	↑	33,3	40,2	37,3	↑
Uganda	19,7	18,3	33,7	↑	24,9	41	34,5	↑	58,8	55,9	48,3	↓
Zambia	37	32,2	38,9	↑	13,7	17,1	23,4	↑	33,8	39,2	34,9	↑
Zimbabwe	28,8	16,3	7,6	↓	47,8	24,4	3,8	↓	19,1	7,8	2,9	↓

Source: [www.worldbank.org/governance](http://www.worldbank.org/governance)



**Table 4: Rule of law and control of corruption (1996–2010) and their change (1996–2010)**  
(source: [worldbank.org/governance](http://worldbank.org/governance))

	Rule of law				Control of corruption			
	1996	2000	2010	Direction	1996	2000	2010	Direction
Angola	3,3	2,4	9	↑	7,3	2,4	3,8	↓
Botswana	66,5	66,5	67,8	↑	74,6	75,1	80	↑
Burundi	4,3	3,3	10	↑	4,9	9,8	12,4	↑
Comoros	12	9,1	13,7	↑	20	5,9	26,3	↑
Congo, DR	1,4	1	2,4	↑	0	1,5	2,9	↑
Djibouti	25,4	26,3	28,9	↑	35,6	15,1	48,8	↑
Egypt	55	52,6	51,7	↓	56,1	43,4	34,4	↓
Eritrea	40,7	38,3	8,1	↓	70,2	73,2	39,2	↓
Ethiopia	23	25,4	27,5	↑	8,8	37,6	28,2	↑
Kenya	16,3	23,4	16,6	↑	15,1	14,6	18,7	↑
Lesotho	54,1	51,2	46,4	↓	35,6	56,1	62,7	↑
Libya	17,2	27,3	17,5	↑	25,9	26,3	6,2	↓
Madagascar	32,1	44	23,7	↓	63,9	54,6	49,8	↓
Malawi	38,3	36,4	50,7	↑	48,8	51,7	42,1	↓
Mauritius	77,5	78,9	74,9	↓	73,2	72,2	73,2	→
Mozambique	23,4	29,2	37	↑	40	41,2	42,6	↑
Namibia	61,2	57,9	61,6	↑	77,1	70,7	64,1	↓
Rwanda	4,8	7,7	46	↑	20	30,7	70,8	↑
Seychelles	81,3	68,9	55,9	↓	82,4	69,8	65,1	↓
South Africa	53,1	55	57,8	↑	78,5	73,7	60,8	↓
Sudan	3,3	4,3	6,2	↑	5,4	23,9	4,3	↓
Swaziland	32,5	29,7	37,9	↑	60	49,3	52,6	↓
Tanzania	48,3	40,7	36,5	↓	15,1	14,6	37,3	↑
Uganda	33	28,2	42,2	↑	28,8	21	20,6	↓
Zambia	31,6	34	38,4	↑	15,1	21	33,5	↑
Zimbabwe	25,8	10	0,9	↓	43,9	16,6	2,4	↓

Source: [worldbank.org/governance](http://worldbank.org/governance)

**Table 5: Development of political rights and civil liberties**

	1990–91		2000–01		2011		Development 1990–2010	
	political rights	civil liberties	political rights	civil liberties	political rights	civil liberties	political rights	civil liberties
Angola	7	7	6	6	6	5	↑	↑
Botswana	1	2	2	2	3	2	↓	→
Burundi	7	6	6	6	5	5	↑	↑
Comoros	5	5	6	4	3	4	↑	↑
Congo, DR	6	6	7	6	6	6	→	→
Djibouti	6	5	4	5	6	5	→	→
Egypt	5	4	6	5	6	5	↓	↓
Eritrea	-	-	7	6	7	7	→	↓
Ethiopia	7	7	5	5	6	6	↑	↑
Kenya	6	6	6	5	4	3	↑	↑
Lesotho	6	5	4	4	3	3	↑	↑
Libya	7	7	7	7	7	7	→	→
Madagascar	4	4	2	4	6	4	↓	→
Malawi	7	6	3	3	3	4	↑	↑
Mauritius	2	2	1	2	1	2	↑	→
Mozambique	6	6	3	4	4	3	↑	↑
Namibia	2	3	2	3	2	2	→	↑
Rwanda	6	6	7	6	6	5	→	↑
Seychelles	6	6	3	3	3	3	↑	↑
South Africa	5	4	1	2	2	2	↑	↑
Sudan	7	7	7	7	7	7	→	→
Swaziland	6	5	6	5	7	5	↓	→
Tanzania	6	5	4	4	3	3	↑	↑
Uganda	6	5	6	5	5	4	↑	↑
Zambia	6	5	5	4	3	4	↑	↑
Zimbabwe	6	4	6	5	6	6	→	↓

Source: [www.freedomhouse.org](http://www.freedomhouse.org)

#### **4. Plans and policies to counter marginalisation in southern Africa**

This section discusses ways designed and planned in southern Africa – particularly by SADC and COMESA – to counter the risk of marginalisation and polarisation in the light of recent insights of economic geography and the EU experience.

But first of all, the experience of SACU is instructive for the region. This is because SACU has had to deal with polarisation, and it did so with compensation payments. SACU, founded in 1910, precedes the independence of its four small members: Botswana, Lesotho, Namibia and Swaziland. The customs union was administered unilaterally by South Africa. It basically paid a monetary compensation to the small countries for being part of the customs union and for ceding their trade policy to South Africa that set its tariffs for the sake of protection of its industries. In return, the small countries received a disproportionate part of the common customs pool. These resources were a substantial part of their revenue income, but the price was being part of a common market dominated by South African industries. In the 1990s this deal became no longer politically sustainable. The small countries demanded a ‘democratisation’ of SACU. As a result of a new agreement in 2002, an independent secretariat was set up.

Among the eight objectives of the 2002 SACU Agreement were, for the first time, aims to alter the institutional and structural set-up of the region. These aims are:

- to create effective, transparent and democratic institutions which will ensure equitable trade benefits to member states;
- to enhance the economic development, diversification, industrialisation and competitiveness of member states;
- to facilitate the development of common policies and strategies.

Article 38 covered a common industrial development policy. It stated that ‘Member States recognise the importance of balanced industrial development of the Common Customs Area as an important objective for economic development’. Because of this, member states agreed to develop common policies and strategies with respect to industrial development.

An urgent need arose to find common ground for the role of tariffs (that was now seen as a means for industrial policy, rather than merely as revenue), for the appropriate view of what regional balanced industrial development means, and how it can be reached (McCarthy and Hansohm 2005).

However, it seems that 10 years after signing the new SACU agreement, no progress has been made on formulating, let alone implementing, a common industrial policy. Five countries' experience in this regard highlights the challenges of highly unequal countries to agree on common policies and gives a warning against such efforts by much larger groups as SADC and COMESA.

SACU presents the extreme case of inequality between its members: South Africa constitutes more than 90% of the region's GDP (see Table 1 above). While its per capita income is not much higher than that of the other members (Botswana's is higher), its capacity to formulate, negotiate and administer trade agreements is. Also, South Africa's industrial sector is much more diversified. Another stark difference between South Africa and the four small SACU members is the diversification of its revenue sources. Because of their dependence on tariffs as a revenue, the scope for these countries to use tariffs as an instrument of trade policy is curtailed. But tariffs are not an important revenue source in South Africa – it uses and has used tariffs as an effective measure to protect industries and create industrial employment.

Technically spoken, the solution could be a step forward to strong regional institutions. However, this does not seem a realistic prospect at all at this time, especially since all countries, including South Africa, are facing considerable social problems in reducing poverty. This does not make substantial transfers such as occur in the EU likely or feasible.

Since the 1970s there have also been initiatives on the regional level in Africa (Marti and Ssenkugube 2009). However, these did not go beyond consultation.

#### **4.1. SADC**

The SADC treaty (1992) speaks of 'our duty to promote the interdependence and integration of our national economies for the harmonious, balanced and equitable development of the

Region’ and states a determination ‘to alleviate poverty, with the ultimate objective of its eradication, through deeper regional integration and sustainable economic growth and development. One of five SADC principles is ‘equity, balance and mutual benefit’.

However, interestingly the 11 objectives do not explicitly take up the issue of balanced development. They merely aim to ‘harmonise political and socioeconomic policies and plans of member states, and to ‘develop policies aimed at the progressive elimination of obstacles to the free movement of capital and labour, goods and services, and of the people of the Region generally, among Member States’. Thus, the treaty takes the position that market-led development will lead to balance development by itself. Trade, industry, finance, investment and mining are areas in which member states agree to cooperate – which means that these remain firmly in national competence.

A major document for the objective of deepening regional integration in SADC is the Regional Indicative Strategic Development Plan (SADC 2003) that translates the aims and objectives of the SADC Treaty into measurable targets. While mentioning the need to diversify regional economies through, inter alia, industrial development and value addition, it takes a rather market-oriented approach. It assumes that ‘deeper integration of the regional economy should lead to economic convergence and not divergence’ (SADC 2003: 14) amongst member states. It therefore follows a neoclassical approach.

However, ‘while maintaining a ‘development integration’ strategy, the RISDP, in view of the significant discrepancies existing among SADC member states, recognises the need for a flexible approach towards deeper integration and the implementation of various policy reforms and recommendations (SADC 2003: 7).

RISDP argues that the industrial sector can only withstand the challenges of globalisation ‘with an overall improvement in productivity and competitiveness combined with a diversified and balanced industrial growth in a wider, well linked economic space that allows for the efficient and effective use of factors of production on the basis of increased value addition’ (SADC 2003: 25-26).

The policy objectives for the finance and investment sector include encouraging movement towards regional macroeconomic stability and convergence – inflation, budget deficits, debt,

minimise market distortions (SADC 2003: 26). Under the Macroeconomic Convergence Memorandum of Understanding, member states have agreed that to achieve and maintain macroeconomic stability, all countries should converge on stability-oriented economic policies, which include restricting inflation to low and stable levels, maintaining a prudent fiscal stance that eschews large fiscal deficits and high debt servicing ratios, and minimising market distortions.

It is important to note that SADC here refers to convergence of macroeconomic indicators and national policies to achieve them – similar to the EU Growth and Stabilisation Pact – which has to be distinguished from long-term developmental convergence which is concerned with the outcome of development and which increases living standards in the poorer countries.

The policies and strategies that are adopted for trade, industry, finance and investment should take into consideration the special needs of less developed member countries and ensure that a win-win situation prevails. As a prime instrument for this is seen the principle of asymmetry in terms of tariff reduction and rules of origin (SADC 2003: 67), i.e. poorer countries liberalising later. But it is recognised also that 'deliberate policies will be required to deal with industrial development for the periphery areas or countries that may not be as competitive as others (SADC 2003: 67) However, it is not stated what nature these policies should have, in particular if they are needed on national or also on regional level.

The targets of RISDP to which SADC governments are obliged are operationalised through a number of SADC protocols. The SADC Trade Protocol (1996), the first to be signed, states the following objectives (Article 3):

1. To further liberalise intra-regional trade in goods and services on the basis of fair, mutually equitable and beneficial trade arrangements, complemented by protocols in other areas.
2. To ensure efficient production within SADC reflecting the current and dynamic comparative advantages of its members.
3. To contribute towards the improvement of the climate for domestic, cross-border and foreign investment.

4. To enhance the economic development, diversification and industrialisation of the region.
5. To establish a Free Trade Area in the SADC region.

While the Trade Protocol aims at a balanced development, it does not define what this means and it does not explicitly refer to the issues of possible marginalisation or need for convergence. Following from this, it does not formulate any ideas on a systematic strategy to ensure or achieve convergence. It merely leaves it to the member countries to apply for a delayed liberalisation of tariffs or Non-Tariff Barriers (NTBs) if they consider to be adversely affected (Article 3).

In sum, while a notion of balanced development testifies to the awareness about the deep unbalanced status in terms of economic size and development level, this has not yet been taken further.

#### **4.2. COMESA**

COMESA basically takes a market-led approach to integration and assumes that trade is a key basis for both closer integration and for convergence. Article 3 of the COMESA Treaty (1982) states that the first objective of the Common Market is 'to attain sustainable growth and development of the Member States by promoting a more balanced and harmonious development of its production and marketing structures'.

With respect to industrial development, it commits in Article 4 to cooperate in the field of industrial development. In the field of economic and social development it aims to promote the accelerated development of the least developed countries and economically depressed areas through the implementation of special programmes and projects in various fields of economic development. Article 79 recognises a need to promote 'economic and social balance' and offers regional macroeconomic coordination to promote it.

According to Article 100 the member states undertake to formulate an industrial strategy aimed at the promotion of linkages among industries through specialisation and complementarity, paying due regard to comparative advantage in order to enhance the effects of industrial growth and to facilitate the transfer of technology.

The member states, recognising the need for the promotion of harmonious and balanced development in the Common Market and in particular the need for reducing the disparities among various areas in the region and paying attention to the special problems of each Member State, particularly those of the least developed countries and economically depressed areas, agree to take several measures designed to strengthen the capacities of those groups of states of the Common Market to solve these problems.

The key measure is a special Fund for Cooperation, Compensation and Development for tackling the special problems of underdeveloped areas and other disadvantages arising from the integration process (Article 150). The member states were to conclude a protocol which shall, inter alia, determine the machinery and formula to be used in granting compensation under this article.

This COMESA Fund was established in 2002 and consists of two distinct elements:

1. the COMESA Infrastructure Fund, designed as a revolving loan facility to finance regional infrastructure projects, including via long-term loans at fixed interest rates and other financing mechanisms such as Public-Private-Partnerships; it is expected to attract non-grant financing and to deliver positive returns on investment; and
2. the COMESA Adjustment Facility, intended to assist countries via budget support to meet the social costs of adjustment to trade liberalisation (e.g. through social safety nets or schemes to retrain the workforce); it will be primarily financed by grants (Braun-Munzinger 2009).

With regard to the Adjustment Facility, the added value of this new mechanism seems to be less clear according to a 2009 study (Braun-Munzinger 2009). The value of the Adjustment Facility is likely to depend on the type of contributions it can raise in the future. By June 2008, the EC was the only donor. Accordingly, the question remains of whether there is a real need to channel these funds through the Adjustment Facility instead of giving them as direct budget support to the respective beneficiary countries (Braun-Munzinger 2009).

The institutional architecture of the COMESA Infrastructure Fund hosted by Mauritius and the operationalisation of the COMESA Adjustment Facility were finalised in 2009. Regarding the COMESA Adjustment Facility, the year 2009 saw the fund disburse €4.4 million and



€10,3 million to Burundi and Rwanda respectively. The disbursed funds sought to compensate the two member states who are already members of the COMESA FTA for revenue losses incurred upon their joining the EAC Customs Union (COMESA 2009: 3).

Member states that have not joined the COMESA Fund were urged to do so and to ratify the protocol and make their contribution in order to be eligible to benefit from the Adjustment Facility (COMESA 2010: 17).

In sum, COMESA has gone further than SADC in conceptualising polarisation and setting up compensatory institutions.

## **5. Conclusion**

This section discusses some lessons that may be taken from the preceding sections.

No clear picture of either polarisation or convergence emerges, either from theory, or from the EU or ESA experience. This is a refreshing and encouraging indicator, all too often overlooked. Larger economies have an easier start with their larger markets with their scale effects and a potential for better organised business and a larger and more vocal civil societies to press for good governance. On the other hand, small countries have to face pressures concerning efficiency and limitations on rent-seeking activities. Small may be beautiful.

Tendencies of convergence or polarisation fixed and irreversible over time. There is no definite path dependence in this respect where countries have no option for change.

The indefinite prospects of convergence or polarisation point to the importance of national policies, endowments, and quality of institutions. Convergence is conditional.

Regional convergence may be accompanied by a degree of divergence on the national level, a tendency that is to be seen in Europe and ESA. Dynamic growth centres are often attained by impoverishing rural areas.

Growth may, but does not necessarily, lead to convergence. The opposite may be true. Thus, growth alone is not a sure recipe for convergence.

Structural change is at the heart of both qualitative development and catching-up by poorer countries. This necessitates a degree of social and economic mobility. Regional integration can play an important role here. By opening up cartellised domestic markets to regional competition it can contribute to overcoming incrustations.

For this, the creation and strengthening of markets are vital. An institutional approach, for example by establishing funds, may on the contrary create, strengthen and maintain interest groups with the aim to resist structural change.

In ESA, the strong sense of the dangers of polarisation contrasts with the lack of strategies or even mechanisms – although COMESA has made a start. Regional agreements tend to take an approach that assumes that growth (partly as a result of regional integration) and market integration will more or less automatically alleviate risks of polarisation. However, experience tends to indicate that, if at all, this is more likely for the longer term. But in the short term a temporary divergence may happen.

Together with perceptions, this creates a case for policy intervention. Principally, there are two ways to address this issue: compensatory mechanisms and structural policy. The former may be economically justifiable, but it seems hardly feasible in the light of the still grave domestic inequality and poverty in the bigger and wealthier countries. A massive system of transfers from rich to poor countries as practised by the EU is unthinkable in today's ESA. Furthermore, as the experience of SACU shows, it does not help to encourage the very structural change that the poorer countries need.

Structural policies – policies that aim at changing the economic structure of economies – are needed. These can be implemented on a national or a regional level. As the experiences in the EU (where structural policy is largely done on the national level) and the SACU (which until now failed to execute its plan for a common industrial policy) indicate, the starting point is still the national level, hopefully with a degree of coordination with, or at least communication within, the region.

Multiple objectives are plaguing the EU as well as the agreements in ESA: These are mostly simply additive and the relation between each other – there could be mutual strengthening

or trade-offs – is not discussed. This state of affairs contributes to confusion and inefficiencies.

Also, both the EU and ESA are characterised by multiple overlapping and competing instruments. How this leads to inefficiencies and contradictions has been amply corroborated by studies on the EU – the same is likely to take place with greater integration within the ESA.

National capacities are and remain the crucial elements of the success of regional integration. No strong regions have ever emerged from weak elements. The EU shows that even after 50 years, the constituent member states are still the vital players.

Of importance is the fact that accountability is stronger on national (or even local) levels. Even in the EU, regional institutions, including the EU parliament, are weak. In ESA, interest groups are still poorly organised on the national level. Organisation on the regional level is almost nonexistent (TRADES 2011).

On the national and regional levels, governance is decisive. Increasingly, there is international agreement that good governance is the basic prerequisite for sustainable economic development. Thus, capacity building for effective and sound governance is a primary means of poverty reduction programmes. Good economic institutions, particularly in the public sector, are instrumental to economic growth and catching-up.

Institutional transformation, however, is measured in decades rather than in years. (Re-) writing laws and regulations (a relatively easy task) is not identical with creating institutions – it only forms the basis. The rules of the game that economists call institutions are cognitive constructs that shape expectations about how other people behave (North 1990). Expectations need to be adjusted accordingly.

Vagueness, ambiguity, doubling of roles and responsibilities of agencies on the national and regional levels are frequent in regional integration processes. More thought needs to be given to this issue.

In order to create mechanisms that alleviate polarisation tendencies, a much stronger data basis and more research (and in the first place stronger ability to undertake research as well)

are required. Even the EU with its deep and diversified research structure has been shown to lack consistent data for evaluating the success – or lack thereof – of mechanisms for convergence.

Regular rigorous monitoring and evaluation need to be communicated, not only to policy makers, but also to the private sector and the citizens. This is not only to obtain feedback on efficiency and effectiveness, but also in to gain public support and legitimacy.

Both successful programmes of trade integration and industrial development have one characteristic in common: effective private sector participation. As discussed, a key reason for the failure of import substitution programmes in Africa was the systematic inability of public officials to predict where their economies would develop dynamic competitive advantages on the regional and world scale. An essential element of successful trade and industry policies is the effective interaction and common vision of policy makers and private sector representatives. This process is still very weak in most countries. All the more this is a problem on the regional level, where the private sector is only rudimentally organised as yet (TRADES 2011).

Civil society participation is important for effective regional integration processes in general as well as for the identification of policies to address any possible and feared adverse effects of integration. This is also a lesson to be learnt both in the EU and in ESA.

Studies on the success recipes of regional integration processes have identified two strong integration conditions. First, the regional group stands to reap important gains from integration. Second, the group is led by a country able to serve as an institutional focal point and regional paymaster. No integration scheme that satisfies these two conditions has ever failed (Mattli 1999). In the ESA and SADC region, South Africa (which is comparatively much stronger than big countries are in other regions) would be the clear candidate for such a role, as it constitutes 36% and 63% of ESA and SADC respectively. Experiences elsewhere suggest that without the stronger lead role of South Africa the regional integration is unlikely to make substantial progress.

South Africa's recently unveiled National Development Plan (National Planning Commission 2011) does not seem to identify such a role. However, it calls for a more active and

integrating role of the country and calls for a critical evaluation and possible redefinition of South Africa's role in SACU and SADC. That process, if undertaken, may lead to a step forward in regional integration.

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## Chapter 5

### The SADC monetary union and common currency: some lessons from the euro

*Mavis Marongwe*

#### Introduction

The launching of the euro on 1 January 2000 was one of the greatest achievements of European Union (EU) integration. It was also a great experiment in using a common currency as both a means and an end to regional integration. As a means it was expected that the euro would bring 'greater economies of scale, price transparency, lower prices and other economic benefits' (Dinan, 2006: 234), and as an end, that it would lead to deeper integration. In its first ten years the euro appeared to be a success, especially in establishing price stabilisation for those eurozone countries that previously had unstable inflationary environments. However, beginning in 2009, the sovereign debt crisis in Greece, Ireland, Portugal, Italy and Spain put a damper on the euro's success and threatened its existence. Meanwhile, in 2003, the member countries of the Southern African Development Community (SADC)<sup>1</sup> agreed to a process of regional integration leading to a common currency similar to the process that was followed by the European Union. The regional integration process was set out in the Regional Indicative Strategic Development Programme (RISDP), a 15-year plan of integration milestones (SADC, 2003). The milestones were the establishment of a free trade area by 2008, the completion of negotiations for a customs union by 2010, the completion of negotiations for a common market in 2015, the establishment of a monetary union in 2016, and the establishment of a common currency in 2018 (SADC, 2003). SADC launched the free trade area on target in 2008 but failed to meet the target for the customs union in 2010, and postponed it to a yet to be determined date (TMSA, 2010). The failure to complete the negotiations for a customs union means that the 2015 and 2018 targets for the monetary union and the common currency may also have to be pushed forward. The slowing down of momentum on the RISDP coupled with the 11-year anniversary of the euro and the eurozone's debt crisis, is an appropriate reason for SADC member states to pause and take some timely lessons from the European Union's experiences with the euro. This chapter discusses these lessons as follows: Part I – lessons

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<sup>1</sup> The SADC member countries are Angola, Botswana, Democratic Republic of the Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe.



from the macroeconomic convergence (MEC) criteria and the Stability and Growth Pact (SGP); Part II – lessons from the euro debt crisis; and Part III – lessons from the euro's effect on trade integration. Part IV looks at policy options that SADC countries could adopt to avoid or mitigate some of the problems that the European Union countries have encountered with their regional integration project and the euro.

### **Part I: Macroeconomic convergence criteria and the Stability and Growth Pact**

On 7 February 1992, European Union member states signed the Treaty on European Union, also known as the Treaty of Maastricht. Article 121(1) of the Treaty set out the macroeconomic convergence criteria to be implemented by member states in order to qualify for the third stage of Economic and Monetary Union (EMU), and adopt the euro as their currency. The MEC criteria, which gave targets for inflation rates, annual government deficit, annual government debt, exchange rates, and long-term interest rates, are set out in Table 1.

**Table I: Maastricht Treaty macroeconomic convergence criteria**

Criteria	Requirements
Annual government deficit	The ratio of the planned or actual government deficit to GDP shall not exceed 3 per cent % of GDP, unless: <ul style="list-style-type: none"> <li>• either the ratio has declined substantially and continuously and reached a level that comes close to 3 per cent % of GDP; or, alternatively,</li> <li>• the excess over 3 per cent % of GDP is only exceptional and temporary and the ratio remains close to 3 per cent % of GDP</li> </ul>
Government debt	The ratio of government debt to GDP shall not exceed 60 per cent % of GDP, unless the ratio is sufficiently diminishing and approaching 60 per cent % of GDP at a satisfactory pace
Inflation	The achievement of an inflation rate that is no more than 1.5 percentage points higher than the average inflation rates of the three best-performing EU Member States
Long-term Interest Rates	A Member State shall have an average nominal long-term interest rate of not more than 2 percentage points above that of the three best performing Member States and the rates shall be measured on the basis of long-term government bonds or comparable securities, taking into account differences in national definitions.
Exchange Rates	A Member State shall have joined the exchange-rate mechanism of the European Monetary System for at least consecutive two years and shall not have devalued its currency against any other Member State's currency on its own initiative for the same period.

Source: European Central Bank (2011)

The following can be noted about the MEC targets. Firstly, the setting of the 3 per cent ratio for annual government deficit to GDP was driven primarily by political and not economic considerations. The reasons for setting the target at three per cent ranged from a commitment made by the French President Francois Mitterrand to his Socialist Party, to a desire by some member states to select a reference point that would be low enough to prevent Italy from being in the first group of EMU participants (Dinan 2006: 241). Because it

was primarily influenced by political and not economic considerations, the deficit target subsequently proved difficult for the EU countries to achieve and maintain when faced with their economic realities. Secondly, the requirements on long-term interest rates and exchange rates were designed to pave the way for the transfer of monetary policy from the national authorities to the European Central Bank (ECB). The transfer of monetary policy to the ECB and thus its loss as a tool for national authorities to manage their economies turned out to be an aggravating factor for the eurozone debt crisis that started in 2009.

After the EU had set the MEC criteria and the euro currency commencement dates, the member states aspiring to be in the first wave of countries joining the single currency began to prepare their economies. While preparing, concern arose about how macroeconomic convergence was to be maintained after the single currency had been established. The concern was that profligate countries could slim down their budgets in order to get into the euro and then return to their errant ways once in the monetary union, thus destabilising it and threatening the European Central Bank's 'no bailout clause' (Dinan 2006: 244). To guard against this possibility, the Stability and Growth Pact was added to the EMU through the Amsterdam Treaty in 1997 (EU, 1997). The SGP contains preventive and corrective mechanisms to ensure that member states keep their government debts and deficits under control. It requires all EU member states to keep their public deficits at or below three per cent GDP to deficit ratio, and their government debts at or below 60 per cent GDP to debt ratio with corrective measures required for eurozone members that breach the targets (EU, 1997).

In preparing for monetary union, the aspiring euro member states found the MEC criteria, particularly those on budget deficit, difficult to meet, and countries that included Germany, France and Italy, resorted to 'creative accounting' methods in order to meet the targets (Dinan, 2006: 244). Italy's measures, for example, included introducing a 'European tax' that was to be collected until 1997 and then refunded afterwards, creating 'informal' spending commitment lists to exclude some figures from the official budget, and 'suddenly' finding money in its Treasury (Dinan, 2006: 244). In spite of creative accounting, most of the 12 countries that wanted to join the euro in the first wave still failed to meet all the requirements. Ultimately, waivers had to be granted so that 11 out of the 12 could join the single currency. Thus, Belgium with a public debt to GDP ratio of 122 per cent (over twice

the 60 per cent target), was allowed to join, as was Italy which had not been in the EMU for the two preceding years, without currency devaluation (Dinan, 2006: 246). Greece failed to meet the targets completely and did not succeed in joining the first wave of countries joining the euro. When it later joined on 1 January 2001, it was on the basis of statistics that were later discovered to be false (The Telegraph 2011a).

After the introduction of the euro single currency, eurozone countries focused on adhering to the SGP to maintain the integrity of the single currency. Table 2 shows ratios of deficit to GDP, and Table 3 the ratios of debt to GDP, in the eurozone for the period 2001 to 2010.

**Table 2: Deficit to GDP ratios for eurozone countries 2001 to 2010**

Country	Year									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Austria	+0.1	-0.4	-1.2	-1.0	-1.6	-1.6	-0.9	-0.9	-4.1	-4.6
Belgium	+0.6	-0.0	+0.1	+0.0	-2.7	+0.3	-0.3	-1.3	-5.9	-4.6
Cyprus	-2.3	-4.5	-6.3	-4.1	-2.4	-1.2	+3.4	+0.9	-6.0	-5.3
Estonia	+0.3	+1.5	+2.6	+1.7	+1.6	+2.3	+2.5	-2.8	-1.7	+0.1
Finland	+5.2	+4.3	+2.5	+2.1	+2.8	+4.0	+5.2	+4.2	-2.6	-2.5
France	-1.6	-3.2	-4.2	-3.6	-2.9	-2.3	-2.7	-3.3	-7.5	-7.0
Germany	-2.9	-3.8	4.1	-3.7	-3.3	-1.6	+0.3	+0.1	-3.0	-3.3
Greece	-6.1	-4.9	-5.7	-6.6	-5.2	-2.9	-6.4	-9.8	-15.4	-10.5
Ireland	+0.8	-0.4	+0.2	+1.4	+1.7	+3.0	+0.1	-7.3	-14.3	-32.4
Italy	-3.2	-2.7	-3.2	-3.2	-4.3	-3.3	-1.5	-2.7	-5.4	-4.6
Luxembourg	+6.1	+2.1	+0.2	-0.6	+0.0	+1.3	+3.7	+3.0	-0.9	-1.7
Malta	-6.6	-5.7	-10.4	-5.1	-2.9	-2.6	-2.4	-4.5	-3.7	-3.6
Netherlands	-0.2	-2.0	-3.2	-2.1	-0.3	+0.5	+0.2	+0.6	-5.5	-5.4
Portugal	-4.2	-2.8	-2.9	-3.0	-6.1	-3.9	-2.6	-2.7		
Slovakia	-6.6	-7.8	-3.8	-2.1	-2.8	-3.5	-1.8	-2.1	-8.0	-7.9
Slovenia	-3.9	-2.7	-2.7	-2.1	-1.4	-1.3	-0.1	-1.8	-6.0	-5.6
Spain	-0.5	-0.3	-0.0	-0.1	+1.0	+2.0	+1.9	-4.2	-11.1	-9.2

Source: Eurostat (2009); Eurostat (2010)

Target: ≤ 3 per cent

Key: -- deficit; + surplus

Table 2 shows that prior to the global financial crisis which started in 2008, eurozone countries could be divided into those that were consistent in keeping their budget deficits at three per cent or less of GDP, and those that struggled to meet the target. The countries in the first group include Austria, Belgium, Estonia, Finland, Ireland, Luxembourg, the Netherlands, Slovenia and Spain. For most of the first ten years of the euro, these countries had budget surpluses, and where they had deficits, these were kept at or below three per cent of the GDP. Their breaches of the SGP target, if any, occurred from 2008 during the global financial crisis, and the eurozone crisis. The second group includes Cyprus, France, Germany, Greece, Italy, Malta, Portugal, and Slovakia. These countries met the deficit target in some years, but they also had periods where they fell short. In this group, Greece can be singled out for consistently high budget deficits during the ten-year period. It should be noted that the three biggest economies in the eurozone, namely Germany, France, and Italy, were in the group struggling to keep budget deficits at or below three per cent of GDP. The SGP has rules to prevent and correct high budget deficits, but the European Council failed to exercise the political will to apply the rules to defaulting members. In 2005, following demands from Germany and France, which were both experiencing high deficits at the time, the SGP rules were changed (Pender and Usherwood, 2002: 76). Although the three per cent and sixty per cent ratios for deficit and debt to GDP were retained, the changes made the SGP 'more flexible and provide[d] more explicit scope for exercising judgment and discretion than in its original version' (Morris, Ongena, and Schuknecht, 2006: 6). The reforms were later criticised by many including the European Central Bank as risking a weakening of the SGP (Morris et al., 2006: 6).

**Table 3: GDP to debt ratios in the eurozone 2001 to 2010**

Country	Years									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Austria	67.0	66.7	65.1	64.3	63.9	62.2	60.7	63.8	69.6	72.3
Belgium	100.0	105.4	100.0	95.7	92.1	88.1	84.2	89.6	96.2	96.8
Cyprus	61.9	65.2	69.8	72.0	69.1	64.6	58.3	48.3	58.0	60.8
Estonia	4.7	5.8	6.0	5.5	4.6	4.5	3.7	4.6	7.2	6.6
Finland	43.6	42.3	45.2	45.1	41.8	39.3	35.2	34.1	43.8	48.4
France	56.8	58.8	63.2	65.1	66.4	63.7	63.9	67.7	78.3	81.7
Germany	59.6	61.2	64.8	66.8	68.0	67.6	64.9	66.3	73.5	83.2
Greece	114.4	111.6	108.8	109.3	100.0	97.1	105.4	110.7	127.1	142.8
Ireland	35.9	32.4	31.5	29.8	27.6	25.0	25.0	44.4	65.6	96.2
Italy	110.9	108.3	106.8	106.5	105.8	106.5	103.6	106.3	116.1	119.0
Luxembourg	6.7	6.8	6.7	6.6	6.1	6.6	6.7	13.6	14.4	18.4
Malta	63.5	63.3	72.8	75.9	70.2	63.6	62.0	61.5	67.6	68.0
Netherlands	51.5	51.3	52.6	53.1	51.8	47.4	45.3	58.2	60.8	62.7
Portugal	53.6	56.1	57.7	59.4	63.6	64.7	63.6	64.7	83.0	93.0
Slovakia	49.2	43.7	43.1	42.5	34.2	30.5	29.6	27.8	35.4	41.0
Slovenia	28.4	29.8	29.4	29.8	27.0	26.7	23.1	21.9	35.2	38.0
Spain	56.3	53.2	49.4	46.9	43.0	39.6	36.1	39.8	53.3	60.1

Source: Eurostat (2010); Eurostat (2009)

Target: ≤60 per cent

Table 3 shows that whilst some countries consistently kept their government debts at or below sixty per cent ratio to GDP, others consistently struggled to meet the target. The countries in the first group include Estonia, Finland, Ireland, Luxembourg, the Netherlands, Slovakia, Slovenia, and Spain. Apart from Spain and Slovakia, these countries were also in the group of countries that kept their budget deficits at or below three per cent of GDP. The group of countries that struggled to meet the government debt target includes Austria, Belgium, Cyprus, France, Germany, Italy, Malta, and Portugal. In this group Belgium, Greece, and Italy had consistent high debt to GDP ratios. Greece had government debts of over 100 per cent to GDP for all but 2006 when it had a deficit of 97.1 per cent, whilst Italy had government debts exceeding 100 per cent of GDP for every year of the first ten years of the euro's existence.

Thus, Tables 2 and 3 show that between 2001 and 2008 only 6.7 out of the 17 eurozone countries met the SGP's targets for government debt and deficit. Therefore it can be concluded that in the first ten years of the euro's existence, the eurozone countries were neither convergent nor moving towards convergence. They failed to achieve macroeconomic convergence before the launch of the euro, and afterwards failed to adhere to the SGP. The failure can be attributed to three factors. Firstly there are many structural differences in the economies of the eurozone countries. Prior to joining the eurozone some countries had stable macroeconomic environments and thus they had little difficulty with meeting the MEC targets and maintaining the SGP targets. Estonia, Finland, Luxembourg, the Netherlands and Slovenia can be put in this category. However, other countries had unstable economies with structural weaknesses prior to joining the eurozone. Consequently, prior to entering the single currency Italy's macroeconomic environment was characterised by its a weak currency, whilst Greece had high budget deficits. Secondly, the eurozone economies, like other countries in the world, are vulnerable to the effects of globalisation with their economies driven by supply and demand elsewhere. If there is a fall in demand for their products and services, or a rise in the cost of commodities such as oil, their government debts and budget will be affected. Finally, the eurozone countries do not have similar business cycles, so that they do not experience economic upturns and downturns at the same time. For example, Germany and France experienced an economic slump in 2004,



whilst Spain, Italy, Ireland, Portugal, and Greece were severely affected by the global economic crisis in 2008.

The eurozone's experiences with the MEC criteria and the SGP hold important lessons for the SADC countries because, for their regional integration project, they have set MEC targets that are similar to those in Table 1. The SADC macroeconomic Convergence Initiative was first specified in the Memorandum of Understanding signed by member states in August 2002, and then further specified in the draft Finance and Investment Protocol (FIP), and the RISDP (SADC 2007b). The SADC MEC criteria which are set out in Table 4, target inflation, annual government deficit and debt, and the ratio of current account funds to GDP.

**Table 4: Macroeconomic convergence targets for the SADC countries**

Year/Indicator	2008	2012	2018
Inflation annual rate	<9.5%	<5%	<3%
Ratio of deficit to GDP	<5%	<3%	<3%
Ratio of debt to GDP	<60%	<60%	<60%
Ratio of current account to GDP	<9%	<9%	<3%

Source: SADC (2007a)

Table 4 shows that SADC adopted the same three per cent ratio for deficit to GDP that was influenced by political considerations in the EU. It also set the same sixty 60 per cent ratio for debt to GDP as the EU. However, unlike the EU, the SADC MEC includes a target for the ratio of the current account to the GDP. SADC also went beyond the EU to set additional quantitative macroeconomic targets on economic growth, external import reserve requirements, central bank lending to the government, domestic savings and domestic investment (SADC, 2007b). This shows that apart from monetary union, SADC is also aiming for convergence in some fiscal matters.

Because of the similarity of the MEC targets, SADC can draw important lessons from the eurozone's MEC and SGP experiences. The main lesson is that it is difficult, if not impossible, for sovereign countries each with a separate economy to reach a stage where they are

convergent or even close to convergent on macroeconomic issues, and to maintain that convergence. The prospective eurozone countries failed to meet MEC targets even after using creative accounting manoeuvres. After entering the euro, adhering to the SGP proved just as difficult as meeting the MEC criteria had been. Table 5 shows the data for 2008, the first target year for the SADC MEC for the primary targets of inflation, annual government deficit and debt, and the ratio of current account funds to GDP. The table shows that achieving the MEC might not be easier in the SADC region than it was in the EU.

**Table 5: Primary macroeconomic convergence criteria data for SADC, 2008**

Country	MEC target			
	Annual inflation rate (Target= <9.5%)	Ratio of deficit to GDP (Target = <5%)	Ratio of debt to GDP (Target = <60%)	Ratio of current account to GDP (Target= <9%)
Angola	13.2	+8.9	33.0	+21.2
Botswana	12.6	-0.8	6.0	+15.0
DRC	23.8	+0.7	n/a	-7.3
Lesotho	10.8	-1.0	55.0	+12.6
Madagascar	9.4	-4.7	30.0	-22.8
Malawi	8.8	-6.3	46.4	-6.3
Mauritius	9.7	-3.4	57.7	-10.5
Mozambique	10.3	-2.8	40.0	-6.1
Namibia	10.3	-4.7	18.7	+3.8
South Africa	11.6	-0.7	32.0	-7.4
Swaziland	12.6	-1.3	17.8	-15.4
Tanzania	10.3	-3.8	38.0	-12.5
Zambia	13.6	+1.0	18.1	-4.2
Zimbabwe	1,594,745	+29.9	114.7	-16.6

Source: Peters (2011: 151)

Table 5 shows that in 2008, ten SADC countries (Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, and Zambia) met three out of the four targets, and three countries (Democratic Republic of the Congo, Swaziland, and Tanzania), met two targets. Zimbabwe was an outlier with its data skewed by the hyperinflation that it was experiencing at the time; thus it did not meet any of the targets. It

remains to be seen how the region will fare with the 2012 and 2018 targets, and it may well be that the SADC countries could succeed in meeting those targets, achieving convergence, and eventually in establishing their common currency. However, should they succeed, they will then need to maintain MEC convergence as in the EU in order to preserve the integrity of the currency. And similar to the eurozone countries, they may find that this is influenced by factors such as globalisation and different business cycles and therefore largely beyond their control. SADC countries depend mostly on commodity exports and if demand for these falls, they may find themselves with high budget debts and deficits. SADC countries also have different economic cycles. For example, Botswana was greatly affected by the 2008 global financial crisis which led to a fall in demand for diamonds, its primary export; but during the same period, Angola experienced record growth in GDP due to a rise in demand for oil and petroleum which are its main exports.

From this lesson SADC countries have to consider whether it is worth devoting resources and energy to pursue macroeconomic convergence if the odds are that they may not achieve it, or that they may struggle to maintain it. Whilst sound fiscal policies and targets are a necessary precondition for sustainable economic growth, the euro experiences have shown that these are best left to each state to decide and implement while taking into account its own economic structure and stage of development. For example, whilst a target of three per cent GDP to government deficit may be a realistic goal for one country, nine per cent may be more realistic for another. If macroeconomic convergence is not likely to be achieved, the goal should be abandoned and the resources and energy devoted to other more realistic targets in the regional integration project such as the free trade area, as will be argued in Part IV.

## **Part II: The euro debt crisis**

The proximate trigger for the euro debt crisis was the November 2009 revelation by the Greek Government that its economy was in worse shape than had previously been let on (The Telegraph 2011a). The revelation sparked concern in the international markets about whether and how Greece was going to pay its debts and finance its deficits. In response to the concerns, credit ratings agencies began to downgrade Greece debt with Standard & Poor's relegating it to junk status in April 2010, to be followed shortly by Moody's and then

Fitch's in January 2011 (The Telegraph) 2011a). With its debt credit downgraded, Greece was unable to raise money on the financial markets, forcing it to turn to the International Monetary Fund (IMF) and the EU for financial support. The events in Greece sparked a flurry of similar events in Ireland, Portugal, Italy and Spain as each revealed serious debt and deficit problems in its economy (Economist, 2011). Most of the sovereign debt that is the subject of the euro debt crisis is held by banks within the EU, especially German and French banks, thus making the eurozone debt crisis unique to the EU (The Telegraph, 2011b). Therefore the bailouts that were extended to Greece, Ireland, and Portugal by the IMF and the EU were intended to avoid a debt default by these countries which could lead to massive losses for the banks holding the debts and +destabilise eurozone financial institutions particularly in France and Germany. Because of this uniqueness, it is highly unlikely that a crisis with similar characteristics could occur in SADC because its member countries source most of their external credit from multilateral institutions, bilateral partners or international financial markets and not from each other. Thus, if a SADC member state were to find itself unable to pay external debts, the financial institutions in other member countries would probably not be exposed, and the other member countries would therefore not be compelled to give bailouts in order to safeguard their own interests. However, debt crises *per se* are not unknown in SADC, with several member countries having been affected by the sovereign debt crisis of the 1980s and 1990s. From that crisis, six SADC countries (DRC, Madagascar, Malawi, Mozambique, Tanzania, and Zambia ) ended up under the joint International Monetary Fund and World Bank Highly Indebted Poor Countries (HIPC) Initiative that was designed to help highly indebted poor countries manage and pay off their debts (IMF, 2011). With SADC also susceptible to sovereign debt problems, it could therefore learn some important lessons from the euro debt crisis.

The first lesson is the practical implications of passing control over monetary policy to a common monetary authority (Santos Silva and Tenreyro, 2010: 3). In a common currency, member states cede to a common monetary authority the ability to use monetary policy to manage their economies. The common authority in the union decides the monetary policy taking into account the interests of all the member states. Sometimes, these interests might conflict, for example while some countries might need expansionary monetary policies, others might need contractionary monetary policies (Krugman and Wells, 2008: 426-427).

This means that the monetary policy adopted by the common authority may hurt some countries even while it is helping others. Without the power to set their own monetary policy, countries have to rely on fiscal austerity measures such as tax hikes and budget cuts to manage a budget crisis. Apart from their unpopularity with the general populace, austerity measures can also contract aggregate demand, thus worsening a financial crisis. When the euro debt crisis hit, the central banks in the affected countries could not unilaterally engage in expansionary monetary policy or decrease interest rates in order to stimulate demand in their own economies. Instead they had to wait on the European Central Bank, which at the beginning of the crisis did not lower interest rates because whilst this would have benefited Greece, Ireland, Italy Portugal and Spain with their recessionary economies, it would have been detrimental to countries like Germany whose economies needed a contractionary monetary policy.

The second lesson is linked to the first, and entails that under a common currency governments lose the ability to set their own exchange rate policy. A country that manages its own exchange rate can, whenever necessary, make its economy competitive by devaluing the currency to make exports cheaper and imports more expensive. Should SADC countries adopt a common currency, they will no longer have the option of using exchange rates to manage their economies. In the eurozone, the countries hit hardest by the crisis (Greece, Ireland, Italy, Portugal and Spain) have not been able to devalue currency to make their goods more competitive. By contrast, EU countries that are not a part of the eurozone such as Poland have 'been able to profit from flexibility of [their currency's] exchange rate in a way that has helped growth and lowered the current account deficit without importing inflation' (Klaus, 2010). Similarly, Iceland, which is not member of the EU, 'devalued its currency and imposed capital controls' (Evans-Pritchard, 2010), when its economy collapsed during the 2008 global financial crisis. This encouraged export demand, discouraged expensive imports and stimulated economy recovery.

The eurozone debt crisis has therefore shown that a government needs to retain control over monetary policy and exchange rates to give it room to balance fiscal austerity measures with monetary measures and exchange rate mechanisms in managing its economy. Presently, when a SADC country has problems with government debt or deficit, or uncompetitive exports, it has the option of reducing interest rates or devaluing its currency

to stimulate the economy. But with a common currency this option will no longer be available leading to the type of problems seen in the eurozone debt crisis.

The third lesson from the euro debt crisis is that in a currency union, countries take on the risk of being exposed to the macroeconomic problems of other member states (Dudley, 2010: 34). In the euro debt crisis, all the eurozone countries had to contribute to the bailout packages for Greece, Ireland and Portugal, with Germany as the biggest economy taking on most of the burden. This created resentment and political problems in Germany and in other countries such as Finland where citizens feel that they are unfairly paying for profligate countries when their own governments have been circumspect with public finances (Westall and Kreijger, 2011). Such developments are damaging to the regional integration that the single currency was supposed to foster. This is an important lesson for SADC countries because whilst they sometimes bail each other out during times of crisis, this is not formalised but rather through ad hoc bilateral arrangements. For example, Malawi bailed out Zimbabwe during its economic crisis that began in 2000; however, it was not compelled to do so (Malawi Democrat, 2011). However, in a currency union, as has happened in the eurozone, member states may be compelled by the exigencies of a situation to bail each other out because not doing so could threaten the survival of their common currency.

The fourth lesson from the eurozone debt crisis is that it shows ‘the folly of binding a group of disparate countries together in a currency zone with no mechanism, such as a central fiscal authority, to address its internal imbalances’ (The Economist, 2010). According to Krugman (2011):

The continent’s economies were too disparate to function smoothly with one-size-fits-all monetary policy. Too likely to experience ‘asymmetrical shocks’ in which some countries slumped while others boomed. And unlike US states, European countries weren’t part of a single nation with a unified budget and a labor market tied together by a common language.

In order to resolve the disparity, it has been suggested that the eurozone could adopt a central fiscal authority to make taxing and spending decisions (Davis, 2011: 9-10). However, a single fiscal authority for the eurozone would probably create more problems, because the individual countries will no longer have the option to develop fiscal policy to manage their

economies. Instead, these decisions will be made elsewhere and, as with the monetary policies, they may not be the best for each country. It can also be argued that fiscal union is not necessary for a successful currency union because around the world there are successful, long-existing, formal common currency areas that predate the euro, including the Eastern Caribbean dollar, and the CFA francs of West and Central Africa. In these common currency areas, there is neither fiscal nor political union but they are successful because the member countries are more homogenous than the eurozone as they share the same history and language, and have economies that are structurally similar. There are consequently few internal imbalances.

This is an important lesson for SADC countries because, just like the eurozone countries, they are disparate, with the countries at different stages of development, with different languages and colonial histories. In other words, they could face the same problems as the eurozone.

From the lessons from the eurozone debt crisis, SADC has to consider whether the benefits of monetary and currency union are worth giving up their individual currencies for. Should the SADC countries decide that the benefits of a common currency are worth giving up control over monetary and exchange rate policy, they will need to develop specific rules for dealing with problems such as those experienced during the euro crisis and they will have to ensure that the rules are strictly enforced.

### **Part III: The euro and Regional Trade Integration**

Robert Mundell (1961: 657-65) in his Nobel Prize winning work on optimal currency areas posited that the main benefit of establishing a common currency between countries is an increase in international trade due to the elimination of currency conversion costs (transaction costs) and a greater predictability of prices. Hence, since the introduction of the euro in 2000, there has been a great deal of debate about the impact of the common currency on trade in the eurozone. The first ten years of the euro's existence were generally considered as being too early to make a proper empirical assessment, but an early study in 2000 by Andrew Rose predicted that a common currency could increase trade by a factor of up to three times. However, a 2003 study by Micco, Stein and Ordoñez found that this prediction was too high for the euro, and that instead it had increased trade between

member countries by 5 to 20 per cent. A subsequent study in 2006 by Baldwin (2006: 7) found that after the introduction of the euro, trade in the eurozone had increased by a modest nine per cent at best, and that the increase was not exclusive but rather covered the non-eurozone countries as well. Most important, Baldwin's study (2006: 7) found that the evidence suggested that the increase had not been due to reduced transaction costs but rather to the export of new goods to eurozone countries due to the reduced costs of introducing such goods into new markets. In 2010, Santos Silva and Tenreyro undertook an authoritative study on the euro and trade using the non-eurozone EU countries as a control group. Their finding was that the effect of the euro on trade in the original 12 eurozone countries had been almost zero per cent, because trade among these countries was already well integrated before the euro was introduced. They noted, however, that the single currency may have a dramatic effect on the newer eurozone countries especially those from the former eastern bloc which were not as well integrated before joining the eurozone, although more time is needed before the effect can be properly evaluated. Eleven years into its existence, the general consensus is therefore that while the euro has increased trade in the original 12-member eurozone it has not been a dramatic increase. This is contrary to Mundell's thesis, and is an important lesson for the SADC region because increased trade integration is one of the primary drivers of the proposed monetary and common currency.

The SADC region like other regions in Africa does not have well integrated trade links (UNECA, 2010: 357). Because of this, it is possible that unlike the eurozone which was well integrated prior to the euro, a common SADC currency could increase intra regional trade as transaction costs are reduced leading to greater predictability of prices. However, this would be true only if currency conversion costs and unpredictability of prices were the main obstacles to trade integration in SADC. According to the United Nations Economic Commission for Africa (UNECA, 2010: 375), the two main obstacles to poor trade integration in African are 'a lack of diversification and competitiveness'. Table 6 showing the top exports of each of the SADC countries, reveals that a lack of diversification instead of high transaction costs is a more important reason for poor trade integration in the region.



**Table 6: Top exports of SADC countries**

Country	Exports				
Angola	crude oil	diamonds	refined petroleum products	coffee	sisal
Botswana	diamonds	copper	nickel	soda ash	meat
DRC	diamonds	gold	copper	cobalt	wood products
Lesotho	manufactures 75% (clothing, footwear, road vehicles)	wool and mohair	food and live animals		
Madagascar	coffee	vanilla	shellfish	sugar	cotton cloth
Malawi	tobacco 53%	tea	sugar	cotton	coffee
Mauritius	clothing and textiles	sugar	cut flowers	molasses	fish
Mozambique	aluminium	prawns	cashews	cotton	sugar
Namibia	diamonds	copper	gold, zinc	lead	uranium
South Africa	gold	diamonds	platinum	other metals and minerals	machinery and equipment
Swaziland	soft drink concentrates	sugar	wood pulp	cotton yarn	refrigerators
Tanzania	gold	coffee	cashew nuts	manufactures	cotton
Zambia	copper/ cobalt 64%	cobalt	electricity	tobacco	flowers
Zimbabwe	platinum	cotton	tobacco	gold	ferroalloys

Source: CIA The World Factbook Bank , 2011

According to Table 6, the top exports in the SADC region are primary commodities with very few manufactured goods. For eleven of the fourteen countries, (Angola, Botswana, the DRC, Madagascar, Malawi, Mozambique, Namibia, Tanzania, South Africa, Zambia, and Zimbabwe) their top three exports comprise extractive commodities, cash crops, or sea products. Swaziland and Lesotho's top exports are manufactures but these are primarily for the South African market. By contrast, eurozone countries export diverse manufactured goods and services which have a ready market within the region eurozone, hence their good

integration before the single currency. For example, Austria's top exports are machinery, equipment, motor vehicles, paper, metal goods iron and steel, textiles and foodstuffs, whilst Germany's top exports include machinery, motor vehicles, electrical products, chemicals and pharmaceutical products (CIA The World Factbook, 2011). If SADC countries maintain the same exporting patterns, it is likely that even with a common currency intra-regional trade will not increase. For example, it is unlikely that Botswana will start exporting diamonds, copper and nickel to Angola or South Africa, just as it is unlikely that Malawi will start exporting tobacco to Zimbabwe. The lesson for SADC from the euro and trade is therefore that whilst a common currency may increase trade integration, it is more likely to do so when the member states are producing goods that have a market within the region because a common currency 'does not in itself create capacity to produce goods' (McCarthy, 2008). Thus, SADC countries need to devote more effort to increasing their manufacturing capacity and diversifying their exports.

#### **Part IV: Policy options**

The lessons from MEC targets and the Stability and Growth Pact, the euro debt crisis and trade integration present an opportunity for SADC to reconsider its own regional integration project and the milestones as set out in the RISDP. In particular, the lessons show that the EU model of regional integration is fraught with difficulties which may outweigh the benefits to be obtained. SADC should therefore reconsider the goals set out in the RISDP and come up with a revised plan for regional integration taking into account its own peculiar history and needs. One option would be to abandon the vision for a monetary union and a common currency and instead focus resources and energy on strengthening the free trade area which would create bigger markets for manufactured goods.

Nevertheless, the SADC countries may decide that regardless of the lessons from the euro, a monetary union and common currency are important for human and economic development in the region, and decide to proceed. In that case, the second option would be to ensure that the rules for getting into and remaining in the monetary union and common currency are strictly adhered to and enforced. This would help to mitigate the type of debt and deficit problems seen in the eurozone whose roots lie in the fact that countries were allowed to become part of the eurozone without meeting the MEC targets, and that once in,

the SGP rules were not strictly enforced. Consequently, SADC will thus have to set rules and ensure that they are followed with strict censure and penalties for breaches, and expulsion as a possibility. This option requires great political will on the part of the political leaders since they make the final decisions to enforce the rules. The required political will was lacking in the eurozone, and it is very likely that the political leaders in SADC may also face the same problem. With this reality, the best option for SADC is may therefore be to abandon the monetary union and common currency and focus on the free trade area and other goals of their regional integration project.

### **Conclusion**

The experiences of the euro with macroeconomic convergence, the Stability and Growth Pact, the euro debt crisis, and trade integration make for a cautionary tale for regions that are aspiring to a similar form of economic union. Macroeconomic convergence and the Stability and Growth Pact have shown that convergence is difficult at best and probably impossible to achieve; although the euro will probably survive the debt crisis, this crisis has exposed some of the things that can go wrong in a monetary and currency union; and an examination of the euro's effect on trade shows that a single currency may not increase trade as dramatically as previously thought. In the light of these lessons, SADC should review its regional integration plan, abandon the pursuit of monetary union and a common currency, and focus on the free trade area and other goals that are more suited to the region and more likely to provide the needed integration and development.

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## Chapter 6

### **SADC-EU relations: What happened to the Berlin Initiative?**

*Stefan Brocza and Andreas Brocza*

#### **Introduction**

This chapter examines the interregional relations between the Southern African Development Community (SADC) and the European Union (EU). The EU has cooperated with the grouping since its inauguration as a vehicle to counteract the influence of the apartheid state in South Africa by supporting the so-called front-line states, which formed the Southern African Development Co-ordination Conference (SADCC). The SADCC Initiative offered the EU an opportunity to demonstrate its political correctness in the form of supported infrastructure projects in southern Africa. With the triumph of democracy in the early 1990s, SADCC had outlived its purpose, and the anti-apartheid alliance was disbanded. In its place, the Treaty of Windhoek created SADC in 1992. SADC was a new organisation with much more ambitious goals than its predecessor. Instead of focusing on sectoral cooperation, SADC emphasised regional integration, not only in trade, but also in foreign and security policies. The EU's 'Berlin Initiative' of 1994 actively supported these objectives and set up a regular and increasingly institutionalised EU-SADC dialogue. In other words, the Berlin Conference and its Declaration played an important role as a midwife for the new interregional relations between SADC and the EU (Weiland, 2006: 185-187).

#### **Interregionalism – theoretical approaches**

A convincing theory of interregionalism is still outstanding. The general discussion is focused by a divergence of neorealist and (neoliberal) institutionalist arguments. This divergence reflects the growing insight that international relations are neither driven entirely by power or exclusively by cooperative motivations. Roloff (2006), for example, approaches the subject from a systemic perspective by combining the structural or neorealist approach to international relations (Waltz, 1979) with interdependence theory (Keohane/Nye, 1989). Some other authors invoke a more constructivist logic in order to explain the phenomenon of interregionalism. Gilson (2002: 12) in this context argues that interregional relations are not so much driven by balancing games but rather by the interaction of regions per se which

transcends them into 'reflexive agents that both constitute and are constituted by their interregional interaction and their ongoing "externalization" within this form'. Some theoretical reflections are also devoted to the function of inter- and transregional relationships. Five such functions are proposed by Rüländ (1999): (1) balancing, (2) institution-building, (3) rationalising the decision making in global multilateral fora, (4) agenda setting and (5) collective identity building. Interregionalism is further linked to the proliferating globalisation literature which has developed several models of global governance. These kinds of relations are discussed here as part of a multilayered system of global governance which is vertically differentiated into global multilateral fora, inter- and transregional fora, regional cooperation agreements, subregional transborder structures and bilateral national interactions. Horizontally it is differentiated by a number of sectoral international regimes covering specific policy fields (Rüländ, 1996). A political economy approach is pursued to interregionalism by Robles (2004). He sees EU development cooperation far from altruistic: it is more of an asymmetric, interest-driven policy strengthening EU economic interests (Hänggi et al., 2006: 9-12).

For the purpose of this chapter, regionalism is understood as a cooperative arrangement between states or statelike actors, with or without institutions. Interregionalism refers to an arrangement between two regions, either contractual or de facto (Reiterer, 2005: 1). Katzenstein's (2005: 118-119) pragmatic definition of regions as 'not simply physical constants or ideological constructs, but ... express[ing] changing human practices' captures the reality of globalisation. Thus, put simply, '[i]nterregionalism represents the interaction of one region with another' (Gilson, 2005: 309).

### **Special EU interest in interregional dialogue**

The EU has assisted and promoted regional cooperation with southern Africa with €591 million. Another €116 million is currently earmarked for SADC in the Regional Indicative Programme (RIP) 2008-2013, focusing on economic and trade integration support and sectoral policies programmes.

These figures reflect quite clearly an interest in regional integration initiatives and in interregional cooperation – but only to a limited extent. Power relations between EU and SADC are characterised by a strong asymmetry, illustrated most clearly by the fact that the



EU's aggregated gross domestic product (GDP) totals some 48 times SADC's aggregated GDP (Van der Vleuten, 2009: 11). Nevertheless, the SADC region enjoys greatest attention on account of its potential economic growth and abundant raw materials. Southern Africa promises to become a fairly dynamic subregion of the continent (Weiland, 2006: 192).

However, the EU's prime interests in southern Africa are trade and cooperation with South Africa – because of the latter's relatively strong economic performance. In this context, arguments are raised that the EU put far more time and effort into its bilateral trade agreement with South Africa than in promoting the rapid implementation of intraregional activities within SADC (Weiland, 2006: 193).

Against this background, making use of the interregionalism process allows the EU to

- present regionalism as a model;
- contribute to identity building within the EU (progressive socialisation) as well as within partners of the EU;
- establish networks at various levels and among regions;
- make best use of its competence in projecting influence including 'essential elements clauses' and conditionality in interregional agreements;
- assure economies of material inputs, such as agendas, time and travel;
- contribute to the solving of problems of a transnational nature;
- counterbalance globalisation through contributions to global governance (Reiterer, 2005: 5).

For the purposes of this chapter it is of particular importance to note that, additionally, the EU differentiates between African Caribbean and Pacific (ACP) countries and is in the process of establishing partnership agreements with more geographically focused subregional organisations of Africa, such as SADC. This can be seen as a strengthening of and even a new step towards formal interregionalism. Former EU-ACP relations represented a looser form of interregionalism with a relatively weak partner organisation and dealt with few sectors (mainly trade and development) and excluded political dialogue for a quite long time.

Aggarwal and Fogarty (in Söderbaum et al., 2006: 367) refer to this as hybrid interregionalism.

### **SADC-EU relations**

EU-SADC relations are dominated by a kind of double asymmetry: on the one hand, the EU as the world's largest donor in Africa and on the other hand the EU as the continent's most important economic and trade partner. Söderbaum (2004) calls the policies of the EU *vis-à-vis* SADC 'soft imperialism'. As a provider of technical and financial aid, the EU seeks to assist in SADC's institution building and to promote the region's collective identity. On the other hand, there is South Africa's position as a regional hegemon on SADC's relations with the EU (Weiland, 2006: 186).

The partnership between the EU and SADC aims *inter alia* at poverty eradication through various support instruments including cooperation to achieve the Millennium Development Goals (MDGs). The Cotonou Agreement sets up a general framework of the partnership between the EU and SADC. The dialogue between the two regions is based on three pillars (EEAS, 2012):

- Political dialogue (known as the 'Berlin Initiative' with SADC);
- Trade for development;
- Development cooperation.

Since this chapter will focus on the 'Berlin Initiative' as a role model for interregionalism, the two other pillars of cooperation will only be discussed briefly as follows:

For the field of 'trade for development', it should be just noted that the EU is the most important trading partner for the SADC region. The EU absorbs around 40% of SADC exports and is the source of approximately 39% of SADC imports. In order to improve the competitiveness of ACP countries, the Cotonou Agreement provided for preferential trade for the ACP states into Europe. With the World Trade Organisation (WTO) coming into effect in 1995, preferential trade agreements became illegal. Therefore a new type of regional trading arrangement known as the Economic Partnership Agreements (EPAs) was launched under the Cotonou Agreement. On the EU side, EPAs are comprehensive development

agreements and their objectives should reduce poverty, diversify economies and create employment through enhanced intraregional integration and carefully managed opening-up to the world economy. The EU-SADC EPA has been negotiated since 2004. For this purpose the SADC group is made up of just seven members – Angola, Botswana, Lesotho, Namibia, Mozambique, South Africa and Swaziland. South Africa used to be an observer of the SADC EPA group, but was admitted into the configuration as an active negotiating party in February 2007. By mid-2008, four SADC countries, namely Botswana, Lesotho, Mozambique and Swaziland, had signed an Interim EPA dealing with the first phase of the EPA, namely Trade in Goods (Namibia only initialled). In February 2010, Botswana, Lesotho, Mozambique and Swaziland informed the commission that they wanted to take one step backwards and include Angola, Namibia and South Africa in the negotiations with the EU in order to reach a conclusion on a full EPA (EEAS, 2012).

In the area of ‘development cooperation’ it should be kept in mind that the RIP for the period 2008-2013 foresees in total €116 million from the 10th European Development Fund (EDF 10) and aims at:

- contributing to poverty eradication in the region;
- developing and sustaining of peace and stability;
- attaining the MDGs by promoting regional economic and political integration.

The objectives for this should be achieved through two focal sectors:

1. *Regional Economic Integration (80%)*

This will provide broad-based support to deepen SADC economic integration and trade policies, including investment promotion, regional infrastructure and food security.

2. *Regional Political Cooperation (15%)*

This will support capacity building in the context of regional governance and the implementation of some aspects of the Joint Africa-EU Strategy in the area of Peace and Security.

The 5% left of the envelope is for non-focal sectors.

Some projects financed under the EDF 9 (2002-2007) are still running, especially the Capacity Building for Regional Integration programme. The total of the fund amounts to €161 million with the main objectives to increase economic growth and reduce poverty through higher levels of regional economic integration and to improve trade negotiating capacities at regional and multilateral levels (EEAS, 2012).

Since early 2002, the Delegation of the European Union in Botswana has been entrusted by the International Cooperating Partners to coordinate with SADC on the overall relations and especially on Trade, Investment, Finance and Industry issues. The framework for the relations between SADC and its International Partners is provided by the Windhoek Declaration on a New Partnership, 2006, inspired from the Paris Declaration on Aid Effectiveness, 2005.

### **The Berlin Initiative**

In recognition of SADC's political mandate as adopted by the SADC Summit in Windhoek in 1992 and the accession of South Africa to SADC in 1994, the EU and SADC launched a political dialogue with a first Ministerial Meeting in 1994 in Berlin, Germany. On 6 September 1994 both sides signed a 'Declaration'. The overall objective of the so-called 'Berlin Initiative' was to contribute to peace, democracy and sustainable development in southern Africa. The purpose of the declaration was to further the development of relations between the two regions and to establish a comprehensive dialogue.

The objectives can be summarised as follows:

- Working together to uphold at different fora the purpose and principles of the UN charter;
- Supporting democracy at all levels and the rule of law, respect for human rights and protection of minorities; promotion of social justice and good governance and working together to create adequate conditions to eliminate poverty and all forms of racial, political, religious, cultural linguistic and gender discrimination;
- Encouraging the reduction of armaments and, in particular, being associated with efforts to exercise restraint in exporting armaments to areas where they are likely to exacerbate conflict;

- Supporting an open and increasingly productive and equitable international economy and, in this context, promoting cooperation in trade with and in the southern African region, in order to enhance its economic development;
- Promoting and facilitating domestic and foreign investment in the productive sectors, particularly in the processing and manufacturing industries in the southern African region, to enhance the region's economic development;
- Encouraging policies aimed at sustainable economic growth for the mutual benefit of the populations and supporting the economic reforms underway, in the southern African region;
- Promoting harmonious economic development through environmentally sound and sustainable management of human and natural resources.

Specifically, the two sides agreed to cooperate in the fields of:

- Political dialogue;
- Regional integration;
- Trade and economic cooperation;
- Private investment, small and medium-sized enterprise and promotion of the private sector;
- Development cooperation, including transport and communication; energy; education and training; health; food and agriculture; mining;
- Natural resources and the environment;
- Science and technology;
- Tourism;
- Cultural cooperation;
- Cooperation in combating of international crime;
- Other areas.

The structure of the Berlin Initiative comprises a Ministerial Conference, which is held *de facto* once in two years, attended by the relevant ministers from all SADC and EU member states. This conference is the highest policy- and decision-making body for the dialogue between the two regions. So far, there have been seven Ministerial Conferences since the Berlin Conference:

Date	Venue	Special Remarks
14-15 October 1996	Windhoek, Namibia	Stocktaking Exercise of Berlin Initiative; intensive political dialogue
3-4 November 1998	Vienna, Austria	Overall review of process since the 1996 Windhoek Conference; next meeting to be mutually agreed
29-30 November 2000	Gaborone, Botswana	Extensive Communiqué (15 pages) on political dialogue and regional integration; joint EU/SADC Declaration on small arms and light weapons; next meeting 'in the EU'
7-8 November 2002	Maputo, Mozambique	Review of Berlin Initiative; unilateral EU Declaration on Zimbabwe; cooperation towards poverty eradication; short communiqué (5 pages)
20 October 2004	The Hague, Netherlands	New meeting format: EU-Troika and SADC Double Troika; official communiqué not available for the public
17 November 2006	Maseru, Lesotho	Programming of 10th EDF with a view to the RIP; no date for next meeting
11 November 2008	Brussels, Belgium	Regional integration, development cooperation and EPA; financial crisis; Strategic Indicative Plan of the Organ (SIPO); capacity building of SADC within the framework of the African Union (AU); next meeting: 'Date to be determined' in the SADC region

In addition, Senior Officials from SADC and the EU (Senior Official Meeting – SOM) meet once or twice a year to prepare and review issues for Ministerial Conferences. The representatives are drawn along the lines of the ministerial delegations. The Joint Steering Committee (JSC) comprises the SADC Troika (chair; incoming chair; and the outgoing chair) and the EU Troika (the presidency; the incoming presidency and the commission). The JSC meets up to four times a year, preparing issues for attention by the senior officials and

Ministerial Conferences. All committees are assisted and serviced by the SADC Secretariat and the Secretariat of the EU Council. The structure of the Berlin Initiative dialogue has so far been at government-to-government level.

The organisation of meetings has primarily been the responsibility of the chair/presidency and the two secretariats, plus in the case of the EU also the commission. Regarding seminars, the organisation has mostly been done by the EU presidency, the hosting country, and consultants. On the SADC side, monitoring has been assumed by the secretariat through regular reports to the SADC Council of Ministers.

Since 1994, a number of specific activities, in particular seminars, have taken place within the agreed areas of cooperation. In some of these areas of cooperation, the activities have resulted in the implementation of specific programmes (for example the EU SADC Investment Promotion Programme (ESIPP) and initiatives on HIV/AIDS and the DRC Peace Process) while in other areas limited activities have taken place with direct reference to the institutional framework of the Berlin Initiative. The projects and programmes are normally funded by the RIP, while thematic seminars and workshops are co-funded by the RIP and individual EU member states.

### **Review of the EU-SADC dialogue**

At the SADC-EU Ministerial Conference in Gaborone, Botswana on 29-30 November 2000, it was agreed to review the dialogue six years after the start of the Berlin initiative with a view to further improvement of the dialogue and the overall partnership between SADC and the EU. The conference therefore mandated the SADC-EU JSC and senior officials assisted by the two secretariats to undertake the review and report to the next SADC-EU Ministerial Conference in 2002.

In general it was agreed that the first six years of interregional dialogue between SADC and EU are characterised by the following:

- The agenda for dialogue has been extended over the years to take into account new challenges and relevant issues.

- The dialogue, especially at the ministerial level has become increasingly stifled and has somewhat lost focus. One main reason is an overloaded agenda, which basically covers all areas of cooperation from the Berlin Declaration. Hence, the time available for a problem oriented political dialogue has been reduced. Consequently, ministers lost a unique opportunity to deal with salient political issues of mutual interest for which there exists no other equally relevant forum.
- Related to the above is the aspect of human resource capacity. The SADC side has generally had to allocate a relatively larger portion of available human resources to the Berlin Initiative than the EU side, which has had more time and resources to prepare for, coordinate, and attend meetings.
- Little dialogue has taken place outside the meeting.
- The objectives and the activities were generally relevant *vis-à-vis* the objectives which, on the other hand, were very broad. In fact, it can be argued that the agenda and the areas of cooperation as set out in the Berlin Declaration were too ambitious from the outset. Nevertheless, most of the areas agreed upon resulted in some activities.
- The dialogue, by simply providing a forum for countries from SADC and the EU to discuss matters that otherwise would not have been discussed, has contributed to an increase in the two regions' appreciation and understanding of each other's views, and thereby also contributing to a mutual understanding of global issues.
- The initiative has served as a useful forum for promoting understanding on issues of common interest, particularly in the areas of regional integration and community building.
- The Ministerial Conferences have been characterised by very long agendas and communiqués, prepared a few months in advance by the JSC and the Senior Officials. The Ministerial Conferences primarily concentrate on political dialogue (discussing and exchanging views on political developments; peace; security; democracy; human rights; rule of law; etc); although as the agenda has been expanded, ministers have increasingly spent time on issues of cooperation in other areas.
- The participants of meetings have usually been drawn from the capitals, although resident ambassadors at times have represented their countries. At the JSC and the



SOM level, SADC is usually represented by permanent secretaries, while directors or head of departments usually represent the EU. At the Ministerial Conferences, foreign and/or planning and development ministers mostly represent SADC, whereas the EU is sometimes represented by state secretaries or under-secretaries.

At a JSC meeting in June 2001 it was agreed that both sides would draw up position papers following consultations with their respective member states. These papers were discussed at the November 2001 JSC, and on the basis of the contributions from the two sides and the discussions that took place, the JSC mandated the two secretariats and the EU Commission to continue work on a joint document concerning the review of the Berlin Initiative. This report was tabled to the Ministerial Conference in Maputo on 7-8 November 2002 and adopted. Its main findings form the basis for future SADC-EU dialogue (Council of the European Union, 2002a: 7-8):

- Although the objectives of the Berlin Initiative are relevant and valid, there is need to take into account new developments, particularly the restructuring of SADC. With regard to SADC, the SADC Common Agenda and the issues of poverty eradication and combating HIV/AIDS have been given higher priority.
- Meetings of the Senior Officials and the JSC should basically remain the same (to prepare for Ministerial Conferences), but in addition they should also be mandated to discuss and approve programmes for implementation, instead of waiting for two years for ministerial approval. Hence, ministers should be encouraged to delegate technical issues to JSC and SOM, which would then report back to the ministerials. Since some of the areas of cooperation are quite technical, it would be useful to make more use of specific working groups, along the lines of the Working Group on Small Arms. These working groups should then report to the JSC and senior officials. The use of experts to attend SOM and JSC meetings as and when necessary has also been mentioned.
- With respect to seminars and themes, the follow-up has in many cases been inadequate. Moreover, there are activities that have been agreed upon but not implemented. Perhaps the activities were too ambitious at the outset. It is therefore recommended that the list of areas of cooperation be revised in order to better reflect the priorities and limited resources available. It is thus proposed that the dialogue

including activities become more targeted in order to ensure more visible results in the priority areas.

- One way to improve the cost effectiveness and to deepen the dialogue would be to increasingly engage the EU Heads of Missions (HOMs) and the SADC HOMs, accredited to Botswana and to the European Communities and other capitals of the two regions. In addition, more regular consultations between the two troikas could be encouraged. Within the framework of the dialogue, the potential for enhanced consultations and cooperation between the EU and SADC in international fora could be further explored.
- Both SADC and the EU should promote the participation from the highest possible level within each meeting category.
- In order to encourage a more problem-oriented discussion at the Ministerial Conferences, one thematic subject of mutual strategic interest could be discussed in addition to the general political dialogue (main political and economic developments in the two regions).
- In order to encourage an open and constructive dialogue, written statements should as far as possible be avoided, especially when ministers discuss thematic subject. Written material could instead be distributed before the conference. To further support an open and free dialogue, the parts of the final communiqué which do not deal with technical issues, might be written after the conference to reflect the discussions held at the meeting.
- In spite of the very clear text of the Berlin Declaration and the fact that both parties are currently involved in integration processes in their respective regions, only a few specific initiatives have taken place in the area of Regional Integration. Hence, the parties may wish to discuss how such exchanging views and experiences on matters relating to different aspects of regional integration can be provided for within the framework of the dialogue.
- Political dialogue should be enhanced outside regular meetings.
- Meetings between EU-SADC parliamentarians and NGOs have normally taken place in the margins of the ministerial meetings. Measures to further integrate these nongovernmental actors into the framework of the dialogue might be considered.

### **Fundamental point of irritation: Zimbabwe**

Without any doubt, the turbulences caused by Zimbabwean President Robert Mugabe as long-standing chairman of the SADC Organ have hampered good interregional relations. Zimbabwe's unapproved military involvement in the Congo and Mugabe's undemocratic policies at home have undermined the credibility of SADC as a whole. In addition, bilateral relations, especially the political dialogue between the EU and Zimbabwe, have been affected. The increasing undemocratic developments and growing violence led the EU to protest and to impose sanctions against Zimbabwe. In this context, the EU was particularly irritated because SADC and its member states did not take an open stand against Zimbabwe, although respect of democratic values and the rule of law – as in virtually all of the EU's interregional relationships – were laid down as common normative objectives in the agreements of EU-SADC interregional cooperation. SADC has rather chosen to resort to the political understanding of not intervening in the internal affairs of a member state. From a European perspective, it is even more disturbing that not even South Africa has shown leadership qualities in this respect (Weiland, 2006: 197-198).

The EU-SADC Joint Committee of Senior Officials met in Paris on 3-4 October 2000. However, both sides could not agree on a text on Zimbabwe for the draft joint communiqué for the forthcoming ministerial meeting in Gabarone scheduled for November. Therefore two quite different proposals were tabled to ministers for final decision (Council of the European Union, 2000a: 9):

24. [The Conference noted developments in Zimbabwe relating to the recently concluded parliamentary elections and the current land distribution exercise. The Conference welcomed the SADC Summit decision mandating the Presidents of South Africa and Malawi to work closely with the Government of Zimbabwe in sourcing resources for a fair and equitable land distribution in Zimbabwe within the framework of the laws of that country.] (Proposal of SADC)

[The Conference welcomed the holding on 24-25 June of the fifth legislative elections in Zimbabwe's history. It called on all the political forces in Zimbabwe to reject all political violence, to respect the rule of law and to strike up a constructive, democratic dialogue.

Taking into account the worrying economic situation, the Conference called for all

parties to mobilise to enable their country to make a resolute commitment to sustainable recovery, which would be a factor for stability and harmonious development in southern Africa. The Conference hoped that the legitimate and fair treatment of land reform, in line with the 1998 principles, would enable the international community to offer appropriate support.] (Proposal of EU)

The final Joint Communiqué of the Ministerial Conference reaffirmed the differences between SADC and the EU on the Zimbabwe issue. Ministers could only agree on the following (Council of the European Union, 2000b: 6):

26. The Conference noted the information provided by the Government of Zimbabwe on the process of land redistribution currently taking place in that country. The Government of Zimbabwe reaffirmed its commitment to comprehensive, transparent, just and fair reform, in accordance with the principles agreed at the 1998 Land Conference and the laws of Zimbabwe. The Conference encouraged all parties involved to ensure that the land redistribution process is carried out within a political context that respects the rule of law and without violence. The EU agreed in principle to support such efforts.

27. The Conference encouraged the people of Zimbabwe to work together in healing the wounds of the past to pave the way for nation-building, economic recovery, poverty reduction and social progress, which would contribute to stability and development in the whole of southern Africa.

Two years later, at the Ministerial Conference in Maputo from 7-8 November 2002, the disagreement on the situation on Zimbabwe escalated. The communiqué noted (Council of the European Union, 2002b: 3) that '[o]n the question of Zimbabwe, SADC and EU could not reach an agreement'.

In addition, the EU side attached a unilateral statement (Council of the European Union, 2002b: 6):

#### EU Statement on Zimbabwe

In accordance with the European Union General Affairs and External Relations Council conclusions, including the Council Conclusion of 18 February and 22 July 2002, the EU reiterated its deep concern regarding the situation in Zimbabwe, particularly the violations of human rights and the restrictions on the media as well as the deteriorating economic situation caused largely by the policies of the Zimbabwean authorities which impacts negatively on the living conditions of the Zimbabwean people.

The EU stressed that emergency food aid should under no circumstances be used as a political tool. The EU underlined that it will continue to expand its humanitarian assistance, including through NGOs to the people of Zimbabwe and to respond to the United Nations consolidated humanitarian appeal.

The EU stressed the importance of close cooperation and continued dialogue on all levels with SADC partners and other international partners on the crisis in Zimbabwe.

In 2006 at the SADC-EU Troika Ministerial Meeting in Maseru, Zimbabwe still remained a separate topic at the joint communique (Council of the European Union, 2006: 4):

14. The EU raised concerns on the deteriorating situation in Zimbabwe and its spillover effects in the region. SADC indicated its continuing support to Zimbabwe in finding solutions to improve the situation and underlined the need for continuous constructive engagement with the Republic of Zimbabwe.

And even the EU-SADC Double Troika Ministerial Meeting on 11 November 2008 in Brussels still noted different positions on Zimbabwe (Council of the European Union, 2008: 5):

The meeting discussed the situation in Zimbabwe following the signing of the agreement, on 15 September, between Zanu-PF and the MDC formations. The meeting noted the outcome of the SADC Extra-Ordinary Summit held on 9th November 2008. Both parties expressed deep concern over the delay in forming an inclusive government

agreed upon by all parties, essential to implement the economic and social reforms, awaited by the population.

The EU called upon the guarantors of the Global Political Agreement to ensure expeditious and credible implementation of all its elements.

Anna van der Vleuten (2009) expressed strong concerns about the EU behaving like a ‘teacher’ in the Zimbabwe case. Following her arguments, the EU tried to influence the attitude of the SADC member states concerning Zimbabwe. But time and again SADC has decided against an explicit condemnation of the Mugabe regime and condemned international criticism of Mugabe as an ‘intervention in African affairs’ (Söderbaum, 2004: 99). The former South African President Mbeki even accused western powers of using Zimbabwe as a smokescreen in order to avoid facing Africa’s real problems (Van der Vleuten, 2009: 11).

In 2004, Tanzania as acting Chair of SADC warned:

We are tired of being lectured on democracy by the very countries, which under colonialism, either directly denied us the rights of free citizens, or were indifferent to our suffering and yearning to break free and be democratic (...) We know our democratic aspirations better than anyone else (Van der Vleuten, 2009: 12).

### **New Priorities, other fora**

Over time, new issues dominated the SADC-EU dialogue and created new priorities. Especially, the ongoing discussions on (possible) EPAs blocked the limited negotiation capacities of SADC member states. In addition, the new established EU-African Partnership created a number of new working structures, which also sometimes overlapped SADC-EU relations. Already earlier, the South African President Mbeki astutely avoided the SADC platform and operated at a higher level. The New Partnership for Africa’s Development (NEPAD) initiative sought dialogue between Africa as a whole and the Group of Seven/Eight (G 7/8) states, and therefore also made its mark on EU-SADC relations. Currently, South Africa participates directly via the Group of 20 (G 20) in world politics and meets regularly with the EU side at the EU-South African Cooperation Councils (within the framework of the

South African-European Union Trade, Development and Cooperation Agreement) as well as at Head-of-State level at the South African-EU Summits (within the greater EU-South African Strategic Partnership). The need of dialogue within the 'old structures' of the Berlin Initiative seems therefore sometimes reduced.

### **Conclusion and outlook**

It seems that interregional institutional development between the SADC and EU is still not solid enough. This does not mean that both sides have lost general interest in meeting – but for the moment it seems that SADC's regional development is more of medium concern for the EU. In addition, it is important to mention that interregional dialogue between SADC and the EU is not restricted to institutionalised fora. The same group of politicians and officials also meets on bilateral level and at conferences of other international organisations and groupings, especially within the EU-ACP framework. The interregional contact between SADC and the EU is therefore *de facto* closer than the official interregional structure suggests.

However, it is to be expected that in the southern African region – especially after a solid restoration of democracy in Zimbabwe – the Berlin Initiative could re-establish a fruitful interregional dialogue between SADC and the EU – a more intensive dialogue between partners on more than just free trade and WTO compatibility. Recent statements from the EU side (for example at the EU-South Africa Summit on 15 September 2011 in Kruger, South Africa) show that Brussels is still very interested in continuing this cooperation with SADC. And finally, the current €116 million by the RIP for the period of 2008-2013 can only be understood as a relatively strong argument for further development of the region through the instrument of interregionalism. The door seems open...

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*Chapter 7*

**An analysis of the impact of Southern African Customs Union revenue-sharing arrangements on the small state: A case study of Lesotho**

*Brendon Martens and Nicolette Cattaneo*

**1. Introduction**

Trade taxes have been used as a source of revenue for governments for hundreds of years. Generating revenue from trade taxes assists governments to fund expenditure programmes that can be used to develop social and physical infrastructure and ensure the continuity of the state (Di John, 2010). In low- and middle-income countries the reliance on trade taxes as a source of government revenue is even more pronounced. However, the large degree of reliance on trade taxes in an era of increasing pressure to liberalise trade can have significant consequences for these countries (Khattry, 2003).

In the Southern African Customs Union (SACU) context there has been a great deal of upheaval surrounding the revenue-sharing arrangements between members. The recent global downturn has seen a sharp fall in transfers and has left some of the smaller countries in severe fiscal distress. This chapter sets out to explore the consequences of these arrangements and events in the case of Lesotho. The study first outlines a theoretical framework revolving around the political economy of taxation and the impact of trade liberalisation on government revenues. Following this, the historical development of SACU and, in particular, its revenue-sharing arrangements are reviewed. Empirical evidence is then examined on the importance of trade taxes in Lesotho as well as the nature of government revenue and trade. Finally, in light of declining trade revenues, prospects for domestic revenue recovery in Lesotho are considered.

**2. Analytical framework**

**2.1 State formation through taxation**

The ability to mobilise resources to achieve the goals of government, be that government a dictatorship or a democratically elected one, is a key requirement of the state. To this end, a

state's ability to mobilise resources can be seen as synonymous with its ability to mobilise revenue. Edmund Burke once stated: 'Revenue is the chief preoccupation of the state. Nay more it is the state' (quoted in Di John, 2010: 110). In this light, revenue is seen as a chief component of state formation, the ability to mobilise resources for the creation and maintaining of the state. The political economy of taxation thus becomes a very important theoretical foundation through which to analyse how changes in revenue streams can impact on the very foundations of statehood. Di John (2010) identifies several key reasons why taxation is so vital to state-building. Firstly, taxation allows for the generation of revenues used in investing in social and physical infrastructure for the growth and development of society and the economy (Di John, 2010: 110). Secondly, forms of taxation allow for the establishing of the territorial reach of the state, allowing for a demarcation of the state's territory. Finally, the ability of the state to satisfy the wants and needs of the citizenry lend legitimacy to the democratic government of the state through responding to the demands of the citizens (Di John, 2010: 111). Therefore the ability to generate revenue through taxation forms a very important part of state formation; the corollary of this is that the inability to generate revenue through taxation can lead to a failure of the state and all the associated ills of a 'failed state'.

As part of revenue mobilisation, trade taxes have played an important role for many low-income and middle-income countries. The reasons for such a reliance on trade taxes stem from the structural characteristics of these countries. This structure is characterised by a large share of output generated by agriculture, in particular subsistence agriculture, a large informal sector and, a corollary of this, large informal employment, as well as many small private businesses as opposed to a few large firms (Di John, 2006: 3). Due to these characteristics the 'standard' taxes such as income taxes and corporate taxes tend to be very weak as they are hard to collect and hard to enforce. Value added tax (VAT) has also been shown to be a poor substitute for trade taxes, primarily due to the large informal sector of developing countries. Emran and Stiglitz (2005) find that the replacement of trade taxes with VAT actually leads to a reduction in welfare. Trade taxes, however, are relatively easier to collect at border points and are easier to monitor due to traded goods being directed through specific entry points into a country (Chang, 2005: 15).

A 2005 International Monetary Fund (IMF) paper finds that, while trade taxes as a percentage of government revenue have been falling and so becoming less important over the past 20 years, they still form, on average, one-quarter of tax revenue for low- and middle-income countries in sub-Saharan Africa (IMF, 2005: 3). Di John (2010: 114) puts this average as high as one-third for all countries in sub-Saharan Africa. Given that such a large portion of total taxes come from trade taxes for these countries it therefore follows that revenue generated from trade taxes is an important source of funding for government; and as such it is important in the formation of the state and ensuring the legitimacy of that state's government. The current trend of trade liberalisation, advocated by the World Trade Organisation (WTO) and many other neo-liberal organisations, thus places a threat on these revenue sources as import tariffs are reduced and export tariffs removed.

## **2.2 Trade liberalisation – fiscal constriction**

The revenue implications of trade liberalisation are very real for many low- and medium-income countries. Works by Keen and Mansour (2010), Khattry (2003), Khattry and Rao (2002), Baunsgaard and Keen (2005), and Di John (2006 and 2010) identify the fiscal implications of trade liberalisation for developing countries. The process of trade liberalisation has involved developing countries opening up their borders to 'free trade forces'. This typically involves converting trade quotas and export tariffs to import tariffs and then systematically reducing these import tariffs. The process sometimes results in an initial increase in trade tax revenue as quotas are converted to tariffs and extremely high tariffs are brought down enough to boost total trade volumes, offsetting the reduction in tariff rates. However, trade liberalisation ultimately entails 'free trade' and, as such, trade revenues do decline over time as tariff rates are cut (IMF, 2005: 7). As revenues decline, governments are faced with a trade-off between practising fiscal restraint and generating new revenue streams through increased domestic taxation and/or increased borrowing.

The latter follows the path of revenue replacement, whereby government seeks to replace lost revenues so that it does not need to cut back on spending. A simplistic theoretical approach to this issue would be that, should the economy be small with no impact on world prices, for every R1 reduction in tariffs, so consumption tax (for example VAT) should be increased by R1. Consumers would in this way face the same prices and government would

not lose any revenue (Keen and Mansour, 2010: 560). While this seems simple in theory it is not so in practice. As noted previously, the structure of low-income economies creates barriers to effective and efficient taxation. The large informal sectors are often not taxed and, as such, final consumption taxes would be lost in these informal sectors, leading to revenue loss (Emran and Stiglitz, 2005: 601). Low levels of urbanisation can exacerbate the problem where tax collection in urban areas is more efficient than in rural areas due to the dispersed small-scale enterprise of rural economies as opposed to the large concentrated enterprise of urban economies (Khattry and Rao, 2002: 1433). In addition, lack of administrative capacity could make collection of consumption taxes from many geographic sources relatively more costly as opposed to collecting import taxes from goods at the border (Keen and Mansour, 2010: 561). Tax systems may also be outdated, open to corruption, and tax-payers themselves have a high tendency to evade taxes, compounding the institutional constraints of domestic taxation (Khattry and Rao, 2002: 1433).

In an earlier paper Keen and Ligthart (1999) suggest that revenue could be maintained by offsetting tariff reductions point for point with increases in consumption taxes 'so long as the underlying tariff reform improves production efficiency' (Keen and Ligthart, 1999: 18). However, in a later paper Baunsgaard and Keen (2005: 22) find that in low-income countries the recovery rate was very low, that for every dollar lost governments were only able to recover 30 cents through increased domestic taxation. Thus, while it may be theoretically possible to offset declining trade revenues through increased domestic taxation, empirical evidence suggests that this is not the case. Governments are therefore forced either to borrow to maintain expenditures or practice fiscal restraint (the former often leads to the latter).

### **2.3 The expenditure trade-off**

The borrowing option for low-income countries has many pitfalls. Loans present the danger of a low-income country falling into a 'debt trap' and the resulting interest payments further constricting expenditure. The only recourse often available is to engage in 'expenditure management'. Khattry (2003) identifies three separate trade-offs associated with this path.

The first involves a trade-off between expenditure on physical infrastructure and social infrastructure (Khattry, 2003: 405). Government investment in physical infrastructure, such

as transport and communications, and social infrastructure, such as education and healthcare, has the potential to crowd in private investments into the country due to the expanding of markets and reductions in production costs. Thus investment in physical and social capital is critical for economic growth for low-income countries. However, trade liberalisation not only causes declining revenues but also causes social upheaval as the economy adjusts. Such adjustments are invariably accompanied by increased unemployment and poverty. Governments cannot maintain previous expenditure levels on both physical and social capital and in the wake of social upheaval often focus on social infrastructure spending in order to maintain legitimacy and preserve social cohesion. Government spending on physical infrastructure may be reduced yet not adequately taken up by the private sector. Growth in physical capital could thus decline dramatically, adversely affecting growth and further perpetuating fiscal and social issues.

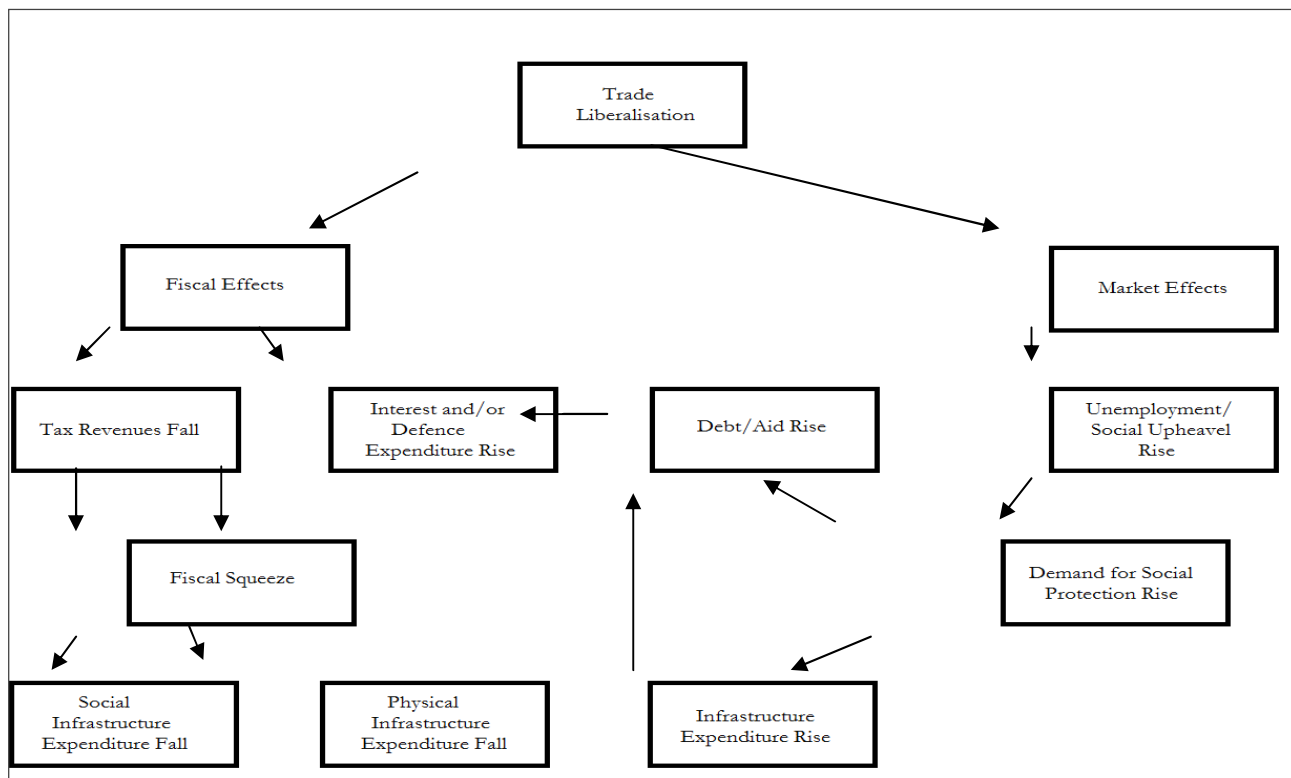
The second trade-off identified by Khattry (2003: 406) involves a trade-off between military expenditure and social infrastructure expenditure. While increased expenditure on social infrastructure can mitigate some of the social upheaval following liberalisation and in so doing maintain government legitimacy and social cohesion, another way to maintain legitimacy is to increase expenditure on the monopolisation of violence. In this regard governments may seek to suppress domestic opposition through a strong security regime instead of addressing socioeconomic issues of citizens. Such governments optimise spending through higher security budgets at the expense of expenditure on social infrastructure. These societies then become caught in a 'militarised poverty trap' (Khattry, 2003: 406).

The third trade-off identified by Khattry (2003: 407) involves a trade-off between interest payments and public investment in physical and social infrastructure. Faced with declining revenues, governments and especially governments in low-income countries face a trade-off between keeping up with interest payments on outstanding loans and maintaining investment in public infrastructure. Currency devaluations and rising interest rates, coupled with the need to borrow in order to meet spending obligations, have increased the burden of debt servicing in these countries. These large debt burdens act as a disincentive to investment while new loans often carry fiscal austerity conditionalities. Therefore private investment remains low while governments are forced to restrict spending in order to

qualify for loans. In this way resources are channelled away from productive investment in physical and social infrastructure, further constraining the ability of the economy to grow.

Figure 1 has been adapted from the work of Khattry (2003) and best explains the causal relationship between trade liberalisation and government expenditure. Trade liberalisation has, amongst others, both fiscal and market effects. The fiscal effects are declining government revenues, increasing interest payments and/or increasing defence expenditure. This results in a fiscal squeeze which puts pressure on expenditure on social and/or physical infrastructure. The market effects cause an increase in unemployment and social dissent which escalates the demand for social spending. Governments then either respond with increased defence spending or increased spending on social and/or physical infrastructure. However, increased infrastructure spending is often financed through foreign debt which leads to increased interest payments. Thus, higher interest payments and/or increased defence spending further compound the fiscal squeeze, placing more downward pressure on social and physical infrastructure spending.

**Figure 1: The effects of trade liberalisation**



Source: Adapted from Khattry (2003: 408)

The discussion above provides an analytical framework within which the case of revenue sharing in SACU can be considered, with a particular focus on the implications of lower trade tax revenues for the small country of Lesotho.

### **3. The historical underpinnings of SACU**

It is customary in discussions on the oldest customs union in the world to track the historical development of SACU from its inception. By identifying and understanding its historical evolution within a unique political and economic framework, it is possible to have a better understanding of the current state of the customs union and in particular its revenue-sharing arrangements. Such a perspective will also facilitate speculation about its future prospects.

#### **3.1 The 1910 Agreement**

The Southern African Customs Union was formed on 29 June 1910 in Potchefstroom, South Africa (Kirk and Stern, 2003: 2). The 1910 Agreement was signed by the then British High Commissioner to South Africa, Bechuanaland (now Botswana), Basutoland (now Lesotho) and Swaziland, Lord Gladstone (Grynberg and Motswapong, 2010: 2).<sup>1</sup> The new customs union agreement reflected the changing political landscape of southern Africa as the newly formed Union of South Africa took up its position as a regional political and economic hegemon. As such, the 1910 SACU Agreement left South Africa with the sole responsibility of determining the common tariff structure while the other countries were forced to conform to South Africa's tariff laws. The revenue-sharing formula was based on the share of both customs and excise duty on goods consumed in each country during the period April 1907 to March 1910 and was therefore a fixed rate that did not take into consideration changes in relative consumption levels between countries after March 1910 (Grynberg and

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<sup>1</sup> The origins of SACU in fact date back to the 1889 Customs Union Convention between the Cape of Good Hope and the Orange Free State Republic. By 1906, all current SACU members, except Namibia (then known as South West Africa), were part of a customs union, together with Southern and North-Western Rhodesia. A Customs Union Convention in 1903 established a union covering the Cape, Natal, Orange River Colony, Transvaal, Southern Rhodesia (Zimbabwe), Basutoland (Lesotho) and Bechuanaland (Botswana). Swaziland was admitted in 1904 and North-Western Rhodesia at the end of 1905 (Maasdorp, 1990: 14-15; Cattaneo, 1998: 7).



Motswapong, 2010: 3). The smaller countries received only 1.3% of the revenue, while South Africa earned the remaining 98.7% (Cattaneo, 1998: 7-8).<sup>2</sup>

In 1925 South Africa began to use tariffs to industrialise its own economy. The passing of the Customs Tariff Act significantly raised the external tariff on imports, thus encouraging local production. This policy reduced revenue from imports, thereby decreasing revenue for Botswana, Lesotho, and Swaziland (henceforth referred to as BLS). Furthermore, trade diversion from imports to more expensive domestically produced goods raised consumer prices in all countries, but benefited South Africa in terms of industrialisation while polarising industrial growth in the region to the detriment of BLS (Grynberg and Motswapong, 2010: 3; Cattaneo, 1990: 45). The 1910 Agreement continued for 55 years, in which time BLS share of external trade increased to 4.1% yet the revenue share remained fixed at 1.3%. Following the independence of the BLS countries from Britain and the increasing international political isolation of apartheid South Africa, a dramatic renegotiation of the SACU Agreement was soon underway.

### **3.2 The 1969 Agreement**

Following negotiations, a new SACU Agreement was signed in 1969. The 1969 Agreement was reflective of the changing international political landscape and the continued regional economic dominance of the South African state (Kirk and Stern, 2003:1). South Africa was faced with increasing political isolation abroad due to its domestic apartheid policies. Having failed in its long-standing quest to incorporate the BLS states into its territory, South Africa attempted instead to draw the newly independent BLS countries to it economically in ways that served its political and security needs. Part of this drive was a renegotiation of the 1910 SACU Agreement that would appear on the surface to take account of some of the negative aspects of the customs union for the smaller countries.

The 1969 Agreement provided for a revised method of revenue sharing that was supposed to compensate the smaller states for trade diversion, loss of fiscal discretion and polarisation. It also provided for a Customs Union Commission to facilitate consultation and

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<sup>2</sup> Namibia was treated as part of the customs union by South Africa when it began to administer the territory in 1915. Namibia's membership was only actually formalised after its independence in 1990 (Maasdorp, 1990: 11-16; Cattaneo, 1998: 7).

certain clauses that purported to allow the smaller countries to protect infant industries. While a Secret Memorandum attached to the 1969 Agreement effectively prevented the use by the smaller countries of the infant industry clauses in practice (Cattaneo, 1998: 150-151), the new agreement revised the revenue-sharing arrangements by linking the revenue paid to BLS not only to external SACU imports but also to imports from South Africa. More significantly, the amount due to BLS was multiplied by a factor of 1.42 to compensate the BLS for the negative aspects of the customs union (Grynberg and Motswapong, 2010: 6). South Africa received the residual of the amount paid out to BLS.

The result of this new revenue-sharing agreement was a dramatic increase in the revenues paid out to BLS, resulting in customs revenue becoming a very significant portion of government revenue in these countries. However, despite the new agreement, South Africa maintained sole authority over setting external tariffs and managing SACU. This ensured that BLS (and later with Namibia's independence in 1990, BLNS) would be dependent on South Africa for large amounts of government revenue and to a very large extent industrial and trade policy direction. By the 1980s, however, the 1969 Agreement proved to be unsustainable as the portion of revenue payments to BLS grew rapidly while the imminent independence of Namibia in 1990 and its inclusion in SACU would further drain the South African fiscus.<sup>3</sup>

By the early 1990s, the new democratic dispensation that was to come to South Africa solidified the need for a renegotiated SACU Agreement (Grynberg and Motswapong, 2010: 9). Key issues remained the 1969 Agreement's revenue-sharing provisions, industrial development and lack of consultation.

### **3.3 The 2002 Agreement**

The renegotiation of the 1969 SACU Agreement began in 1994 with the coming to power of the new ANC-led unity government in South Africa. The negotiations took eight years to

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<sup>3</sup> A stabilisation factor was introduced into the revenue-sharing formula in 1976 to ensure a more consistent average rate of duty for BLS. Fluctuations in this rate had made it difficult for the smaller countries to predict revenue available for government spending (Cattaneo, 1998: 9). In the early 1980s, the BLS countries initiated discussions on the lag in payments from the revenue pool and the range of the stabilisation factor but were unable to negotiate further amendments due to South African pressure that they agree to the homelands' membership of SACU. Such pressure was resisted by BLS, and South Africa finally elected to pay the TBVC 'states' (Transkei, Bophuthatswana, Venda and Ciskei) revenue out of its own share (Cattaneo, 1998: 9).

finalise before the new agreement was signed in 2002 (Grynberg and Motswapong, 2010: 9). While the drive to renegotiate the SACU Agreement can be attributed to the unsustainable revenue-sharing trajectory of the 1969 Agreement, it also reflected the changing political climate in South Africa. Critically, the intention was for the new democratic South Africa to establish an agreement on the basis of equality between the SACU members and not from a position of authority and dictatorship as had been the case in previous agreements. To this end the new agreement signed in 2002 sought to establish a democratic SACU. In this regard the 2002 Agreement provided for the establishment of a SACU Tariff Board to consider changes to the common external tariffs. This new institution was to replace the South African Board on Tariffs and Trade which had previously carried out this function (Kirk and Stern, 2003: 7). The new board was to be made up of a panel of experts from each member country and all recommendations would have to be ratified by the SACU Council of Ministers, which consists of one minister from each member country. The council would be supported by the Customs Union Commission while all disputes would be settled through an independent *ad hoc* Tribunal. All decisions in SACU institutions would be made by consensus (Kirk and Stern, 2003: 8). This was a major break from the previous institutional arrangements of SACU and reflected the new democratic forces present in South Africa.

The revenue-sharing component of the 2002 SACU Agreement also changed significantly. Where South Africa previously received the residual of SACU revenues once BLNS were paid, now all members would be subject to the same revenue formula. The new formula consisted of three components: a customs component, excise component and development component (Grynberg and Motswapong, 2010: 9). The customs component is calculated as a member state's percentage share of total intra-SACU imports, with the member state being entitled to that percentage share of customs revenue once deductions for the running of SACU are made. The excise component is calculated through firstly subtracting 15% for the development component and then calculating each member's share from the value of its Gross Domestic Product (GDP) as a percentage of total SACU GDP. Finally, the development component is calculated using per capita GDP with the greatest amount of the development funds going to the lowest per capita GDP member in order to compensate for the negative aspects of the customs union arrangement on less developed members (McCarthy, 2003: 624).

The 2002 SACU revenue-sharing formula came into effect in 2005/6 and resulted in an increase in SACU payments to BLNS with a decline in payments to South Africa relative to the previous 1969 formula (CIE, 2011: 15). However, the changing economic landscape since the conclusion of the 2002 negotiations has led to a move to re-evaluate the current formula once again.

### **3.4 Issues in SACU since the 2002 Agreement**

Since 2002, the common external tariff of SACU has declined dramatically while the tariff schedule has also been significantly simplified due to impetus around trade liberalisation. The average simple applied tariff rates have fallen from 11.4% in 2003 to 8.1% in 2010 while the number of tariff lines has decreased and the variation in tariffs has fallen from 17.8% in 1997 to 11.1% in 2009 (CIE, 2011: 20). Furthermore, the signing of preferential trade agreements with the European Union (EU), one of SACU's largest trading partners, by South Africa and BLNS has further liberalised a significant portion of extra-SACU trade. Thus, the consequences of a common external tariff on the smaller BLNS through trade diversion have lessened, reducing the need for compensation on these grounds. Despite this, real monetary compensation paid to BLNS over and above their own collections has increased due to higher SACU revenues while South Africa has had to forego increasing amounts of potential government revenue (CIE, 2011: 22). It would therefore seem that the opportunity cost of the current 2002 revenue-sharing formula has become too great for South Africa, resulting in the call to re-evaluate the formula in order to reduce this opportunity cost. Changes to the formula that would reduce the size of transfers to BLNS would, however, have significant and potentially disastrous consequences for government revenues, especially for Lesotho where, in the period 2006 to 2008, trade taxes from SACU made up on average 58.2% of total government revenue (World Bank, 2010).

Significantly, there has also been a failure to implement the far-reaching democratising institutions that the 2002 Agreement called for (Ahmed, 2011: 11). Of the three primary SACU institutions that were to be set up under the 2002 Agreement, namely the Secretariat, the SACU Tariff Board and the Tribunal, only the SACU Secretariat has been established. The role of the SACU Tariff Board is still being carried out by South Africa through its International Trade Administration Commission (ITAC), successor to the Board on Tariffs and

Trade (BTT), effectively ensuring that South Africa maintains a monopoly on the setting of tariffs (Volz, 2011: 64). To this end, South Africa views tariffs as a tool that can be used in its industrial policy. The new 2010/11–2012/13 Industrial Policy Action Plan (or IPAP2 as it is commonly known) makes extensive reference to the use of tariffs to develop certain sectors (DTI, 2010: 26). In contrast, it has been argued that the smaller BLNS countries view tariffs as a source of government revenue and as such have different views on the use of tariff policy (Volz, 2011: 64). The result of the failure to establish the SACU institutions and the differing views on the use of tariffs have contributed to unease with the current SACU revenue-sharing formula and to an inability to develop common policy.

The 2002 SACU Agreement provides for policy harmonisation in a number of areas including industrial development, agriculture, competition policies and unfair trade practices (WTO, 2009: 6-10). There has been little progress, however, on common or harmonised agricultural and industrial policies, and other areas of harmonisation highlighted in the 2002 Agreement. While elements of the development integration approach<sup>4</sup> are clearly evident in the 2002 SACU Agreement, ongoing discord over revenue-sharing issues and progress towards a regional industrial development policy, compounded by problems arising as a consequence of the Economic Partnership Agreement (EPA) negotiations with the EU, have prompted calls for the resolution of a number of outstanding issues regarding the implementation of the 2002 SACU Agreement. Several SACU Heads of State Summits have been held since April 2010 in response to the pressures under which SACU is currently functioning. It is evidently envisaged that a Permanent SACU Heads of State Summit is to be institutionalised (Erasmus, 2011), although there have also been calls for SACU to be ‘absorbed’ into SADC. The latter option has severe revenue implications for Lesotho and Swaziland in particular.

It is arguable that the current crisis in SACU has its roots in certain specific implementation failures of the 2002 Agreement. The preoccupation with issues surrounding the revenue-sharing arrangements has led to a neglect of the historical impact of the 1910 and

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<sup>4</sup> By contrast to orthodox market integration, the development integration approach considers economic integration specifically as a vehicle for industrial development. Features include a lower cost to the protection of the industrial sector through access to a larger regional market prior to entry into world markets, regional industrial development policy, and transport and infrastructural cooperation. Particular measures to ensure an equitable distribution of benefits, such as a regional development bank, compensatory payments mechanism or asymmetric tariff reductions are other important features (see Davies, 1996; Cattaneo, 1998).

particularly the 1969 Agreement on the industrial development of the smaller countries. From the outset, in 1994, discussions on a suitable resolution of revenue-sharing issues should have been coupled with a more coherent and systematic approach to SACU agricultural and industrial development.

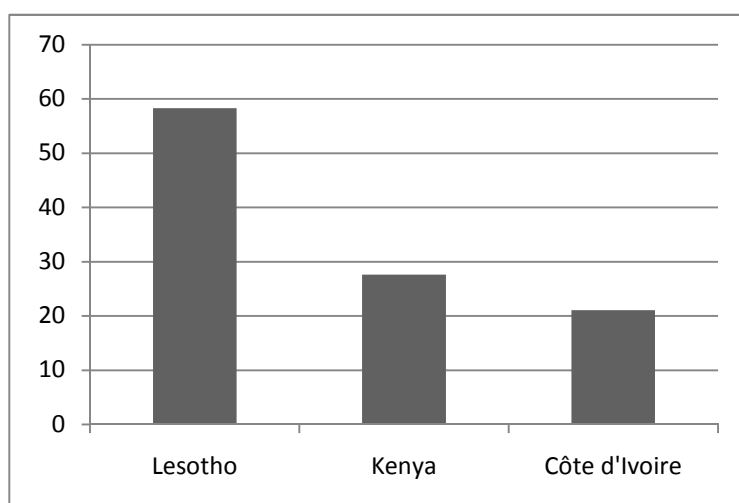
#### 4. Trade taxes and government revenue in Lesotho

The analysis of the empirical evidence on the impact of falling tariff revenues will firstly focus on the extent of the reliance that the Lesotho government has on SACU revenues as a source of government revenue and the importance of government spending in the domestic economy. These factors will be compared with two other African countries of similar GDP per capita, namely Kenya and Côte d'Ivoire.<sup>5</sup> Following this, the nature of the trade taxes will be considered in relation to domestic revenue streams and the general level of openness of the Lesotho economy.

##### 4.1 The importance of trade taxes in Lesotho

Lesotho is defined as a lower middle-income country (World Bank, 2010) and, as such, government spending unsurprisingly forms a significant part of the domestic economy.

**Figure 2: Government expenditure (% GDP)**



Source: IMF (2011)

<sup>5</sup> While other African countries with similar per capita income levels could also have been added for comparative purposes, the cases of Kenya and Côte d'Ivoire serve adequately to illustrate the more general point about the relative importance of government spending and trade taxes in Lesotho.

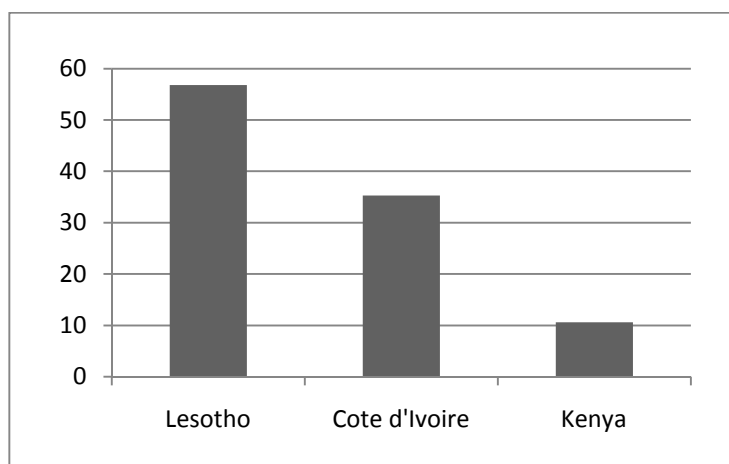
Figure 2 shows a comparison of 2008 government expenditure as a percentage of GDP between Lesotho, with a per capita GDP of \$516.9 (measured in constant 2000 dollars), and two other countries with similar levels of GDP per capita, namely Kenya (\$453.2) and Côte d'Ivoire (\$529.5). What is immediately apparent is that Lesotho's government expenditure, at 58.3%, forms a considerable portion of total GDP, much higher than Kenya (27.6%) and Côte d'Ivoire (21.1%) with similar GDP per capita. The Lesotho economy is therefore dominated by government activity where changes in government expenditure will have a significant impact on the domestic economy.

The high proportion of government expenditure in Lesotho shows that the government is integral to the functioning of the Lesotho economy and Lesotho society in general. Thus, changes in government policy can have very real and far-reaching effects on the people of Lesotho. It is in this context that the nature of government revenue mobilisation can have extremely volatile consequences for government expenditure, causing a chain reaction of volatility in the economy and hence society.

The Lesotho government's main source of income is that of taxes on international trade, stemming from transfers from SACU. Figure 3 shows the comparison of trade tax revenue as a percentage of government revenue between Lesotho, Kenya and Côte d'Ivoire for 2008. The Lesotho government receives 56.8% of its total government revenue from SACU transfers while Côte d'Ivoire receives 35.3% and Kenya 10.6% of revenue from trade taxes. Lesotho is clearly heavily reliant on trade tax revenue as a source of government revenue and this reliance is generally considerably higher than other countries of similar GDP per capita.

This high dependence exposes the Lesotho government to the volatility of international trade. As has been seen in the current economic climate, trade volumes have declined significantly and consequently so have trade tax revenues. This has impacted significantly on the revenue streams of the small countries in the SACU grouping. Most notable is the case of Swaziland where the government is facing a fiscal crisis and has had to approach South Africa for a loan of R2.4 billion, although the acceptance of the conditionalities of the loan is still a stumbling block (Ajam, 2011: 1).

**Figure 3: Taxes on international trade (% of government revenue)**



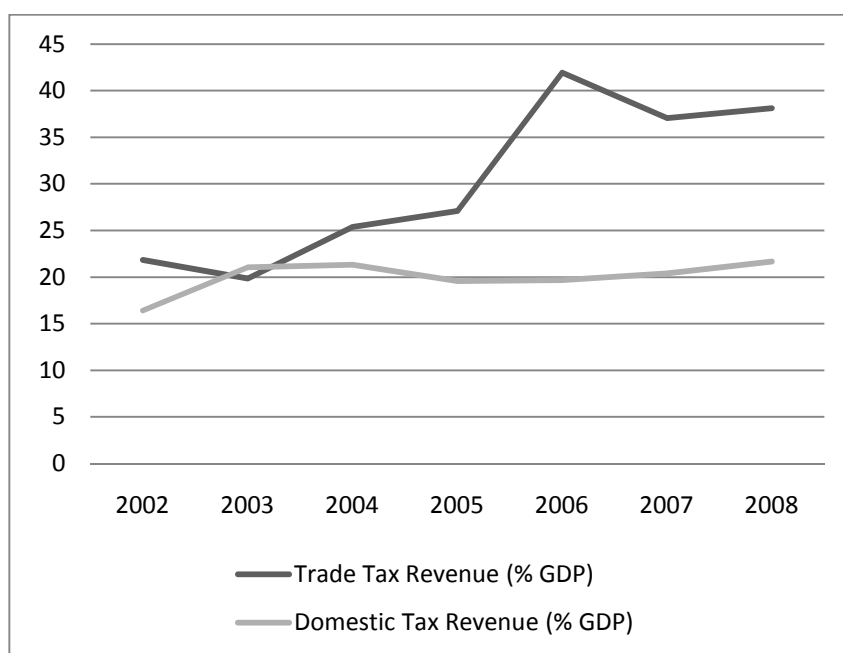
Source: World Bank (2010)

#### 4.2 The nature of trade taxes in Lesotho

Figure 4 shows a comparison of domestic tax revenue and trade tax revenue for Lesotho. Prior to 2004, domestic revenue and trade tax revenue were fairly similar, around 20% of GDP. However, there was a massive increase in trade tax revenues after 2004. This can be attributed to the final full implementation of the new 2002 SACU revenue-sharing formula in 2005/6 which resulted in a large increase in SACU transfers to the country (CIE, 2011: 20). Domestic tax revenues remained fairly stable, decreasing slightly in 2004 after the creation of the Lesotho Revenue Authority (LRA) and the implementation of the new VAT tax system in 2003 (Jefferis, 2007: 164). The fall can be attributed to institutional adjustment. The level of domestic tax collection is fairly high in Lesotho when compared to Côte d'Ivoire and Kenya, suggesting Lesotho has a relatively efficient tax collection authority (World Bank, 2010).



**Figure 4: Domestic and trade tax revenues (% GDP)**



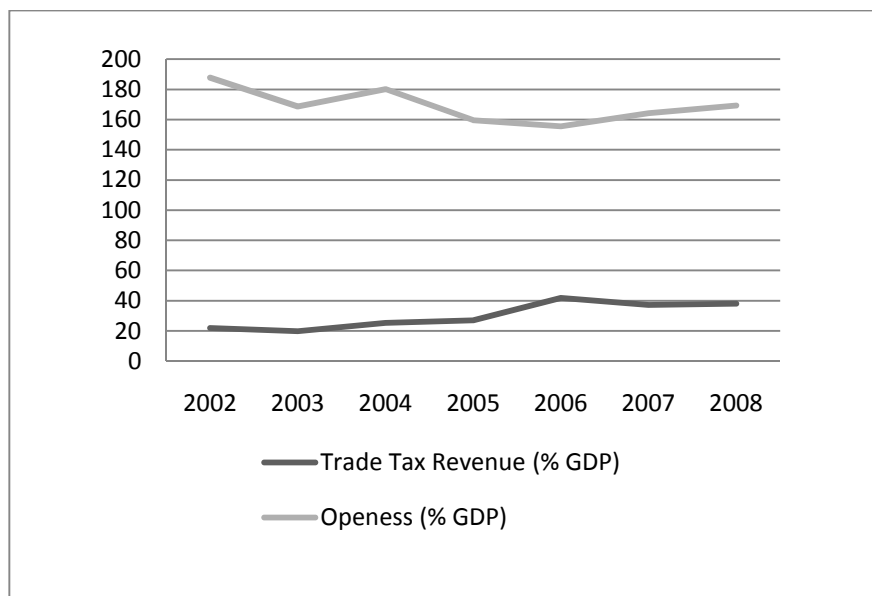
Source: IMF (2011), World Bank (2010) and authors' calculations

In addition, the historical trajectory of SACU transfers indicates the dramatic impact of the 2002 revenue-sharing formula. Figure 5 shows trade tax revenues against the openness of the Lesotho economy to international trade. Openness is calculated as the summation of imports and exports as a percentage of GDP. As can be seen, there has been a sustained decline in the relative openness of the Lesotho economy, especially from 2004. This was primarily the result of a fall both in imports and exports as a proportion of GDP from 2004 to 2006. Critically, in 2004 the Multi-Fibre Agreement (MFA) concluded, ending the Lesotho clothing and textile industry's access to developed markets without quota restrictions. The result was a rapid fall in production in the industry and a fall in exports as producers shifted production to other countries with lower production costs, such as China (Jefferis, 2007: 170). Lesotho does, however, still maintain preferential access to the US market under the African Growth and Opportunity Act (AGOA) which has contributed to a significant change in the country's direction of trade since the early 2000s.

However, in this period trade tax revenue as a percentage of GDP increased dramatically, particularly in 2005/6 as a result of the full implementation of the 2002 revenue-sharing formula agreement. Significantly, tariff rates had also been declining and simplifying and, combined with falling trade, would have resulted in a fall in trade tax revenues, not a

dramatic increase. The increase in trade tax revenues can therefore be primarily attributed to higher SACU transfers.

**Figure 5: Trade tax revenue and openness (% GDP)**



Source: IMF (2011), World Banks (2010) and authors' calculations

## 5. Domestic revenue recovery

Given the current state of SACU and the furore surrounding the revenue-sharing formula it is likely that there will be a revision of the formula and possibly of the customs union itself. Any changes to the formula would very possibly entail reductions in SACU transfers to BLNS, given the current high level of transfers at present. BLNS have received a glimpse of what a lower trade tax revenue future would look like after the global downturn led to a dramatic fall in trade volumes and hence trade tax revenues. Given lower SACU revenues, the IMF African Department has conducted an analysis of how the BLNS governments could adjust in such a context (Mongardini et al., 2011).

Mongardini et al. (2011: 32) suggest that BLNS should engage in three fiscal areas in order to remain viable. These would be revenue measures that would seek to boost domestic revenue collection, expenditure measures that would focus on reducing government spending, and structural measures to streamline and improve the efficiency of spending. In the case of Lesotho, there already exist high non-SACU revenues and a broad based taxation

system (VAT) (Mongardini et al., 2011: 32). Thus, the scope for overhauling and dramatically increasing domestic revenues is limited, where improving domestic revenue collection would focus on improving tax compliance and administrative capacity, higher administration fees and penalties and profiling large taxpayers.

Given the limited scope for increasing domestic revenues in Lesotho, the main approach to adjusting to lower SACU transfers would, in this view, come from the expenditure measures. Here, Mongardini et al. (2011: 32) identify what Khattry (2003) calls 'expenditure management'. Specifically, it is suggested that Lesotho reduce its spending on social infrastructure by reducing transfers and subsidies and postponing payments to pension schemes. It is also suggested that there should be a reduction in spending on goods and services and an elimination of expenditure on non-core functions and non-productive expenditure. The report fails to identify what goods and services, and what would constitute non-core functions and unproductive expenditure, but given the history of expenditure management initiatives this could entail reduced expenditure on social programmes and pro-poor spending relative to physical infrastructure. The reduction in spending on social infrastructure, however, would have severe consequences for the poor and harm social cohesion. The result could be a dramatic rise in social upheaval which would in itself impact negatively on the economy. The report fails to consider the consequences of a reduction in social infrastructure spending. A paper by Ngalawa et al. (2010) shows, for example, that declining revenues and the resulting reduction in social expenditure would have a direct impact on public health expenditure. This would reduce the country's ability to provide healthcare, especially in combating HIV/Aids.

Finally, Mongardini et al. (2011: 32) suggest structural reform that would seek to strengthen the management of public finances to enhance the efficiency of public expenditure given reduced resources.

## **6. Conclusion**

The mobilisation of the resources of the Lesotho state by the Lesotho government is carried out through the collection of tax revenue. These resources allow the government to carry out its functions and ensure the continuation of an operational state. Should the Lesotho government fail to mobilise the state's resources the ability of the government to maintain

its functionality would be compromised and this could conceivably lead to the failure of the state itself. Thus, revenue mobilisation is integral to state formation. In Lesotho, the government forms a very large part of the Lesotho economy and is therefore a large part of Lesotho society; hence the Lesotho government is extremely important in the formation of the Lesotho state. However, the mobilisation of resources in Lesotho is not confined to collecting domestic taxes; trade taxes in the form of transfers from SACU contribute over half of all government revenue with the result that the government is heavily reliant on these transfers.

This heavy reliance on SACU transfers stems from the historical development of the customs union. The 1969 Agreement saw a significant increase in transfers to BLNS and the 2002 Agreement further increased these transfers considerably. The 2002 Agreement also sought to develop a democratic SACU but the failure to establish all of the SACU institutions that were agreed upon has seen a failure to bring about consensus on industrial and other policies between all the members. South Africa maintains a prominent position over BLNS with its control of the tariff structure through ITAC, where South Africa views tariff policy as part of industrial policy. The failure to reach consensus on regional industrial policy between members of SACU has exacerbated the revenue-sharing issue as a source of major contention between members to the point where a review of the formula is being undertaken. Had the 2002 Agreement been fully implemented it could be argued that issues surrounding the revenue-sharing formula may not have been as pronounced.

Should there be changes to the formula there is a high likelihood that they would entail a fall in SACU transfers to BLNS and higher transfers to South Africa as the trade diversion effects of the customs union on BLNS have decreased due to trade liberalisation. For Lesotho and BNS there would need to be an adjustment to lower SACU transfers. The current fall in SACU transfers due to the global economic downturn provides a glimpse of the effects of lower SACU transfers and hence trade tax revenues on these countries. The response from Lesotho could involve reduced expenditure on social infrastructure due to the already high level of domestic revenue collection which would severely limit the extent to which Lesotho could recoup lost trade tax revenues from domestic sources. This fall in spending on social infrastructure would negatively affect the poor and reduce social cohesion, increasing social upheaval in Lesotho.

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Chapter 8

**Foreign Direct Investment in South Africa**

*Ron Sandrey*

Investment is the fuel of economic growth, and in a closed economy domestic savings are the only source of investment. However, in an open economy these domestic savings may be augmented by borrowing from abroad (the savings of others). These borrowing can take different forms, but the form of interest to this chapter is foreign direct investment (FDI) as defined by the net inflow of investment to acquire a lasting management interest (10% or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in a country's balance of payments. It is distinct from portfolio investment, which is considered to be the purchase of stocks, bonds, and money market instruments by foreigners for the purpose of realizing a financial return, which does not result in foreign management, ownership, or legal control. In general terms, any foreign investment that is not direct investment is (a) considered portfolio investment, or (b) "Other investment" (loans, trade finance, currency & deposits and other assets with unaffiliated parties), and in contrast to FDI foreign portfolio and "other investments" have no controlling interest in their investment. Hence, the 10% or more thresholds for voting stock, albeit an arbitrary definition, becomes critical in dictating 'controlling interest' for FDI.

The objective for this chapter is to present a recent view of FDI for South Africa, both in inflows (liabilities) and outflows (assets). We do this set against a background of the role of FDI in development and a perspective on South African FDI from a global flow position.

**The overall data for South Africa**

Firstly, we need a discussion on the data and its interpretation used in this section. The data is **stock** data and it has been sourced directly from the South African Reserve Bank. It is the results of their survey data to assess the values of foreign assets in South Africa (liabilities resulting from inflows of foreign capital) and South African assets abroad (assets resulting



from outflows of South African capital). Data for these assets abroad is available by sector, but the comparable inflow data (liabilities) is not available by sector - this data is the **stocks**.

The other data series available from the South African reserve bank are the annual **flows**, or the values of capital inflows (liabilities) and outflows (assets) to (a) FDI investment, (b) portfolio investment or (c) 'other investment' as defined above, also available from the Reserve Bank.

From the **stocks data we have analysed the annual changes** to the liabilities and assets for South Africa. **This is not flows**, but **reported annual changes to stocks** whether they be in foreign firms in South Africa or South African firms abroad. An important factor here is that by definition the stocks given by the Reserve Bank are denominated in South African rand, while the actual values of these stocks are of course in the host foreign country when they are held abroad. Currency fluctuations over the period are shown in figure 1 below and illustrate the volatility of the rand against the dollar and the dollar against the British pound over the period 1998 to 2011 that we are looking at to put the importance of these currency fluctuations in perspective. Consequently, the foreign currency value of the stocks held abroad will reflect these fluctuations, but they should not influence the foreign stocks in South Africa to the same extent<sup>1</sup>. In addition, there are profit / loss adjustments and other related factors that need to be considered.

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<sup>1</sup> These same fluctuations will of course influence the value for the mirror image of the source country's stock in South Africa when they are viewed from that country's perspective.

**Figure 1: Annual values of rands to dollar and rands to the pound.**

Source: <http://wikiposit.org/a?uid=FRED.AEXSFUS>

### Inward Foreign Direct Investment (liabilities)

The next series of tables present the most recent data<sup>2</sup> for South Africa FDI inflows. Table 1 starts by showing the cumulative FDI inflows (**Stocks of FDI**) denominated in Rand 1,000 millions<sup>3</sup>. These stocks increased from Rand 81,000 million in 1997 through to Rand 1,016,000 million in 2010. The dominance of Europe as a source can be seen from viewing the table, with UK, Netherlands, Germany and Switzerland all in the top five stock totals for 2010. Also shown are the totals from Europe<sup>4</sup>, with these ranging from a low of 71.5% in 1998 to a high of 89.6% in 2001 and a total average of 83.5% over the period shown. Much has been made of the role of China as a source of FDI for South Africa, but table 1 shows that while certainly increasing over recent years these stocks are still relatively modest.

<sup>2</sup> As at January 2012 from the South African Reserve Bank (Pieter Swart, pers com). Where Neth is the Netherlands, Germ is Germany, Swiss is Switzerland, Malay is Malaysia and Lux is Luxembourg.

<sup>3</sup> We use the so-called 'short' billion of one thousand million rather than the more uncommon 'long' billion of one million million rand.

<sup>4</sup> As defined by total Europe, not just European Union.

**Table 1: South African FDI Stocks, Rand 1,000 million.**

	Total	Europe	UK	Neth	USA	Germ	Swiss	China	Japan	Malay	Lux
1997	81.5	61.1	37.1	4.6	12.1	10.0	3.8	0.0	1.1	3.5	0.4
1998	91.9	65.7	36.6	4.8	13.8	10.5	7.6	0.0	1.3	7.0	0.3
1999	318.6	288.0	248.3	5.4	17.3	16.8	8.4	0.0	0.9	6.6	0.7
2000	328.9	292.6	242.9	11.0	19.6	19.1	10.3	0.1	1.5	6.8	0.8
2001	370.7	332.2	281.2	10.7	18.9	22.4	6.8	0.2	2.0	6.5	2.5
2002	264.4	211.1	158.1	12.8	23.9	22.0	6.0	0.2	3.4	7.1	3.0
2003	311.2	245.7	188.3	16.1	29.5	22.9	6.1	0.2	7.1	10.0	1.8
2004	362.9	294.0	227.9	16.2	31.2	25.8	6.4	0.3	7.4	2.4	1.9
2005	499.6	425.1	350.4	14.1	32.1	29.9	10.6	0.3	9.9	2.3	2.2
2006	611.7	535.4	440.3	22.1	37.4	34.1	12.3	0.5	14.7	2.4	1.9
2007	751.9	655.9	524.2	29.0	46.3	41.4	21.3	0.5	12.9	2.3	8.6
2008	632.6	492.2	342.5	32.2	47.2	47.0	29.2	26.8	17.0	12.8	8.4
2009	866.7	691.9	468.0	91.4	55.8	58.1	28.8	34.0	17.5	14.6	10.7
2010	1,016	842.8	504.3	177.9	62.7	60.9	46.1	37.3	19.3	17.2	15.8

Source: South African Reserve Bank.

Of more interest is the **changes to these resource stocks (note – these are not ‘flows)**, and the highlights of these changes are shown in Table 2 (again in thousand million rand, or billion). These changes will reflect new inflows (investment) or outflows (disinvestment) by the foreign firms as well as adjustments such as profit / loss data. **Column 2** shows the total annual changes with the penultimate row showing the grand total change over the period and the bottom **row** showing the percentage of the total change from that source. The grand total change from 1998 has been rand 934 billion, with some distinct variations apparent. The period through to 2005 was especially volatile, with solid increases in 1999 but major decreases in 2002 with modest changes in the other periods. From 2005 onwards there were significant increases with the exception of decreases in 2008. The dominance of Europe is again apparent, although note the European (mostly UK) changes during the 2002 and the 2008 years where these changes have been strong enough to dictate the overall result. China was an important source of FDI for South Africa, in 2008.

**Table 2: Inward FDI, Year on year changes, Rand 1,000 million (billion)**

	Total	Europe	UK	Neth	Germ	USA	Swiss	China	Japan	Lux
1998	10.4	4.6	-0.5	0.2	0.6	1.7	3.8	0.0	0.2	-0.1
1999	226.8	222.4	211.6	0.6	6.3	3.5	0.8	0.0	-0.4	0.5
2000	10.2	4.6	-5.3	5.6	2.3	2.3	1.9	0.1	0.7	0.0
2001	41.8	39.6	38.2	-0.3	3.3	-0.7	-3.5	0.1	0.5	1.7
2002	-106.3	-121.1	-123.1	2.0	-0.4	5.0	-0.8	0.1	1.5	0.5
2003	46.8	34.6	30.2	3.3	0.8	5.6	0.1	0.0	3.7	-1.1
2004	51.7	48.3	39.6	0.1	2.9	1.7	0.3	0.1	0.3	0.1
2005	136.7	131.1	122.5	-2.1	4.1	0.9	4.2	0.0	2.5	0.2
2006	112.1	110.3	89.9	8.0	4.2	5.2	1.6	0.1	4.8	-0.3
2007	140.2	120.6	83.9	6.8	7.2	9.0	9.1	0.0	-1.8	6.7
2008	-119.3	-163.8	-181.7	3.3	5.6	0.8	7.9	26.3	4.1	-0.2
2009	234.0	199.7	125.6	59.2	11.1	8.6	-0.5	7.2	0.4	2.3
2010	148.9	151.0	36.2	86.5	2.8	6.9	17.4	3.3	1.8	5.1
total	934.1	781.8	467.2	173.3	50.9	50.6	42.3	37.2	18.2	15.4
% total	100%	83.7%	50.0%	18.6%	5.4%	5.4%	4.5%	4.0%	1.9%	1.7%

Source: South African Reserve Bank.

Other major investors not shown over the period have been Malaysia (rand 10.4 billion in 2008), France, Bermuda and Russia. At the other extreme, Saudi Arabia has disinvested slightly more than a billion rand over the period in total, with a variation between reasonable investments some years and disinvestments in other. Panama and 'other Central America' are the other two main disinvesting sources, although these are relatively small players.

Much has been made of the so-called BRICs (Brazil, Russia, India and China) as a source of FDI. The data show in table 3 suggests that these **changes** are important, with China being a major FDI source in both 2008 and 2009. In particular, Chinese investments offset disinvestment from other sources in 2008. Russia is the second most important BRIC source (inflows/increases in 2004, 05 and 09 but outflows/decreases in 2006), followed by India (2009) and a modest contribution from Brazil.

**Table 3: South African FDI annual changes from BRICs, Rand 1,000 million.**

Year end Dec	Total flows	China	Russia	India	Brazil	BRICs % total
1998	10.4	0.0	0.0	0.0	0.0	0.1%
1999	226.8	0.0	0.0	0.0	0.0	0.0%
2000	10.2	0.1	0.0	0.0	0.0	0.8%
2001	41.8	0.1	0.0	0.0	0.0	0.2%
2002	-106.3	0.1	0.0	0.0	0.1	0.1%
2003	46.8	0.0	0.0	0.0	0.0	0.0%
2004	51.7	0.1	6.9	0.0	0.0	13.6%
2005	136.7	0.0	4.2	0.0	0.1	3.1%
2006	112.1	0.1	-11.1	0.1	0.0	9.7%
2007	140.2	0.0	0.0	0.3	0.0	0.2%
2008	-119.3	26.3	0.0	0.3	0.0	22.3%
2009	234.0	7.2	5.4	1.5	0.0	6.0%
2010	148.9	3.3	1.7	0.2	0.2	3.6%

Source: South African Reserve Bank

Table 4 details the **stocks** by sectors of economic activity to where South Africa inward FDI has been directed over the same period. In recent years mining has become the main beneficiary, followed by manufacturing and then the finance-insurance-real estate-business services sector. 'Other' includes construction; agriculture, forestry and fishing; community, social and personal services; and electricity, gas and water. Official data matching source by sector is not available.

**Table 4: FDI stocks by economic activity (rand 1,000 million)**

Year end Dec	Total	Mining	Manufac-turing	Fin busservices	Transport communs	Trade &accom	Other
1997	81	4	35	29	5	8	0.7
1998	92	7	40	29	6	8	0.8
1999	319	114	79	105	8	11	1.1
2000	329	92	87	129	9	12	1.0
2001	371	124	89	131	9	15	2.7
2002	264	89	67	82	10	13	2.9
2003	311	111	75	87	22	13	2.8
2004	363	119	111	100	14	15	3.3
2005	500	179	136	158	9	15	3.3
2006	612	250	165	163	14	16	3.4
2007	752	332	197	179	13	28	3.4
2008	633	195	205	182	16	31	3.6
2009	867	290	242	235	65	31	3.6
2010	1,016	389	263	242	84	35	3.6

Source: South African Reserve bank

Table 5 extends the sector analysis from the **stocks** given in Table 4 to show the **changes** by sector over the period. This is really the ‘business end’ of FDI, and the data shows a degree of variation between the different sectors over the period. Clearly some very large deals are influencing the overall flow patterns. For example, in 2008 there was a major foreign increase in the mining sector. Some of these patterns will be discussed later, although that discussion is incomplete as the Reserve Bank does not publish specific commercial activity and in general secondary data sources have to be used to glean this information.

**Table 5: FDI changes by economic activity (rand 1,000 million)**

Year end Dec	Total	Mining	Manufacturing	Fin bus services	Transport comms	Trade & accom	Other
1998	10.4	3.6	5.7	0.3	0.4	0.2	0.1
1999	226.8	106.8	39.1	75.6	2.6	2.4	0.3
2000	10.2	-22.6	7.3	24.2	0.1	1.3	-0.1
2001	41.8	32.5	2.7	1.4	0.3	3.2	1.7
2002	-106.3	-34.9	-22.2	-48.9	1.3	-1.8	0.2
2003	46.8	21.7	8.2	5.0	11.9	0.1	-0.1
2004	51.7	8.5	35.9	13.6	-7.9	1.1	0.4
2005	136.7	59.1	24.7	57.4	-4.7	0.2	0.0
2006	112.1	71.8	29.4	4.9	4.4	1.5	0.2
2007	140.2	81.9	31.7	16.1	-1.0	11.6	-0.0
2008	-119.3	-136.9	7.7	3.8	2.7	3.2	0.2
2009	234.0	94.5	37.5	52.5	49.4	0.2	0.0
2010	148.9	98.9	20.7	6.8	19.0	3.4	0.0

Source: South African Reserve bank

### Outward FDI (assets)

We next turn to the reverse ‘mirror’ side of FDI, that of the value of investment from South Africa to control business activity elsewhere in the world. The **stock** data for this is shown in Table 6, again in rand thousands of millions. These stocks will reflect both the initial investments and changes to the values of these investments over time from currency changes and other factors (such as unremitted profits/losses). Again, Europe dominates as a destination, but not as comprehensively as it does for foreign assets (liabilities) held in South Africa. Luxemburg is the main destination, but from there the trail is likely to be a little hard to decipher as this destination is somewhat akin to a flag of convenience that shipping countries use. Using the IMF guidelines the Reserve Bank only reports on the ‘first port of call’ for these funds.

**Table 6: South African FDI foreign stocks by destination, Rand 1,000 million (billion).**

Yr end Dec	Total	Lux	UK	China	Mauritius	USA	Austria	Nigeria
1997	113	42	32	0	1	3	0	0
1998	157	44	45	0	1	4	0	0
1999	203	42	79	-0	2	6	11	0
2000	245	58	77	0	3	11	2	0
2001	213	60	62	0	6	10	18	0
2002	190	48	36	0	3	21	27	0
2003	181	44	44	0	4	15	11	0
2004	220	51	66	2	8	15	17	5
2005	238	75	72	4	3	14	18	5
2006	354	106	80	16	34	22	22	10
2007	449	122	93	33	33	24	23	32
2008	465	54	115	29	44	27	28	28
2009	536	66	87	101	49	35	17	30
2010	593	103	99	93	53	29	25	24

Source: South African Reserve Bank

Table 7 extends Table 6 and shows the aggregate destinations for South African FDI stocks in Europe and Africa over the period examined for both values and percentage shares. Through to 2007 the total share to Europe and Africa combined was over 80%, but from that period the influence of investments in China as shown in Table 6 became more important. Only partially shown in Table 6 is that over the last four years the main African destinations have been Mauritius, Nigeria, Mozambique, Ghana and the DRC.



**Table 7: Outbound South African FDI stocks, % share in Europe and Africa.**

Yr end Dec	Total	Europe		Africa	
	R bill	R bill	%	R bill	%
1997	113.2	99.2	87.6%	6.1	5.4%
1998	157.4	138.8	88.2%	9.4	6.0%
1999	203.0	176.6	87.0%	10.0	4.9%
2000	244.7	208.9	85.4%	12.3	5.0%
2001	213.2	177.8	83.4%	15.0	7.0%
2002	189.9	142.8	75.2%	13.3	7.0%
2003	180.5	137.4	76.1%	15.8	8.8%
2004	220.0	166.7	75.8%	23.6	10.7%
2005	238.5	190.4	79.8%	19.1	8.0%
2006	354.3	238.8	67.4%	59.1	16.7%
2007	448.6	276.4	61.6%	84.4	18.8%
2008	464.8	253.6	54.6%	102.2	22.0%
2009	535.7	222.6	41.6%	115.7	21.6%
2010	593.2	283.5	47.8%	121.7	20.5%

Source: South African Reserve Bank

Table 8 examines the annual changes to stocks from South African outward FDI as represented by the annual changes from Table 6. Again, this will represent both new investments and valuation changes to existing investments. There has been a lot of variation in these changes, with the first three years showing consistent increases and then three years of decreases. This is followed by seven years of increases albeit with aggregate variations from lows in 2005 and 2008 and a high in 2006. An examination of the data shows considerable annual variations in the individual destinations with some significant increases taking place in some countries while others have shown major decreases. For example, 2009 shows increases (mostly investments in this instance) of 72 billion in China and large disinvestments in the UK and to a lesser extent Austria, while there were disinvestments of 68 billion in Luxemburg during 2008.

**Table 8: Outbound South African FDI changes by destination, Rand 1,000 million.**

	Total	Europe	Africa	China	UK	Lux	Maur	USA	Austria	Nigeria
1998	44	40	3	0	13	2	0	1	0	-0
1999	46	38	1	-0	34	-2	1	2	11	0
2000	42	32	2	0	-1	16	1	5	-9	0
2001	-31	-31	3	0	-16	1	3	-1	15	-0
2002	-23	-35	-2	0	-26	-12	-3	11	9	0
2003	-9	-5	3	0	8	-4	1	-6	-16	0
2004	40	29	8	2	22	7	4	0	6	5
2005	18	24	-5	2	6	24	-5	-1	1	-0
2006	116	48	40	12	8	32	30	7	4	5
2007	94	38	25	17	13	16	-1	2	0	22
2008	16	-23	18	-4	22	-68	11	4	6	-3
2009	71	-31	13	72	-28	12	5	7	-12	2
2010	58	61	6	-9	12	36	4	-6	9	-6
total	480	184	116	93	68	61	53	25	25	24
total%	100%	38%	24%	19%	14%	13%	11%	5%	5%	5%

Source: South African Reserve Bank

### Recent Balance of Payment flow data

Table 9 shows the annual balance of payment data as published by the South African Reserve Bank for international investment **flow** data, where 'liabilities' are outflows, 'assets' are inflows, 'net' is the balance for each sector and balance' is the overall balance as shown. Note that an increase in **liabilities** (inflow of capital) is denoted by a positive value, while a decrease in liabilities (outflow of capital) is denoted by a negative value. For **assets**, the position is reversed; an increase is a negative value (South African money leaving the country) while a decrease is an inflow of capital denoted by a positive value. Also note that this data is in rand million and not rand billion as in the series of tables above.

The first segment is FDI, where there was an outflow of FDI during 2006 as liabilities declined, and for most years assets abroad increased as indicated by the negative signs. The central segment shows that excepting for 2008 there have been significant portfolio inflows into South Africa, and these are generally greater than the outflows of portfolio investment going offshore. Note also that this portfolio flow is generally greater than the comparable

FDI values, and sometimes significantly so. Finally, the lower segment shows the ‘other’ category as discussed above, and the totals here are also variable and often significant. The bottom row is literally ‘the bottom line’ and shows the total effects.

**Table 9: Overall update on Balance of payment data for South Africa, R millions (Flows)**

Year	2003	2004	2005	2006	2007	2008	2009	2010
Direct Invest								
Liabilities	5,550	5,155	42,270	-3,567	40,120	74,403	45,465	8,993
Assets	-4,275	-8,271	-5,916	-41,058	-20,896	25,888	-9,757	554
Net direct	1,275	-3,116	36,354	-44,625	19,224	100,291	35,708	9,547
Portfolio Invest								
Liabilities	7,548	46,262	36,188	144,501	97,485	-71,540	107,234	107,876
Assets	-1,001	-5,946	-6,123	-15,044	-24,026	-63,325	-13,470	-33,374
Net direct	6,547	40,316	30,065	129,457	73,459	-134,865	93,764	74,502
Other Invest								
Liabilities	14,594	10,944	32,735	60,750	58,711	47,730	-39,956	7,899
Assets	-36,919	-3,555	-2,895	-38,823	2,119	82,983	23,703	-22,138
Net direct	-22,325	7,389	29,840	21,927	60,830	130,713	-16,253	-14,239
Balance	-14,503	44,589	96,259	106,759	153,513	96,139	113,219	69,810

Source: South African Reserve Bank, Quarterly Bulletin, December 2011

### The role of FDI

FDI has always played an important role in industrial development of a country, and that role is changing and expanding as the very growth of FDI is accentuating the globalisation of the world’s economy just as this same globalisation is simultaneously accentuating the role of FDI. It is a symbiotic relationship: globalisation is driven by changes in technology, the liberalisation trends of many economies in regulatory environments and trade and investment and capital market regimes, while at the same time FDI itself has contributed to these changes. It is certainly not a new phenomenon, but its role may be becoming more complex as the inexorable march of globalisation continues. Global alliances and chains in the service sectors (consider retail and fast food chains and software development) are just as important as traditional manufacturing for FDI.

UNCTAD 2011 discusses how FDI policies increasingly interact with industrial policies, nationally and internationally, and this paragraph draws heavily from that discussion. For a particular government this means developing national investment guidelines; perhaps targeting the types of investment or specific categories of foreign investors for industrial development purposes; examining possible investment incentives related to certain industries, activities or regions; and definitely investment facilitation in line with industrial development strategies. Selective FDI linkages with industrial may be related to the protection of infant industries, national champions, strategic enterprises or ailing domestic industries in times of crisis. At the regional and international levels industrial policies are generally supported by FDI promotion through International Investment Agreements (IIAs), although caution must be exercised to avoid constraining regulatory space for industrial policies and particularly in the service sector (transportation, finance and communication). The big challenge is to ensure that both FDI policies and industrial policies coordinate to advance development. The domestic balance is between building stronger domestic productive capacity on the one hand and preventing investment and trade protectionism on the other. The international balance is to avoid the so-called “beggar thy neighbour” policies and ensure synergies for global cooperation.

Bartels and Crombrugghe (2009) examined the complexity of an FDI regime and the challenges that governments face in operationalising such a regime. They argue that the role of FDI in promoting industrial development in both developed and developing countries was accepted, just as was the role of that development in fostering technological and hence economic growth. The complexity arose in policy measures to promote FDI, and here they argue that a country must set policy measures for FDI that are consistent with the needs and priorities set by government in a context of specific circumstances, stages of development, location, resources, regional agreements and international competitiveness. It is not a matter of liberalisation versus regulation but rather a careful evaluation of aspects of both.

Graham and Spaulding (undated) argue that for the provider FDI can offer a firm new markets and marketing channels, cheaper production facilities, access to new technology, products, skills and financing, while for the host country (or the foreign firm) which receives the investment it can provide the new technologies, capital, processes, products, and

management skills that gives a strong impetus to economic development. They acknowledge that FDI is controversial: proponents of foreign investment argue that the exchange of investment flows benefits both the home country (the country from which the investment originates) and the host country (the destination of the investment), while opponents of FDI note that multinational conglomerates are able to wield great power over smaller and weaker economies and can drive out much local competition. As in most polarising arguments, Graham and Spaulding consider the truth to be somewhere in the middle.

### **Recent developments in FDI into Africa and South Africa**

Information for South Africa's investment framework is derived from the World Trade Organisation (WTO) 2009 review, who reports that much of the institutional framework governing investment in South Africa had remained broadly unchanged since 2003. Investment is governed by sector-specific legislation, and a variety of schemes provide incentives to investors. South Africa encourages investment by non-resident persons and companies, and national treatment applies to all foreign investors. The country has made significant progress in liberalising exchange controls in recent years, although some restrictions to foreign investment remain. The country promotes outward investment, particularly in the SACU and SADC areas where the Government encourages South African firms to invest regionally through the relaxation of foreign exchange controls on capital destined for the region. Gelb (2010) confirms that the South African policy framework is largely *laissez-faire* regarding the entry *per se* of foreign firms, as no official approval is required for foreign firms to enter the economy excepting in a few sectors such as banking. Foreign investors are subject to the same laws and regulations as domestic investors, and policy interventions affecting corporate behaviour and performance are largely concerned with domestic redistributive aims (BEE) and do not discriminate between domestic and foreign investors.

The more recent South African view on FDI is interesting. The National Development Plan (2011) outlines a very comprehensive vision for South Africa's medium term future and what is needed to achieve this vision. The document is strangely silent on FDI. It recognizes the need to raise the rate of investment, but dedicates little over one page discussing how this is

to be achieved and what the benefits are. It sees this increased investment being sourced from (1) higher levels of public-sector fixed capital formation with an emphasis on infrastructure building, (2) more private sector investment, and (3) foreign investment. The plan considers that, “over time, a larger share of investment should be funded domestically, but this will depend on how well resources are used in the short term to raise productivity, incomes and employment”. It is almost as though foreign investment is seen as a failure of South Africans to be able to fund their own development with this begrudgingly admission that foreign investment is needed.

Gelb and Black (2007) provide a good background to the history of FDI in South Africa from colonisation through to and including the 1990s. From the initial pastoral economy fuelled by agricultural export and a financial system dominated by London banks South Africa moved to the minerals boom after the 1860s, a boom financed by both FDI and portfolio investments from Europe. This European investment was accentuated by the growth of the manufacturing and services sectors and augmented by US investments over the next few decades. By the early 1970s 40% of the FDI stock was in manufacturing, 25% in financial and business services and a lesser 15% in mining. From this period the FDI flows slowed in response to political pressures in home countries against apartheid, and during the 1980s there was significant disinvestment in both FDI and portfolio investments. During the 1990s the ‘new dawn’ of the Rainbow nation similarly led to a ‘new dawn’ of foreign investments, and this was actively encouraged by the official government policies of the time seeking improved growth and economic development. In particular, low domestic savings were identified as a constraint and FDI was encouraged as the preferred investment inflow. This general picture is backed up by the data in Table 2 above which shows that as late as 1997 there was less than 10% of the FDI stocks in South Africa that were reported at the end of 2010. Emphasising the changing FDI environment over this period in an address in June 2011 to Rhodes University Gelb related how in 1985 he was at the University as a panellist on United States policy in South Africa discussing disinvestment focussed on the United States and now he was back to discuss foreign direct investment focussed on China!<sup>5</sup>

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<sup>5</sup> <http://www.ru.ac.za/latestnews/name,36785,en.html> Rhodes University dated 7 June 2011

Thomas and Leape (2005) in examining FDI in South Africa through to 2005 found that the country received comparatively low (but not insignificant) levels of FDI at that time, in part because South Africa had a well developed local corporate sector and a strong domestic capital market. The UK (and to a lesser extent Germany) had been the main investor initially, but a broadening of sources had taken place since 2000. This is apparent from Table 2 above. EU investors had been active in the auto sector initially, with the US and Japan also contributing new FDI to this sector from 2000. The study set out to specifically analyse the impacts of the Trade Development and Co-operation Agreement (TDCA) on FDI flows from Europe, and found that perhaps apart from the auto sector there was little evidence that the TDCA had much direct influence on FDI flows into South Africa. In interviews examining the investment climate against competitor economies in emerging markets Thomas and Leape found that disincentives included lagging growth, instability in the exchange rate, inflexible labour markets, weaknesses and the high costs of infrastructure, and concerns of crime and corruption.. Incentives focussed on many of the positive changes such as a broadly favourable institutional framework and increasing openness to trade.

### **Recent global FDI patterns**

The OECD regularly report on global FDI data and trends, and Table 10 below duplicates the data from their January 2011 update. It shows global figures for the years 2006 through to 2010 and for 2011 data/forecasts. Flows for 2009 were down considerably on the previous three 'pre-crash' years, and although flows have increased over 2010 and our 'estimates' for 2011 they have not reached pre-crash levels. OECD countries continue to be the main attraction for FDI inflows, but the third-from-bottom line of Table 10 shows that the so-called BRICs are becoming increasingly attractive to investors. The penultimate line shows that as a percentage of global inflows South Africa peaked at 0.52% in 2008, while the bottom line shows that OECD countries while still the destination for over half of the flows are becoming less attractive as a destination.

**Table 10: Global FDI inflows, \$ billion**

	2006	2007	2008	2009	2010	2011
World	1,454	1,963	1,746	1,245	1,245	1,287
OECD	1,009	1,355	1,059	663	660	773
Brazil	19	35	45	26	49	68
China	124	160	175	114	185	207
India	20	26	43	36	25	33
Russia	30	5	75	37	43	51
South Africa	-1	6	9	6	1	5
BRIC \$	192	232	347	219	303	364
BRIC %	13.2%	11.8%	19.9%	32.6%	24.3%	28.2%
RSA % tot	0.03%	0.29%	0.52%	0.46%	0.10%	0.35%
OECD	69.4%	69.0%	60.7%	53.3%	53.0%	60.0%

Source: OECD. 'Estimates' for 2011 have been made by averaging the first three quarters of 2011 and extrapolating this data to the full 2011 year. Data has been rounded, and BRIC includes South Africa.

The global FDI outflow data for recent years is shown in Table 11, again with the 2011 data estimated from the first three quarter reports. The same patterns of a decline during 2009 are apparent, with a recovery looking likely for 2011 but not back to peak levels. An examination of the data will show that the annual inflow and outflow global totals do not match, with up to ten percent variations each year. This can be caused by various reasons, including inconsistencies in the reporting methods and data collection between countries, uneven coverage on issues such as reinvested earnings, exchange rate issues, the evolving nature of FDI itself where perhaps the package may include government development assistance, perhaps a blurred distinction between FDI and portfolio monies in instances where possibly 'hot money' is involved, and perhaps reporting time differences. Nonetheless, the data gain shows both the absolute dominance of the OECD countries as the data sources and the increasing role of the BRIC countries. South Africa was a significant FDI contributor in 2006 but not in the other periods.



**Table 11: Global FDI outflows, \$ billion**

	2006	2007	2008	2009	2010	2011
World	1,376	2,170	1,902	1,122	1,355	1,536
OECD	1,188	1,932	1,636	903	1,063	1,343
Brazil	28	7	21	-10	12	-14
China	21	17	54	44	60	47
India	14	17	19	16	15	16
Russia	23	46	56	44	53	61
South Africa	6	3	-3	1	0	-1
BRIC \$	92	90	147	95	140	108
BRIC %	6.7%	4.1%	7.7%	8.5%	10.3%	7.0%
RSA % tot	0.44%	0.14%	0.16%	0.11%	0.01%	0.07%
OECD	86.3%	89.0%	86.0%	80.5%	78.5%	87.4%

Source: OECD. 'Estimates' for 2011 have been made by averaging the first three quarters of 2011 and extrapolating this data to the full 2011 year. Data has been rounded, and BRIC includes South Africa.

To put the FDI data in perspective we show data for **flows** as a percentage of GDP for the OECD, BRICs and South Africa over the 2006 – 2010 periods in Table 12 and the **stocks** as a percentage of GDP over the same periods in table 13. The left hand side of the tables shows the inflows and the right hand side the outflows in each table. FDI inflows for the BRICs are generally above the developed OECD average while outflow values are more variable.

**Table 12: FDI Flows as a % of GDP**

	Inflows					Outflows				
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010
OECD	2.7	3.3	2.4	1.6	1.5	3.1	4.7	3.7	2.2	2.5
Brazil	1.7	2.5	2.7	1.6	2.3	2.6	0.5	1.2		0.6
China	4.6	4.6	3.9	2.3	3.1	0.8	0.5	1.2	0.9	1.0
India	2.2	2.2	3.4	2.8	1.6	1.6	1.5	1.5	1.3	1.0
Russia	3.0	4.2	4.5	3.0	2.9	2.3	3.5	3.3	3.6	3.5
South Africa		2.0	3.3	2.0	0.3	2.3	1.0		0.4	

Source: OECD. Negative values are not calculated.

The stocks for FDI inflows into South Africa as a percentage of GDP are higher than the other values shown, while for outflows South Africa is positioned between the mature OECD average and the developing BRICs – with the exception of Russia.

**Table 13: FDI stocks as a % of GDP**

	Inflows					Outflows				
	2006	2007	2008	2009	2010	2006	2007	2008	2009	2010
OECD	26.0	29.0	26.0	30.4	30.0	30.5	34.4	33.1	39.3	39.4
Brazil	20.2	22.5	17.4	25.0	22.6	10.4	10.1	9.4	10.3	9.1
China	22.6	20.1	20.3	26.4	25.1	3.3	3.3	4.1	4.9	5.3
India	7.7	9.2	9.9	13.2	12.9	3.0	3.8	5.0	6.2	6.1
Russia	26.9	37.8	13.0	31.0	33.3	21.9	28.5	12.4	24.8	24.9
South Africa	33.6	38.6	24.7	41.5	42.1	19.5	23.0	18.1	25.7	24.6

Source: OECD Note that the South African data for 2008 appears to be an outlier.

### The African picture

UNCTAD (2011) reports on the global FDI scene for 2010, where flows rose modestly above their 2009 levels but were still below pre-crisis averages. Perhaps more significantly, for the first time combined flows to developing and transition economies were more than half of total flows, and their outflows of FDI also reached record levels. However, bucking this FDI inflow trend flows to Africa and some other least developed countries fell. The UNCTAD report also features an increasing component of globalisation that goes beyond both FDI and trade, that of non-equity modes (NEMs) whereby trans-national corporations (TNCs)

coordinate activities of host country firms but have no ownership stake in these firms. Examples of NEMs includes contract manufacturing, service outsourcing, franchising and related activities, and these activities can contribute a significant part of GDP and trade to some developing countries. While there are downsides such as low value-added contributions and sometimes questionable social and environmental standards, NEMs raising some policy issues for developing countries.

The two general modes of entry, Mergers and Acquisitions (M&A) and 'greenfields' or new project investment are also discussed in the 2011 World Investment Report from UNCTAD. Since the 2008 crisis the global value of greenfields investment has been much higher than M&A, with much of the former directed towards developing countries. Table 14 details the recent data relating to these forms of activity for South Africa. The left hand side of the table shows the equivalent of inward FDI, denoted as 'net sales; for M&A and 'by destination' for greenfields. Conversely, the right hand side of the table shows the equivalent of outward FDI'; denoted as 'net purchases' for M&A and 'by source' for greenfields. Over the period shown greenfields represent somewhat more value than M&A according to UNCTAD data.

**Table 14: South African FDI by M&A and Greenfields; deal numbers and \$ mill**

Year	05	06	07	08	09	10	11	05	06	07	08	09	10	11
<b>M&amp;A</b>	<b>Net sales</b>							<b>Net purchases</b>						
deals	24	34	41	37	22	27	23	26	22	38	22	29	33	7
\$ mill	5092	-1336	4301	6676	4215	3943	232	1604	10046	8541	2817	1491	1488	3316
<b>Greenfield</b>	<b>By destination</b>							<b>By source</b>						
deals	32	41	29	65	50	61	29	62	76	59	120	95	41	
\$ mill	2212	1926	3589	4452	9608	4953	3830	3467	4947	5148	11873	7509	5891	1042

Source: UNCTAD 2011. Note that 2011 data is only for Jan-Apr only

UNCTAD (2011) also provide the general overview for FDI in Africa over recent years. Inflows peaked during the 2008 resource boom, and continued downwards during 2010 as Africa's share of developing region FDI declined (from 12 % in 2010 to 9 % in 2010). Around one-third of African inflows were directed to North Africa, and about the same share was destined for southern Africa. The leading recipient for the latter in recent years has been Angola with generally over half the total, followed by South Africa and then Zambia,

Mozambique, Namibia and possibly Botswana. African outflows have been around 10% of the inflow levels, and these have mostly been from Egypt, Libya, Nigeria, Angola and South Africa. Over the last twenty years FDI stocks in Africa have increased from 61 billion in 1990 to 154 billion in 1990 and some 554 billion in 2010, with South Africa, Egypt, Nigeria, and Morocco the main host countries. FDI outward stock has increased from 20 billion in 1990 to 122 billion in 2010, with South Africa controlling around two-thirds of these flows and Libya, Egypt and Nigeria controlling most of the remainder. Over the last two years inflows of FDI have been greenfields investment, reversing the trend for M&A investments to generally have been larger through to 2008. Outward FDI have been predominantly greenfields over recent years.

What are the drivers of this investment? UNCTAD 2010 reports on how the 2008 contraction of the commodity boom that had been driving investment (and providing the highest rates of return among developing nations) resulted in a consequential decline in inward FDI in the continent of Africa. M&A activity declined sharply, while the decline in greenfields investment was more muted – delays and cancellations however contributed to decline in both aspects of FDI. Contraction in FDI for the service sector was less evident than for other sectors, and the telecommunications industry become the prime recipient for FDI inflows. The other notable feature was the increasing role of developing and transition countries as FDI providers, with China, Malaysia, India and the Gulf States the most active of these. The main recipients of FDI in 2009 were Angola, Egypt, Nigeria, South Africa and Sudan, with Algeria, Libya and Congo in the next tier. The main outflows were from South Africa and Libya, followed by Egypt.

Ezeoha and Cattaneo examined the relative impact of financial development, macroeconomic and institutional factors on the flow of foreign direct investments to the Sub-Saharan African (SSA) countries over the 1995 to 2008 period. They found that financial development, the size of a country's market, infrastructural development and urban agglomeration are among the important factors that influence FDI flows to the region, and that, contrary to the findings of earlier studies, corruption serves as a *helping hand* in the flow of FDI to the region. They also found that financial development, infrastructure and trade openness was more important in attracting FDI to non-resource endowed countries than to resource endowed countries. The influence of corruption was found to be more

significant in resource endowed countries, a situation that they attributed to the weak law enforcement, government bureaucracy, and inefficient regulatory structures that characterize most African economies.

Draper et al (2010) examined South Africa's outward FDI and found that the portion primarily directed to the southern African region rarely exceeded 10% of the total between 1997 and 2007. Until recently, South Africa's outward FDI to Africa was concentrated in SADC countries (particularly Mauritius), but there has been a substantial shift into the rest of sub-Saharan Africa (particularly Nigeria). This may reflect relative saturation of market opportunities in southern Africa they considered that both Angola and Zimbabwe are likely to become major targets in the near future. They found that South African OFDI to Africa is private sector dominated, and its impact is on the whole beneficial. However, they considered that the actions of the South African government to support the activities of their nationals in the region are schizophrenic, particularly in its use of bilateral investment treaties (BITs) which seem to provide substantial advantages to South African companies at the expense of host-nation policy space whereas South Africa's BITs with countries investing in the Republic have been found by international arbitration to favour the converse. Nonetheless, they found that South African FDI is essentially beneficial to its southern African hosts. In 2007 these hosts in Africa were concentrated in Mauritius (30.0%, Mozambique (7.3%), Botswana and Namibia (3.8 and 3.4% respectively), smaller amounts in Lesotho, Swaziland, Zimbabwe and Zambia, and 47.3% or nearly half in the 'rest of Africa'. These shares had changed dramatically since 2003 when Mauritius, Mozambique and Namibia all had individual shares above that for the 'rest of Africa'.

Staying with South African regional outbound FDI Luiz and Charalambous (2009) examined the key elements that South African firms consider before investing in the services sector in Sub-Saharan Africa. They found that the biggest influence is the political and economic stability of the country and the profitability and economic stability of its specific market. Infrastructure (in terms of information and communications technology) and the existence of a credible financial system were also major factors. Because of the uncertainty of most markets, South African firms preferred to enter the markets with a local partner if a credible one was available, and the key motivation cited was to broaden revenue bases, improve profit margins and stay close to local customers.

The IMF (2011) found that a reorientation toward new markets is underway in sub-Saharan Africa, with non-traditional partners now accounting for about 50% of the regions exports and almost 60% of its imports. This is driven mostly by Brazil, India, and China, but it is augmented by increasing trade within the region, and the rise of emerging partners is broadly homogeneous across the various sub-Saharan African country subgroups. A similar reorientation is also taking place in investment flows, with China now accounting for 16% of total foreign direct investment (FDI) flows to the region and other emerging countries also making considerable investments in sub-Saharan Africa. Chinese investment is geographically spread, while most Indian investment is concentrated in Mauritius and Brazil's investment is focused on Angola, Mozambique, and more recently Liberia. Top destinations of Chinese investment in the region are South Africa, Nigeria, Zambia, Niger, Ethiopia, and the Democratic Republic of the Congo. While most of the emerging partners' investments are in mining, Chinese investment is also directed toward manufacturing, construction, finance, agriculture, and services and India has significant investment in Mauritius' manufacturing sector. The Chinese FDI profile is interesting, with packages that can involve large state-owned enterprises linking investment in natural resources with related infrastructure projects to adroitly avoid political interference and corruption– the so-called 'Angolan model'. This is not the complete picture though, as the IMF reports that the Export-Import Bank of China estimated that of the 800 Chinese companies operating in Africa in 2006, approximately 85% were privately owned and were small or medium-sized enterprises (SMEs).

Gelb (2010) warns of the problems associated with getting reliable data on Chinese FDI in South Africa, and decries much of the published literature on the subject as being of very limited value<sup>6</sup>. This data problem echoed by Grimm (2011), who likens obtaining accurate information on Chinese overseas development aid (ODA) to "putting together a jigsaw puzzle". While concentrating on Chinese ODA, Grimm expands on the very real issue of how Chinese ODA and FDI become blurred for a variety of reasons, and these problems are accentuated in Africa. Gelb outlines the problems associated with assessing FDI stock data of the respective two-way positions in both South Africa and China and explains how the

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<sup>6</sup> He specifically states that 'much of the information presented is erroneous, incomplete or outdated' (Gelb, 2010, page 2).

different reporting practices lead to much confusion on actual data. These problems include the use of survey data methodology used in South Africa that may be incomplete and in addition to giving the option of valuations at book value or market value, the use of approvals in China where these projects may or may not eventuate, and the general problem of FDI routed through a third country. His assessment is that South African data probably substantially underestimates the stock of Chinese FDI in South Africa but significantly overstates South African stocks in China. Conversely, he considers that Chinese data seems reasonable for Chinese stocks in South Africa but seriously underestimates South African FDI in China (Gelb, 2010).

Using the EDGE FDI Database, Gelb reports that “there are more than 4100 operations of foreign firms in South Africa, of which only 47 (just over one percent) are Chinese. In addition, 19 Chinese firms have entered South Africa but subsequently withdrawn while twelve firms have signalled their intention to enter but are yet to do so, making a total of 78 Chinese firms recorded. The database also records over 3500 operations of South African firms (including ‘émigrés’) in the rest of the world, of which a mere 32 are in China (also about one percent). Another seven South African firms entered China but later withdrew, and there are nine possible future entries, making a total of 48 firms”. For Chinese stocks in South Africa, the Industrial and Commercial Bank of China (ICBC) with its 20% holding in Standard Bank is the largest Chinese FDI holding, followed by six Chinese mining companies with their investments in mining and metal manufacturing. Conversely, only four “genuinely” South African companies had holdings in China: Bidvest, Sappi, Sasol and Naspers (Gelb, 2010).

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Chapter 9

**South Africa's Foreign Investment Position**

*Ron Sandrey*

The previous chapter introduces South Africa's Foreign Direct Investment (FDI) policies and positions over recent years. The objective for this chapter is to expand upon that analysis by extending to the three broad categories of FDI, Portfolio and 'Other' investment for both Assets (South African investment abroad) and Liabilities (investments in South Africa by other countries) and to give a more detailed analysis of the destination for Assets and sources of for Liabilities. An emphasis will be given to South Africa's African investment position and the BLNS (Botswana, Lesotho, Namibia and Swaziland) position in particular. All the data is sourced from the South African Reserve Bank (this will not be acknowledged in the individual tables), and all data is expressed in rand 100 million amounts<sup>1</sup> for the respective December years. The data is Stock data, derived from the Reserve Bank surveys. We will present both this **Stock data** and changes to the Stock data. We emphasise that these **changes to the Stocks are NOT Flows**, but merely changes to the annual Stock positions. **Flows** are the data for new monies coming into South Africa for Liabilities and leaving South Africa for Assets abroad. Any information given in this chapter relating to **changes to Stock data** will include these flows and also changes in Stocks from changes such as those from currency valuations, profit/loss amounts that may or may not be remitted and other factors.

In summary we find that most of the South African investments abroad (assets) are held in Europe with these investments followed by the America's. Other destinations and sources are much less significant. The total assets abroad are very evenly split between the three categories of direct investment, portfolio investment and 'other' investment. The most recent 2010 data for liabilities shows that portfolio investments are somewhat more significant than direct investments with 'other' investments a more distant third.

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<sup>1</sup> To convert the amount in the tables to the so-called US billion (one thousand million) divide this amount by ten. We have used 100 million throughout the paper for consistency.

## Section 1 – The Big Picture

Table 1 starts by giving the broad overall aggregate position for the December years 2008 through to and including 2012 for both Assets and Liabilities. The 'Change10/08' is the amount that the investment position has changes in 2012 from the 2008 position, while 'Change%10/08' is the relevant percentage change for that same period. The '%share2010' is the relevant shares of the total for 2010. Note that only three years has been sourced for this aggregate position, although a more historical position will be introduced for Africa later. The term 'IntOrg' is the investment position relating to International Organisations.

**Table 1: South African Investment Assets and Liabilities, Rand 100 million.**

<b>Assets</b>	<b>Total</b>	<b>Europe</b>	<b>America</b>	<b>Africa</b>	<b>Asia</b>	<b>IntOrg</b>	<b>MidEast</b>	<b>Oceania</b>
<b>2008 Totals</b>	17,138	9,837	4,312	1,414	489	642	218	226
<b>2009 Totals</b>	18,137	10,352	3,781	1,528	1,203	769	253	252
<b>2010 Totals</b>	20,358	12,172	4,058	1,622	1,173	779	285	269
<b>Change</b>	3,221	2,335	-253	208	684	136	68	43
<b>Change %</b>	15.8%	19.2%	-6.2%	12.9%	58.3%	17.5%	23.7%	16.0%
<b>% share 2010</b>	100%	59.8%	19.9%	8.0%	5.8%	3.8%	1.4%	1.3%
<b>Liabilities</b>	<b>Total</b>	<b>Europe</b>	<b>America</b>	<b>Asia</b>	<b>Africa</b>	<b>IntOrg</b>	<b>MidEast</b>	<b>Oceania</b>
<b>2008 Totals</b>	18,189	11,509	4,472	917	825	314	112	40
<b>2009 Totals</b>	20,899	13,354	5,402	1,010	707	257	135	35
<b>2010 Totals</b>	24,845	15,718	6,697	1,182	840	202	117	88
<b>Change 10/08</b>	6,656	4,209	2,226	265	16	-112	5	48
<b>Change 10/08%</b>	26.8%	26.8%	33.2%	22.5%	1.9%	-55.6%	3.9%	54.5%
<b>% share 2010</b>	100%	63.3%	27.0%	4.8%	3.4%	0.8%	0.5%	0.4%

The table highlights that:

South Africa has somewhat less of a call on funds held offshore (assets) than others have on their funds held in South Africa for each of the three years.

Based on 2010 data Europe is the main destination for assets (59.8%) and the main source for Liabilities (63.3%), with this followed by the Americas for both.

Both Africa and Asia are more important as an investment destination than an investment source, while IntOrg is the destination for a modest (3.8%) of South African foreign investments.

MidEast and Oceania hold 1.4 and 1.3% of the Assets respectively but are minor sources for the Liabilities.

Changes over the period show that Asia had the biggest increase in assets by percentage but Europe remained the largest increase by value. For liabilities or inbound Europe was again displayed the largest increase but in percentage terms Europe, Americas and Asia were very similar.

There are three categories of investment recorded by the Reserve Bank. These are:

Foreign **direct** investment (FDI) as defined by the net inflow of investment to acquire a lasting management interest (10% or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in a country's balance of payments.

FDI is distinct from **portfolio** investment, which is considered to be the purchase of stocks, bonds, and money market instruments by foreigners for the purpose of realizing a financial return, which does not result in foreign management, ownership, or legal control.

In general terms, any foreign investment that is not direct or portfolio investment is considered "**Other** investment" (loans, trade finance, currency & deposits and other assets with unaffiliated parties), and in contrast to FDI, both foreign portfolio and "other investments" have no controlling interest in their investment.

In Table 2 these three categories are shown by region for **Assets** for the years 2008 – 2010 by total and then 2010 by **(a)** % share held by each region **in** the three categories in **2010** and then in the lower part of the table **(b)** % share held by each region **of** the three categories in **2010**.

**Table 2: South African Foreign Investment Abroad (Assets) by Region & Category**

	Total	Europe	America	Africa	Asia	IntOrg	MidEast	Oceania
<b>Assets R100 mill</b>								
2008 Direct	4,648	2,537	341	1,022	335	1	200	214
2008 Portfolio	6,018	4,242	1,640	103	20	1	9	4
2008 Other	6,471	3,059	2,331	289	134	640	9	8
<b>2008 Total</b>	<b>17,138</b>	<b>9,837</b>	<b>4,312</b>	<b>1,414</b>	<b>489</b>	<b>642</b>	<b>218</b>	<b>226</b>
2009 Direct	5,357	2,228	462	1,157	1,057	1	230	221
2009 Portfolio	7,126	5,380	1,593	88	36	8	12	9
2009 Other	5,655	2,744	1,727	283	110	759	10	22
<b>2009 Total</b>	<b>18,137</b>	<b>10,352</b>	<b>3,781</b>	<b>1,528</b>	<b>1,203</b>	<b>769</b>	<b>253</b>	<b>252</b>
2010 Direct	5,932	2,834	431	1,218	971	1	245	232
2010 Portfolio	8,696	6,737	1,768	92	45	11	28	15
2010 Other	5,730	2,602	1,859	313	156	766	12	22
<b>2010 Total</b>	<b>20,358</b>	<b>12,172</b>	<b>4,058</b>	<b>1,622</b>	<b>1,173</b>	<b>779</b>	<b>285</b>	<b>269</b>
<b>Assets - (a) % share held by each region in the three categories in 2010</b>								
Direct	29%	23%	11%	75%	83%	0%	86%	86%
Portfolio	43%	55%	44%	6%	4%	1%	10%	6%
Other	28%	21%	46%	19%	13%	98%	4%	8%
2010 Total	100%	100%	100%	100%	100%	100%	100%	100%
<b>Assets - (b) % share held by each region of the three categories in 2010</b>								
Direct	100%	48%	7%	21%	16%	0%	4%	4%
Portfolio	100%	77%	20%	1%	1%	0%	0%	0%
Other	100%	45%	32%	5%	3%	13%	0%	0%
2010 Total	100%	60%	20%	8%	6%	4%	1%	1%

In 2010 most of the total South African assets (43%) were held in portfolio assets abroad, followed almost equally by direct and other. In 2008 however there was more held in other were held in portfolio. By region most of the 2010 portfolio is held in Europe (77%) while in Africa, Asia, the Middle East and Oceania it is predominantly direct. Investment held in International Organisations are almost exclusively 'other'.

The comparable picture for Liabilities (investments held in South Africa by others) is shown in Table 3 for 2008 – 2010 and by % shares for 2010 as in Table 2. Overall there is more held in portfolio than direct for each year. European and Asian money is held more in direct (54% and 69% respectively), while the American money (85%) is concentrated in portfolio investments. The International Organisation money is almost exclusively 'other' again, and 'other' also is the main African investment.

**Table 3: Foreign Investment in South Africa (Liabilities) by Region & Category**

Liabilities R 100 mill	Total	Europe	America	Africa	Asia	IntOrg	MidEast	Oceania
2008 Direct	6,326	4,922	652	52	619	1	64	16
2008 Portfolio	7,971	4,149	3,406	267	139	0	3	7
2008 Other	3,891	2,439	414	505	159	312	46	17
<b>2008 Total</b>	<b>18,189</b>	<b>11,509</b>	<b>4,472</b>	<b>825</b>	<b>917</b>	<b>314</b>	<b>112</b>	<b>40</b>
2009 Direct	8,667	6,973	801	59	721	2	95	16
2009 Portfolio	9,337	4,551	4,353	278	140	1	5	8
2009 Other	2,895	1,830	248	370	148	255	35	10
<b>2009 Total</b>	<b>20,899</b>	<b>13,354</b>	<b>5,402</b>	<b>707</b>	<b>1,010</b>	<b>257</b>	<b>135</b>	<b>35</b>
2010 Direct	10,155	8,499	735	66	810	2	28	15
2010 Portfolio	11,923	5,621	5,691	306	197	1	43	63
2010 Other	2,767	1,598	271	468	175	199	45	10
<b>2010 Total</b>	<b>24,845</b>	<b>15,718</b>	<b>6,697</b>	<b>840</b>	<b>1,182</b>	<b>202</b>	<b>117</b>	<b>88</b>
<b>Liabilities - % share held by each region in the three categories in 2010</b>								
Direct	41%	54%	11%	8%	69%	1%	24%	17%
Portfolio	48%	36%	85%	36%	17%	0%	37%	72%
Other	11%	10%	4%	56%	15%	99%	39%	11%
2010 Total	100%	100%	100%	100%	100%	100%	100%	100%
<b>Liabilities - % share held by each region of the three categories in 2010</b>								
Direct	100%	84%	7%	1%	8%	0%	0%	0%
Portfolio	100%	47%	48%	3%	2%	0%	0%	1%
Other	100%	58%	10%	17%	6%	7%	2%	0%
2010 Total	100%	63%	27%	3%	5%	1%	0%	0%

The investment positions for the seven main individual countries for assets and liabilities over the 2008 – 2010 periods are shown in Table 4. The UK and the US are the two main destinations and sources, while Luxemburg and China are three and four for assets. Also note that Mauritius is a popular destination for South African funds, and more will be shown on these investments later. Assets in the US have declined over the period (recall that currency fluctuations may play a part in this) while those in both China and Bermuda have increased sharply. The Netherlands is the third main caller on foreign investments (liabilities) in South Africa as these investments increased by some 77.8% over the period. Not shown is that for liabilities China ranked at number 9 in 2010.

**Table 4: Investment positions for the seven main countries in both Assets & Liabilities**

<b>Assets</b>	<b>Total</b>	<b>UK</b>	<b>USA</b>	<b>Lux</b>	<b>China</b>	<b>Berm</b>	<b>IntOrg</b>	<b>Maur</b>
2008	17,138	6,266	3,744	996	312	426	628	468
2009	18,137	6,924	2,827	1,115	1,035	800	758	536
2010	20,358	8,213	2,995	1,513	959	866	762	586
Change	3,221	1,947	-749	517	646	440	134	117
Change %	15.8%	23.7%	-25.0%	34.2%	67.4%	50.8%	17.5%	20.0%
<b>Liabilities</b>	<b>Total</b>	<b>UK</b>	<b>USA</b>	<b>Neth</b>	<b>German</b>	<b>Swiss</b>	<b>Belgium</b>	<b>Lux</b>
2008	18,189	7,148	4,248	406	914	686	433	383
2009	20,899	8,494	5,129	966	884	701	397	446
2010	24,845	9,279	6,569	1,829	904	854	740	695
Change 10/08	6,656	2,131	2,321	1,424	-10	168	307	313
Change 10/08%	26.8%	23.0%	35.3%	77.8%	-1.1%	19.7%	41.5%	45.0%

Where Lux is Luxemburg, Berm is Bermuda, Maur is Mauritius and Neth is Netherlands.

## Section 2: the African Picture

This is the main section of the chapter and here we will examine the South African investment position with fellow African countries. We will start close to home with firstly the SACU (BLNS) countries, than the remainder of SADC and then the remaining important African countries. In keeping with the order to date we will start with Assets and then examine Liabilities. For this section we are able to give a longer time-frame as we have data from the Reserve Bank for 2001 to 2010 inclusive, and by the three categories as above. To avoid data overload we shall walk through the garden smelling the roses at key points.

### 2.1 Assets

The big picture for South African assets in the BLNS countries of SACU is shown in Table 5. The second column shows the total assets held in Africa, and referring back to Table 1 we see that in 2010 these assets were some eight percent of the overall total held by South Africa. The right hand column below shows that only 9.1% of these African holdings were based in SACU during 2010, meaning that less than one percent of the African total is in SACU according to the official data. The main SACU destination is Namibia, followed by Botswana, Swaziland and then Lesotho. Over the period SACU's share of African investments from South Africa has steadily declined from the 2001 figure of 29.0%, and in total has only increase by 82% in nominal terms over that period. While we have not analysed the impacts of the changes to the rand values over this period, we note that aside from Botswana the SACU countries are in a Monetary Union which means that the changes to the rand are effectively nullified here, but not in all other destinations globally.



**Table 5: South African Assets held in SACU, R 100 million, 2001 to 2010**

Assets						SACU	SACU
Year	Tot Afri	Namibia	Bots	Swazi	Lesotho	Total	% Africa
2001	281	41.8	14.0	6.8	19.0	82	29.0%
2002	291	34.3	13.5	6.2	9.8	64	21.9%
2003	323	49.9	15.0	13.7	11.6	90	27.9%
2004	367	38.5	14.4	13.0	10.6	76	20.8%
2005	368	43.1	14.7	10.8	9.9	78	21.3%
2006	800	38.5	22.7	23.4	14.7	99	12.4%
2007	1,172	40.3	44.2	27.2	13.5	125	10.7%
2008	1,414	60.8	38.0	18.6	6.5	124	8.8%
2009	1,528	41.4	37.5	22.9	30.9	133	8.7%
2010	1,622	62.5	40.0	32.1	13.7	148	9.1%
Change	1,341	20.7	26.1	25.4	-5.3	67	5.0%
Change %	477%	50%	186%	375%	-28%	82%	

The investment categories for these investments in the BLNS countries and total Africa are shown in Table 6 for the years 2001, 2005 and 2010. For Africa in total the emphasis is heavily on direct investments in 2010, and that has changed since 2001 when direct was only slightly above 'other'. For Namibia the emphasis has changed from dominantly direct in 2001 to a more balanced portfolio in 2010, while for both Botswana and Swaziland the emphasis has changed from 'other' in 2001 to direct in 2010. Lesotho's emphasis has been on 'other' over the period and total investments have declined there since 2001.

Table 6: South African Assets held in SACU by Category, R 100 million, 2001, 2005 &amp; 2010

R 100 Million	Africa Tot	Namibia	Botswana	Swaziland	Lesotho
<b>2001 Assets</b>					
Direct investment	150	29	3	1	3
Portfolio investment	11	1	2	0	0
Other investment	120	12	9	6	16
<b>2001 Totals</b>	<b>281</b>	<b>42</b>	<b>14</b>	<b>7</b>	<b>19</b>
<b>2005 Assets</b>					
Direct investment	191	8	6	4	2
Portfolio investment	9	2	2	0	
Other investment	168	32	7	6	8
<b>2005 Totals</b>	<b>368</b>	<b>43</b>	<b>15</b>	<b>11</b>	<b>10</b>
<b>2010 Assets</b>					
Direct investment	1,218	13	29	27	4
Portfolio investment	92	20	4	0	
Other investment	313	29	8	5	10
<b>2010 Totals</b>	<b>1,622</b>	<b>63</b>	<b>40</b>	<b>32</b>	<b>14</b>
<b>Change 10/01 %</b>					
Direct investment	714%	-54%	831%	large	63%
Portfolio investment	712%	large	83%	large	-100%
Other investment	160%	138%	-14%	-12%	-42%
<b>Total</b>	<b>477%</b>	<b>50%</b>	<b>186%</b>	<b>375%</b>	<b>-28%</b>

We now examine the comparable position for South African assets held in non-SACU SADC countries, with this shown in Table 7. The majority is held in direct investments in Mauritius, with this followed by direct investments in Mozambique. Investments in the remaining non-SACU SADC destinations are similarly mainly direct investments. Following that, we show the position for South African assets held in the remaining African countries.

**Table 7: South African Assets held in rest SADC by Category, R 100 mil, 2001, 2005 & 2010**

	Maur	Mozam	Zim	DRC	Zambia	Tanz	Malawi	Angola	Madag	Sub total
<b>2001 Assets</b>										
Direct	55	41	6		1	5	0	0		109
Portfolio	2	-	3					1		6
Other	6	8	6	18	13	0	2	2	0	56
2001 Totals	63	49	14	18	14	6	2	3	0	170
<b>2005 Assets</b>										
Direct	34	46	7		6	6	8	1		108
Portfolio	2		0					1		3
Other	15	21	8	0	12	3	8	2	0	68
2005 Totals	52	66	15	0	18	9	16	4	0	180
<b>2010 Assets</b>										
Direct	534	77	57	41	14	22	18	15	0	777
Portfolio	20	1	5	6	1		1	0	0	35
Other	32	24	9	9	36	8	9	10	0	137
2010 Totals	586	101	71	57	51	30	27	25	1	949

**Table 8: South African Assets held in 'rest of Africa' by Category, R 100 mil, 2001, 2005 & 2010**

	Nigeria	Oth Africa	Ghana	Uganda	Kenya	Seych
<b>2001 Assets</b>						
Direct	0	1	0	2	2	0
Portfolio	0	3				
Other	1	10	4	2	1	2
2001 Totals	1	14	4	4	3	2
<b>2005 Assets</b>						
Direct	50	7	0	5		0
Portfolio	0	1			0	
Other	2	36	4	0	1	2
2005 Totals	52	44	4	5	1	2
<b>2010 Assets</b>						
Direct	240	31	57	27	13	0
Portfolio	11	17	1	0	3	
Other	5	105	6	4	3	1
2010 Total	257	152	65	31	19	1

## 2.2 Liabilities

Again for liabilities we start with the BLNS countries of SACU and total Africa. This data is shown in Table 9, and here note that a very high percentage of the investments from Namibia are held in portfolio investments South Africa. For Lesotho, Botswana and Swaziland it is generally focussed much more into 'other'.

**Table 9: South African Liabilities held by SACU by Category, R 100 million, 2001, 2005 & 2010**

R 100 millions	Tot Africa	Namibia	Lesotho	Botswana	Swaziland
<b>2001 Liabilities</b>					
<b>Direct</b>	50	0	1	8	5
<b>Portfolio</b>	120	115	0	0	1
<b>Other</b>	114	23	9	7	17
2001 Totals	285	139	10	16	23
<b>2005 Liabilities</b>					
<b>Direct</b>	40	0	1	2	1
<b>Portfolio</b>	314	299	2	0	2
<b>Other</b>	242	26	28	23	10
2005 Totals	596	326	31	25	13
<b>2010 Liabilities</b>					
<b>Direct</b>	65	3	1	5	2
<b>Portfolio</b>	306	261	6	1	2
<b>Other</b>	468	47	30	31	29
2010 Totals	839	311	37	37	33

The comparable data for the rest of SADC is shown in Table 10 and that for the significant investments from the 'rest of Africa' in Table 11. Excepting for Zimbabwe where their investments are predominantly direct these investments from the rest of SADC are almost exclusively 'other'. The predominance of 'other' from the rest of Africa is also shown excepting those investments from Ghana in 2010 which are mostly held in portfolio investments.

**Table 10: South African Liabilities held by rest SADC by Category, R 100 mil, 2001, 2005 & 2010**

R 100 millions	Maurit	Zimbabwe	Mozam	Malawi	Angola	Zambia	DRC	Madagas
<b>2001 Liabilities</b>								
<b>Direct</b>	15.3	20.9	0.1	0.1	0.0	0.3	0.0	0.0
<b>Portfolio</b>	1.8	0.7	0.1	0.1	0.3	0.0	0.1	0.0
<b>Other</b>	7.7	7.1	1.6	4.0	7.9	1.8	2.7	0.0
2001 Totals	24.7	28.7	1.7	4.2	8.3	2.1	2.8	0.0
<b>2005 Liabilities</b>								
<b>Direct</b>	12.7	21.4	0.6	0.2	0.1	0.4	0.0	0.0
<b>Portfolio</b>	9.4	0.5	0.1	0.0	0.1	0.2	0.0	0.0
<b>Other</b>	14.8	9.3	8.6	10.8	9.8	4.1	1.3	0.0
2005 Totals	36.8	31.2	9.3	11.0	10.0	4.6	1.3	0.0
<b>2010 Liabilities</b>								
<b>Direct</b>	22.5	21.4	3.4	0.5	0.5	0.8	0.1	0.0
<b>Portfolio</b>	2.4	0.7	0.7	0.1	0.6	2.9	0.1	0.0
<b>Other</b>	31.0	9.7	14.5	15.9	13.2	6.0	4.6	0.1
2010 Totals	55.9	31.7	18.6	16.4	14.3	9.7	4.8	0.1

**Table 11: South African Liabilities held by rest Africa by Category, R 100 mil, 2001, 2005 & 2010**

R 100 millions	Other	Ghana	Kenya	Nigeria	Tanzania
<b>2001 Liabilities</b>					
Direct	0.1	0.0	0.0	0.0	0.0
Portfolio	0.1	0.0	0.1	0.1	0.0
Other	22.1	0.2	0.7	0.9	0.0
2001 Totals	22.2	0.2	0.8	1.0	0.0
<b>2005 Liabilities</b>					
Direct	0.3	0.0	0.0	0.1	0.0
Portfolio	0.1	0.0	0.0	0.0	0.0
Other	78.5	0.2	12.0	1.7	3.7
2005 Totals	78.9	0.2	12.0	1.8	3.8
<b>2010 Liabilities</b>					
Direct	3.1	0.2	0.4	0.6	0.0
Portfolio	7.4	21.6	0.3	0.3	0.0
Other	214.0	0.6	9.4	6.1	5.7
2010 Totals	224.5	22.5	10.1	6.9	5.8

### Section 3: Details on Investment Holdings

In this final section we are able to provide more information on these investments by both Assets and Liabilities in the three categories of direct, portfolio and other. This data refers to which sector in South Africa it is invested in. For example, portfolio investment for banks will refer to portfolio investment in South African banks. It is not classified according to the source of the investment. Table 12 starts by looking at the SACU position, with again the data in R 100 million and for the 2010 years only. In the top data row direct investment totals are shown, with the three rows beneath that showing the amounts associated with Public Corporations, Banks and Private Sector. Most of the South African total direct investment held in 'total African' and virtually all of the BLNS direct investment is associated with the private sector, although there is some (R35.2 hundred million) associated with public corporations. For direct investment liabilities (money held in South Africa with some controlling influence) it is exclusively private sector. On the other hand, for both assets and liabilities, Monetary Authorities, Public corporations, Banks and the Private sector are all involved to some degree. Note, for example, that for Namibia the private sector is heavily involved with portfolio investments in South Africa that are associated with both public authorities and banks, although the majority is private sector.



**Table 12: Details on Assets and Liability Investment for BLNS, R 100 million at 2010**

	Total Africa	Botswana	Lesotho	Swaziland	Namibia
<b>Assets</b>					
Direct investment	1,217.6	28.7	4.2	26.9	13.4
Public corporations	35.2				
Banks	0.4		0.2	0.2	
Private sector	1,182.1	28.7	4.0	26.7	13.4
Portfolio investment	91.6	3.7		0.3	20.2
Banks	36.7	0.7			20.0
Private sector	54.9	3.0		0.3	0.1
Other investment	312.9	7.7	9.6	4.9	29.0
Monetary authority	0.7				
Public corporations	62.7	0.5	6.7	1.6	4.1
Banks	152.9	2.5	2.5	1.5	8.8
Private sector	96.5	4.8	0.4	1.8	16.1
<b>Liabilities</b>					
Direct investment	64.6	4.7	1.0	2.3	3.3
Private sector	64.6	4.7	1.0	2.3	3.3
Portfolio investment	306.4	0.9	5.7	1.7	261.2
Public authorities	41.1	0.0	2.7		38.3
Public corporations	9.0				8.9
Banks	73.9	0.6	1.4	1.7	60.9
Private sector	182.5	0.2	1.5		153.1
Other investment	468.0	31.0	30.1	29.0	47.0
Monetary authority	40.0	14.9	10.6		
Public corporations	95.6				
Banks	276.7	12.7	18.6	25.8	44.3
Private sector	55.7	3.4	1.0	3.1	2.7

The similar position for 2010 investments relating to the rest of SADC is shown in Table 13. Here the patterns are more diversified although often the private sector is dominant.

**Table 13: Details on Assets and Liability Investment for SADC, R 100 million at 2010**

	Angola	Madag	Malawi	Maurit	Mozam	Zimbabwe	Tanzania	DRC	Zambia
<b>Assets</b>									
Direct investment	14.7	-0.1	17.7	533.9	76.8	56.8	22.2	41.2	14.0
Public corporations				4.4	27.6				
Banks									
Private sect	14.7	-0.1	17.7	529.5	49.2	56.8	22.2	41.2	14.0
Portfolio invest	0.3	0.2	0.7	20.1	0.8	4.9		6.3	1.2
Banks					0.8	0.6			0.7
Private sect	0.3	0.2	0.7	20.1	0.0	4.3		6.3	0.5
Other investment	9.7	0.4	9.0	31.8	23.9	9.2	7.9	9.4	35.9
Monetary authority						0.7			
Public corp	1.4	0.0	1.6	1.1	9.2	0.8	4.5	0.5	18.0
Banks	3.8	0.3	1.7	22.5	10.5	5.4	1.3	6.6	10.6
Private sect	4.5	0.1	5.7	8.2	4.1	2.3	2.1	2.4	7.3
<b>Liabilities</b>									
Direct investment	0.5		0.5	22.5	3.4	21.4		0.1	0.8
Private sect	0.5		0.5	22.5	3.4	21.4		0.1	0.8
Portfolio invest	0.6		0.1	2.4	0.7	0.7		0.1	2.9
Public authorities								0.0	0.0
Public corporations									
Banks	0.6		0.1	0.6	0.7	0.5		0.1	0.2
Private sector				1.9		0.2		0.0	2.7
Other investment	13.2	0.1	15.9	31.0	14.5	9.7	5.7	4.6	6.0
Monet auth	2.8	0.0	10.6	0.0	0.0	1.2			
Public corporations									
Banks	9.7	0.1	1.2	8.7	10.3	7.3	1.3	4.0	2.6
Private sect	0.7	0.1	4.1	22.3	4.2	1.2	4.4	0.6	3.5

**Table 14: Details on Assets and Liability Investment for rest Africa, R 100 million at 2010**

	Nigeria	Ghana	Other	Uganda	Kenya	Liberia	Comores	Seychel
<b>Assets</b>								
Direct investment	239.9	56.7	31.2	26.7	12.8	0.1		
Public corporations	3.2							
Banks								
Private sector	236.7	56.7	31.2	26.7	12.8	0.1		
Portfolio investment	11.3	1.5	16.6	0.4	3.3			
Banks	0.0	1.5	12.3	0.1	0.1			
Private sector	11.3		4.3	0.3	3.2			
Other investment	5.5	6.4	104.5	3.8	3.3			1.0
Monetary authority								
Public corporations			12.8					
Banks	4.1	5.1	60.0	3.4	2.1			0.3
Private sector	1.4	1.3	31.7	0.4	1.2			0.7
<b>Liabilities</b>								
Direct investment	0.6	0.2	2.0	0.2	0.4		0.9	
Private sector	0.6	0.2	2.0	0.2	0.4		0.9	
Portfolio investment	0.3	21.6	7.4		0.3			
Public authorities			0.1					
Public corporations								
Banks	0.3		6.0		0.3			
Private sector		21.6	1.3		0.0			
Other investment	6.1	0.6	212.9	0.7	9.4	0.2		0.1
Monetary authority	0.0							
Public corporations			90.7		4.9			
Banks	4.7	0.2	120.3	0.7	4.3			
Private sector	1.4	0.4	1.9	0.1	0.3	0.2		0.1

The investment patterns for the world as shown in Table 15 are a more complex picture, although most, but certainly not all, of the capital is associated with the private sector. Assets held abroad with Monetary Authorities in Europe, America and International Organisations are significant, as are the liabilities associated with South African banks.

Table 15: Details on Assets and Liability Investment for World, R 100 million at 2010

	Europe	America	Africa	Oceania	MidEast	Asia	IntOrg	Total
<b>2010 Assets</b>								
<b>Direct tot</b>	2,834	431	1,218	232	245	971	1	5,932
Public corporations	0	0	35	0	0	5	0	40
Banks	0	0	0	0	0	2	0	3
Private sector	2,833	431	1,182	232	245	964	1	5,889
<b>Portfolio tot</b>	6,737	1,768	92	15	28	45	11	8,696
Banks	159	98	37	4	0	12	0	309
Private sector	6,578	1,670	55	11	28	33	11	8,387
<b>Other tot</b>	2,602	1,859	313	22	12	156	766	5,730
Monetary authority	793	1,554	1	0	0	0	751	3,098
Public corporations	14	16	63	0	0	0	0	93
Banks	1,589	182	153	14	7	117	14	2,076
Private sector	167	108	97	7	5	39	1	424
<b>Liabilities 2010</b>								
<b>Direct tot</b>	8,499	735	66	15	28	810	2	10,155
Banks	624	69	0	0	0	382	0	1,075
Private sector	7,875	666	66	15	28	428	2	9,080
<b>Portfolio tot</b>	5,621	5,691	306	63	43	197	1	11,923
Public authorities	1,180	868	41	0	0	51	0	2,141
Public corporations	140	33	9	0	0	1	0	183
Banks	504	519	74	0	3	17	1	1,118
Private sector	3,796	4,271	183	63	40	127	0	8,480
<b>Other tot</b>	1,598	271	468	10	45	175	199	2,767
Monetary authority	0	0	40	0	0	0	191	231
Public authorities	188	0	0	0	0	1	1	190
Public corporations	207	13	96	0	0	34	0	350
Banks	956	82	277	3	40	46	7	1,411
Private sector	246	176	56	7	5	94	1	585

Much has been made of the investments made between China in South Africa, and to put this in perspective we have isolated out the so-called BRIC countries of Brazil, Russia, India

and China in Table 16. Referring back to Table 4 we can see that China was the fourth most significant destination for South African assets held abroad, and Table 16 shows that most of these assets are direct investments associated with banks. A very similar position is found for Chinese investments in South Africa, where the majority are direct investments associated with banks. South African investments in Brazil are predominantly portfolio investments associated with banks, while in India they are more associated with 'other' and banks. For BRIC investment in South Africa China is the main player and again it is direct investment in banks.

**Table 16: Details on Assets and Liability Investment for BRICs, R 100 million at 2010**

	Brazil	Russia	India	China
<b>2010 Assets</b>				
<b>Direct tot</b>	6.0	4.5	10.6	928.1
Public corporations			5.0	
Private sector	6.0	4.5	5.6	928.1
<b>Portfolio tot</b>	66.5	0.6	8.6	11.7
Banks	64.2		3.3	8.4
Private sector	2.3	0.6	5.3	3.2
<b>Other tot</b>	13.2	0.9	20.5	18.9
Banks	12.1	0.9	12.0	11.4
Private sector	1.1		8.5	7.4
<b>Liabilities 2010</b>				
<b>Direct tot</b>	3.8	70.6	25.1	372.5
Banks			8.1	359.2
Private sector	3.8	70.6	17.0	13.3
<b>Portfolio tot</b>			0.3	17.4
Banks			0.3	0.6
Private sector			0.0	16.8
<b>Other tot</b>	5.8	0.2	9.5	66.3
Banks	0.1	0.1	3.9	24.4
Private sector	5.7	0.1	5.6	41.9

Table 17 shows the comparable profile for both assets and liabilities relating to the main European players. For assets abroad the private sector is the main focus for both direct and portfolio investments, while with 'other' banks in the UK feature. This pattern is repeated for European investments in South Africa, although note that for portfolio investments from Luxemburg there is a significant sum associated with Public Corporations.

**Table 17: Details on Assets and Liability Investment for Europe, R 100 million at 2010**

	UK	Neth	Germ	Swiss	Luxem	Frnce	Italy	Spain	Belg
<b>2010 Assets</b>									
<b>Direct tot</b>	991	173	64	80	1,029	9	6	12	105
Public corporations	0	0	0	0	0	0	0	0	0
Private sector	991	173	64	80	1,029	9	6	12	105
<b>Portfol tot</b>	5,640	12	23	37	444	18	2	1	1
Banks	138	0	3	0	1	0	0	0	0
Private sector	5,501	12	20	37	443	18	2	1	1
<b>Other tot</b>	1,583	76	124	24	39	100	7	7	30
Monetary authority	296	0	0	0	0	0	0	0	0
Public corporations	14	0	0	0	0	0	0	0	0
Banks	1,232	40	116	12	0	96	3	7	29
Private sector	40	36	8	13	39	5	4	1	1
<b>Liabilities 2010</b>									
<b>Direct tot</b>	5,043	1,779	609	461	158	95	63	42	40
Banks	572	3	14	2	1	16	0	0	0
Private sector	4,471	1,776	595	460	158	78	63	42	40
<b>Portfol tot</b>	3,222	24	54	361	440	234	25	0	634
Public authorities	179	0	8	73	168	8	0	0	561
Public corporations	34	3	14	12	6	14	5	0	1
Banks	322	4	8	22	26	14	5	0	1
Private sector	2,688	17	26	254	240	198	15	0	71
<b>Other tot</b>	1,014	26	241	32	97	59	7	6	66
Public authorities	125	0	57	0	0	7	0	0	0
Public corporations	58	0	82	0	33	21	0	0	1
Banks	747	5	45	16	51	15	1	4	58
Private sector	84	21	58	16	13	16	6	3	7

Data shown for the remaining key players is shown in Table 18 to complete the picture. For Malaysia, Bermuda and the UAE investments are exclusively associated with the private sector, while for Japan the pattern is more mixed with large 'other' assets held by South Africa in Japan that are associated with both Public Authorities and banks. The South African investments in the US are generally private sector but there is significant holding there in Monetary Authorities, while for US investments in South Africa banks feature heavily.

**Table 18: Details on Assets and Liability Investment for others, R 100 million at 2010**

	Total	USA	Japan	Malaysia	Bermuda	UAE
<b>2010 Assets</b>						
<b>Direct tot</b>	5,932	287	19	1	60	234
Public corporations	40	0	0	0	0	0
Private sector	5,889	287	19	1	60	234
<b>Portf tot</b>	8,696	885	16	0	807	0
Banks	309	33	0	0	0	0
Private sector	8,387	853	16	0	807	0
<b>Other tot</b>	5,730	1,823	14	2	0	1
Monetary authority	3,098	1,554	0	0	0	0
Public corporations	93	16	0	0	0	0
Banks	2,076	158	3	0	0	0
Private sector	424	96	11	2	0	1
<b>Liabilities 2010</b>						
<b>Direct tot</b>	10,155	627	193	172	74	33
Banks	1,075	69	0	0	0	0
Private sector	9,080	559	193	172	74	33
<b>Portf tot</b>	11,923	5,687	120	0	0	40
Public authorities	2,141	868	49	0	0	0
Public corporations	183	33	1	0	0	0
Banks	1,118	519	11	0	0	0
Private sector	8,480	4,267	58	0	0	40
<b>Other tot</b>	2,767	255	55	1	1	2
Monetary authority	231	0	0	0	0	0
Public authorities	190	0	1	0	0	0
Public corporations	350	13	34	0	0	0
Banks	1,411	78	5	0	0	1
Private sector	585	164	15	1	1	1

Chapter 10

**South Africa's electricity subsidies and import dependence in Botswana**

*Roman Grynberg & Myriam Velia*

**1. Introduction**

A range of challenges confront policymakers in Botswana in the area of electricity distribution and production. Less than 50% of the population is connected to the grid (12% in rural areas), but particular sectors are heavily reliant on electricity; for instance, mining accounts for around 40% of total electricity consumption.<sup>1</sup> Electricity consumption has grown by at least 7% per year since 2000,<sup>2</sup> but between 70% and 80% of Botswana's electricity is imported, primarily from South Africa. Moreover, the share of electricity imported has grown over time.

With South Africa experiencing electricity shortages since 2007, electricity supply and economic activities have been severely disrupted. Producers in Botswana have had to rely on electricity from generators and diesel will be critical at least until 2012. By 2012, South Africa will not supply electricity to Botswana. The country thus needs to rapidly expand supply from alternative sources. Without any new investment in electricity supply, Botswana's electricity gap would increase from 33MW in 2008 to 546MW in 2013. Coal extraction for the expansion of coal-fired power generation is accelerating in the country to fill the gap (BPC, 2010).

This chapter considers the development of electricity generation capacity and the trade in electricity in Botswana and we illustrate how cross-border electricity supply and pricing decisions have severely negatively impacted on electricity sufficiency in the country. Botswana's current predicament is one in which it has had its major supplier of electricity,

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<sup>1</sup> The domestic sector accounts for only 26% of total national electricity consumption but its share increased rapidly from 15% at the end of 1990s (BPC, 2009).

<sup>2</sup> The figures vary across data sources: data from the *CIA World Factbook* (<https://www.cia.gov/library/publications/the-world-factbook/>, accessed 3 September 2010) suggest that consumption would have grown by 10.1% per year between 2000 and 2007; data from Macheke and Kelesitse (2008) suggests an annual growth of electricity sales of 8.8% between 2000 and 2004; electricity consumption data from the World Bank suggests a 7.1% annual increase.



Eskom, the main parastatal electricity supplier in the Republic of South Africa (RSA), terminate its supply contract. Consequently, the government of Botswana has had to find alternative supply sources to overcome what would otherwise be a very grave situation of electricity shortages. We argue that alternative supplies are to originate internally.

Botswana is well endowed with coal deposits by regional and international standards; these, officially assessed at 25-30 billion tonnes, may be as high as 212 billion tonnes. Next to South Africa, Botswana has southern Africa's largest coal deposits. The availability of abundant fossil fuels has made the situation in Botswana harder to comprehend. The situation is by no means unique to Botswana as electricity shortages exist in many fossil fuel rich developing countries. Normally these shortages are associated with post-conflict situations or with internal maladministration in the electricity generating utility. However, in the case of Botswana the shortages stem from past decisions on trade and regional integration. Developments in South Africa have to be understood in order to explain what is observed.

This study reflects on Botswana's strategy towards the development of its own huge coal resources and what should now be done around the substantial increases in electricity prices which the South African regulator, the National Energy Regulator of South Africa (NERSA), has allowed Eskom to implement over the next three years and the halt in supply by South Africa. We focus, in this study, on the issue of the price of electricity, not from the perspective of the consumers, but in terms of the role that electricity pricing and supply play in national economic development. The analysis is conducted, in turn, by analysing the factors, actors and motives behind the supply and pricing strategies in both Botswana and South Africa from a regional and trade perspective. The study draws attention, in Botswana's current situation, to the importance of South Africa's own development objectives as well as to the dominance of cost considerations although this was based on a narrow accounting approach advocated by the World Bank.

This chapter contains six main sections besides this introduction. Section 2 details the existing energy supply situation in Botswana by examining own sources as well as imports. Section 3 focuses on South Africa's policy in the electricity sector with a focus on supply and pricing. Attention then shifts, in Section 4, to the price of electricity exported by South Africa and examines dumping, subsidies, underpricing as well as additional electricity import

subventions that are associated with the Southern African Customs Union (SACU), the oldest customs union in the world which encompasses South Africa, Botswana, Namibia, Lesotho and Swaziland. Section 5, which looks at Botswana's belated electricity generation expansion as a response to South Africa's electricity crisis, is complemented by a discussion, in Section 6, of a cost of the electricity policy in the form of a loss of trade and investment policy space. Section 7, which looks at additional electricity sourcing alternatives within the southern African region, concludes the study from the perspective of electricity as an instrument of commerce and development.

## **2. The existing energy supply situation in Botswana**

This section focuses on presenting some basic elements of the electricity supply in Botswana. We present the energy potential in Botswana before setting out some aspects that pertain to Botswana's policy choice of electricity imports.

### **2.1 Botswana's sources of energy supply**

Botswana has two potentially substantial fossil fuel deposits from which to develop low-cost energy. As has been known for many years, Botswana has deposits of coal which have been used for electricity generation at Morupule in the Central District; the country also has large relatively recently discovered deposits of coal-bed methane (CBM), a natural gas. In volume terms, Botswana has amongst Africa's largest *in situ* deposits of coal. According to total estimates Botswana would have 212.8 billion tonnes of coal and the reserves in the important 'measured' and 'indicated' categories is 26.6 billion tonnes with the vast majority found at the Mmamabula site in south-east Botswana.<sup>3</sup> The volumes are potentially larger than even those available in South Africa, although much of the reserves are in the speculative and hypothetical categories. Yet, even with the lower measured and indicated reserve figures, there is sufficient coal for domestic production of electricity and export for many years to come.<sup>4</sup>

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<sup>3</sup> Although estimates of proven coal reserves in Botswana vary greatly across sources, reserves of coal in excess of 17 billion tones at minimum are proven and indicated; another 40 billion tonnes are inferred. South Africa has proven coal reserves of slightly over 54 billion tonnes (Geological Survey Department quoted in World Bank, 1984). Botswana has been aware of its substantial deposits on coal since at least the 1970s although it was then importing coal from RSA and Zimbabwe (World Bank, 1984).

<sup>4</sup> With low-cost coal competing with environmentally cleaner technologies, the coal deposits may have only a

In turn, although much of Botswana's coal is not of the same quality as that found in South Africa (a considerable portion of the Morupule deposits, for instance, is affected faulting and intrusions of dolerite), Botswana's coal, in spite of a low calorific value and a high ash and sulphur content, is still useful for generating electricity.

Besides coal, Botswana also has very substantial reserves of CBM (Botswana Department of Geological Survey, undated: 3). However, because CBM has technical properties that make it difficult and costly to develop, the existence of reserves does not guarantee the viability of any project.<sup>5</sup> Indeed, most projects employing CBM have not proven to be as successful as their original proponents envisaged. Nevertheless, there have been successful CBM projects in Australia and the US, which provide for local and domestic needs. In both cases government tax incentives and other subventions were part of the incentives necessary to assure viability. As drilling and technology improve, CBM deposits in Botswana may yet prove to be a very important source of energy.

In spite of substantial deposits of fossil fuels, Botswana has imported up to 80% of its electricity<sup>6</sup> from the RSA. Also, Botswana has been the most import dependent of the 12 countries of the Southern African Power Pool (SAPP) that defines the cooperation of key electricity utility companies in the Southern African Development Community (SADC) region for the purpose of a common electricity market.<sup>7</sup> Figure 1 illustrates this dependence on electricity imports for 2008.

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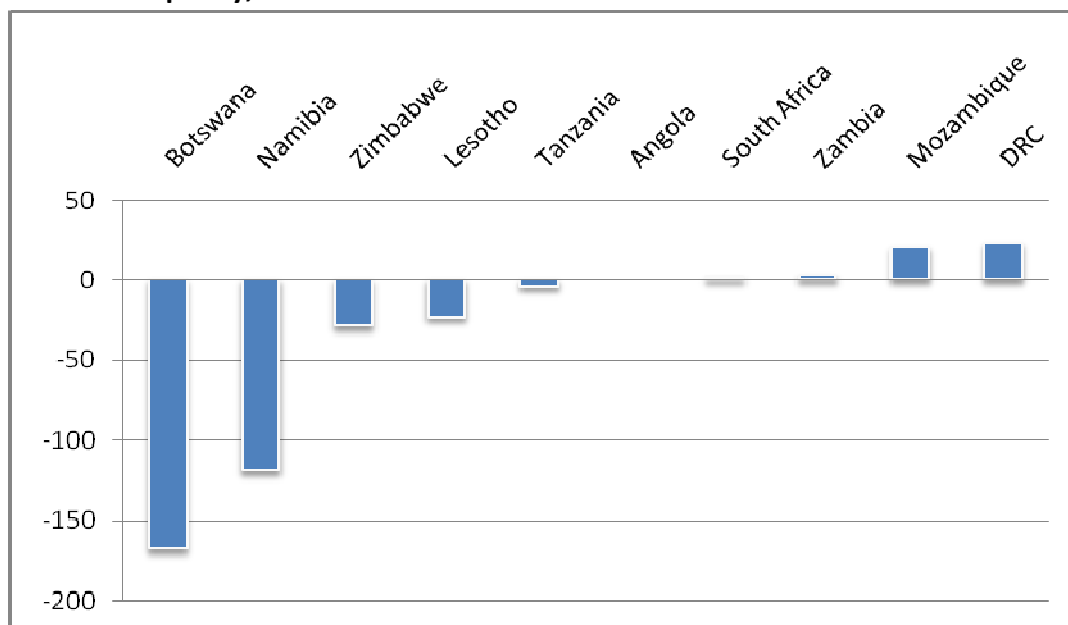
commercial value to Botswana for the next quarter century.

<sup>5</sup> Firstly, CBM deposits are frequently very widely dispersed and reserves require substantial drilling to extract, treat and store water normally found with the methane. Secondly, a perfect well is one that contains large deposits with very little water; and a large number of wells are normally needed in order to make a project viable. This, in turn, requires a large number of drilling companies and infrastructure.

<sup>6</sup> According to CIA *World Factbook* data, Botswana's electricity imports rose from 68% of consumption in 2000 to 82.4% in 2007; the shares of imports in total production increased from 197% in 2000 to 206% in 2007.

<sup>7</sup> The SAPP, founded in 1995, engages a subset of 12 SADC countries. SAPP's operating members (in Botswana, Mozambique, South Africa, Lesotho, Namibia, the Democratic Republic of Congo, Swaziland, Zambia and Zimbabwe) are those who have signed relevant SAPP government documents and which have utility companies that are internationally interconnected. However, over 80% of SAPP's capacity is with Eskom. It is now recognised that the contributions of SAPP and of other regional power pools in Africa have been relatively ineffective. (See for instance, Sebitosi and Okou, 2010, for a review of the issues and for comments on the role played by Eskom in the policy perceptions of the role to be played by South Africa in the SAPP.)

**Figure 1 Botswana's net imports (-) and exports (+) of electricity as a percentage of domestic capacity, 2008**



Note: Figures for Lesotho are based on 2007 SAPP estimates.

Sources: International Energy Agency (IEA) and SAPP databases

## 2.2 Botswana's policy choice: the shift to imports

The known reserves of coal in Botswana mean that the dependence on imports of electricity is a policy choice. Moreover, being a country that ran an almost continual fiscal surplus until the current economic crisis by virtue of its diamond resources, Botswana could have borrowed from international financial institutions or even from the private market to expand its electricity-generating capacity in the 1990s. Of note is the fact that, with the exception of the water-rich countries, all of South Africa's near neighbours have become import dependent, i.e. largely dependent upon Eskom supplies, but Botswana, the richest in coal, has become the most import dependent. We will set out below some basic elements associated with Botswana's choice from a historical and policy perspective.

Throughout the early post-independence history of Botswana the government at the highest levels was opposed to the notion that the country should become dependent upon South Africa for its electricity supply. During apartheid the sovereign risk of such dependence on an often hostile neighbour was fairly obvious. Former President QuettMasire (2006: 172-173) writing of the Selebi-Phikwe mine commented:

We were being pressed by the World Bank and the project's partners to purchase power from the South African governments' utility Eskom ... we saw the Sashe project as an opportunity both to mine our coal resources at Morupule and to develop BPC [Botswana Power Corporation] .... What was more important, we did not want to put ourselves further at risk with the apartheid government in South Africa. They withheld rail cars for our beef when we did something that displeased them, such as receiving high profile political refugees. What would happen if they decided to shut off the electricity to the mine and smelter at Selebi-Pikwe, or to the capital Gaborone?

As for the World Bank, consistently in favour of a policy of economic integration, it followed the commercial logic that electricity is an input that should be purchased and sold on immediately commercial terms. This particular position which was unaltered over the last four decades applied not only to Botswana but also to other countries in the region. This argument remained valid as South Africa was persistently a low-cost electricity supplier (domestically and regionally) until the late 2000s as will be illustrated in Sections 3 and 4 of the chapter.

Given the current situation, there is an irony to the approach taken by the government: while the apartheid regime proved to be remarkably reliable as a source of electricity supply, President Masire's fear materialised when South Africa cut off the electricity to Gaborone post-2008. Eventually, it was the manner in which the World Bank considered electricity production and costs and changes that emerged following South Africa's democratic transition in a context of growing electricity consumption within Botswana that led to a change. With the World Bank consistently but subtly supporting using the lowest cost electricity, government came to effectively support imports. Indeed, because of a cost argument, most publicly available World Bank reports have pushed the government to import electricity rather than to generate capacity domestically using higher cost domestic resources.<sup>8</sup>

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<sup>8</sup> For instance, World Bank (1975: 3) reports: 'Government plans for extension of electricity services are being reviewed in the wider context of a comprehensive energy policy .... This policy will be directed to converting most of the country's power equipment from diesel to stem generation so as to utilize the large available coal reserve. It should take into consideration the costs of producing domestically as an alternative to importing it from neighboring countries'. Also, the World Bank advised in 1984 against the full the expansion of the Morupule electric generating capacity arguing: 'A third 33 MW unit may not be required ... since the high

Throughout the apartheid period electricity was supplied by South Africa to Botswana but the government resisted the pressure to increase those imports substantially and kept a cap of 30% on imported electricity. Prior to the shift to dependence on imports from RSA, Botswana predominantly relied on electricity generated by BPC at Morupule (132MW) and at Selebi-Phikwe (80MW) although a further 75MW was available through South Africa. Since in the mid-1990s maximum demand was 150MW, making imports from South Africa unnecessary. Significantly at the time, BPC's then new facility produced electricity that was cheaper than electricity from South Africa (Government of Botswana, 1991: 223). Imports only increased rapidly in the 1990s following the movement towards a democratic dispensation in South Africa. With the political impediments to electricity trade gone, a conscious shift in policy emerged in Botswana during the life of the seventh National Development Plan to move away from self-reliance.

Botswana maintained a policy of self-sufficiency until 1992 when demand exceeded generation capacity. In view of the existing regional developments, the policy of maintaining self-sufficiency is no longer being pursued and expansion of the national generation capacity has been deferred. The BPC power and energy sourcing configuration [i.e. the generation/import mix] stands at 70/30 for both capacity and energy requirements and the ratio is expected to rise to be 44/56 and 51/49 by the year 2000 and 2001 respectively. The relatively small Morupule Power station (4 x 33 MW) cannot realize the economies of scale similar to those of large scale power stations such as RSA's Matimba Station (6x 65 MW). Consequently Morupule's long run marginal cost of generation is 0.037USD/kWh versus 0.005USD/kWh for Electricity Supply Commission in RSA. (Government of Botswana, 1997: 218-219).<sup>9</sup>

Botswana chose not to be self-sufficient in electricity for sound commercial reasons that assured high rates of return for BPC and minimised the need for further infrastructure investments. While the commercial imperative of what eventually became low-cost South

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tension transmission link with Eskom [Eskom's predecessor] provides stability and an adequate safeguard (equivalent to one unit at the Morupule Power Station) for BPC's interconnected system' (World Bank, 1984: paragraph 3.6: 30.)

<sup>9</sup> Harvey and Lewis (1990) also point out that Botswana was, by 1987, largely self-reliant in electricity although BPC did not make a profit at the price that was imposed on the Government of Botswana by the financing agreement with the World Bank. This agreement prohibited BPC from charging a price to Bamangwato Concessions Limited that fully recovered costs.

African electricity was strong, the national policy of dependence was to have serious economic consequences. Just when South Africa abandoned the expansion of its own electricity-generating capacity that was to result in the phase-out of supply to Botswana and other buyers in the region, Botswana commenced a policy of import dependence on highly subsidised South African electricity. These policies were based on the fact that it was cheaper to import the electricity from South Africa than to generate it domestically (see Figure 4 for 2004-09 data). South Africa’s electricity was cheap, reliable and plentiful from the 1980s until the middle of the last decade and from a simple business model perspective, importing electricity from RSA became the cheapest option for BPC and for the energy planners in government. Although sound commercially, this meant that Botswana forfeited access to a policy of cross-subsidisation of electricity to commercial users that has traditionally been used by South Africa and is now being used by Mozambique.

### **3. South Africa’s policy in the electricity sector**

Electricity is generated in facilities with a life that spans many decades. Outside Botswana one needs to review South Africa’s history to understand the supply and pricing of South African electricity. This section looks at these elements, their context, and their impacts on Botswana’s development.

#### **3.1 Evolution of policy priorities and trends in electricity supply capacity in South Africa**

The South African government invested very heavily in electricity and energy capacity during apartheid to assure that the country had enough low-cost electricity for domestic and industrial use.<sup>10</sup> Electricity and energy in general had to be supplied domestically for reasons of state security. The massive expansion of Eskom’s capacity during apartheid created such an excess that Eskom was able to sell that electricity at very low prices to its neighbours. The selling of that electricity and the subsequent dependency on South Africa on what were in retrospect clearly subsidised prices, helped provide the apartheid regime with a potentially powerful instrument of international policy that could be used against those countries

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<sup>10</sup> Eskom, Eskom’s predecessor, set up in 1922, was mandated by law to be non-profit making. This may explain why its managers appeared unconcerned by the capacity expansion over the 1970s and 1980s which caused the build-up of excess capacity and resulted in operations that were well below maximum capacity. Such capital expansion and the resultant under-capacity utilisations would not have been possible in a firm (public or private) which had a profit-making objective. It was in no small part this under-capacity utilisation that permitted Eskom to export to Botswana at very low prices.

bordering South Africa whose support for liberation movements was considered unacceptable. However, the expansion of South Africa's electricity capacity went beyond national security concerns. It also contained the recognition that cheap electricity was a vital component of attracting investment to what was becoming an increasingly unacceptable investment location with high sovereign risk. This explains why, within the portfolio of assets of Eskom in the power generating sector, all coal-powered stations except one were commissioned before 1994;<sup>11</sup> Eskom's coal-fired plants are on average 29.6 years old. Additional electricity considerations emerged in South Africa after the 1994 elections: the new democratically elected government began a period of expansion with the use of existing capacity to ensure that those who did not have access to electricity during apartheid were granted access.

This last expansion in the domestic use of electricity, while significant, was nevertheless by no means as large as the expansion of industrial, mining and smelting usage. Therefore in the 1998 White Paper on Energy, the government of South Africa announced that:

Eskom is the world's fourth largest electricity utility, with an installed generating capacity of about 39 000 MW in 1997. The maximum demand in 1997 was about 28 330 MW. Eskom's latest Integrated Electricity Plan forecasts for an assumed demand growth of 4.2% that Eskom's present generation capacity surplus will be fully utilised by about 2007. (DME, 1998: 53)

Thus, as early as 1998 South Africa knew that, unless more capacity was built, South Africa's surplus would disappear. A decline in excess capacity occurred from 1995 (Figure 2) and with no substantial increase in capacity generation, power shortages started throughout southern Africa by 2007-8. However, while the post-apartheid government in South Africa had clear objectives for electricity in terms of ensuring access for the poor and assuring industry that it could provide cheap electricity, there was no concomitant obligation to expand that

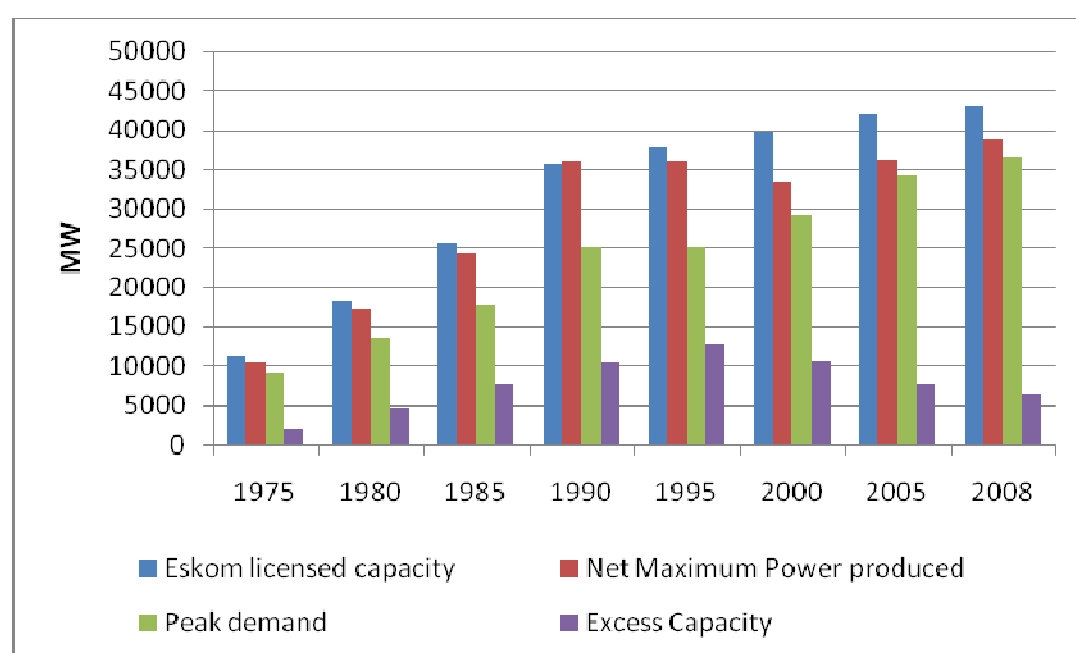
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<sup>11</sup> This is the case for 12 out of 13 coal-powered stations. The exception is the Majuba plant commissioned in 2006. Coal makes up approximately 87.2 % of Eskom's 2008 electricity capacity. In fact, however, it is as the Eskom Act (No. 41 of 1987) which converted Escom to Eskom and made the new entity subject to the provisions of the Companies Act and tax- and dividend-paying entity, that the expansion of electric generating capacity immediately came to a halt.



capacity.<sup>12</sup> The South African government failed to provide Eskom with the resources or the pricing formula required for the capital expansion. This created the supply crisis of 2008 and the resulting termination of supply contracts with Botswana and the six other SAPP utilities which Eskom supplied. It was the policy of the RSA government to expand the supply generated by independent power producers (IPPs). Yet, IPPs have long complained about the absence of an appropriate regime to assure commercial production. Many issues confront IPPs but a key problem that remained until July 2011 was an electricity tariff regime that would allow Eskom to purchase electricity at commercially viable rates.

**Figure 2 Eskom’s electricity generating capacity**



Note: Excess capacity is defined as licensed capacity minus peak demand.

Sources: Winkler (2006) and Eskom (2008)

<sup>12</sup> It is widely reported that President Thabo Mbeki had been informed that the rapid growth of the South African economy would necessitate an expansion of capacity. For instance, *News24*(2008) reported that '[i]n 1998, the White Paper on Energy Policy warned that Eskom's power reserves would run out by 2007 if the government did not make the necessary investments. But, the government decided in 2001 not to invest in infrastructure. Chief government spokesperson Themba Maseko said on Wednesday the reason for this was that the government believed independent power producers would come to the fore'.

### 3.2 Understanding South Africa's electricity pricing strategy

Eskom prided itself on low costs<sup>13</sup> and over time South Africa has had amongst the lowest electricity prices in the world and the lowest price of electricity in the world for industrial use.<sup>14</sup> However, electricity prices remained low even after the electricity-generation capacity was exhausted.

Electricity prices in general can be explained by two key elements: the fuel used (diesel is the most expensive and hydro the cheapest) and the depreciation of the equipment used in the electricity-generation process. Along such lines, the three reasons normally specifically advanced for South Africa's low prices are:

- 1) South Africa uses a very low cost energy source, i.e. high quality coal;<sup>15</sup>
- 2) It had substantial excess capacity of physical plant which allowed export pricing at below full cost;
- 3) The coal-fired plants used by Eskom are extremely old and therefore the capital cost is very low.<sup>16</sup>

The third factor above is critical for cost–depreciation of the generating facilities is normally the largest component of the cost of electricity generation irrespective of the fuel or method used to generate the electricity – and it is in fact one of the principal reasons why trade in electricity expanded between Botswana and South Africa. Yet, between electricity's physical excess capacity, its extremely low operating cost and its negligible capital cost, the South African government could have priced electricity at a full cost recovery including the

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<sup>13</sup> For example, Eskom (2008: vi) reports: 'Nersa awarded Eskom a real price increase of 1% over the next three years. *This will not compromise South Africa's competitive advantage of being the lowest cost global producer of electricity*' [emphasis added].

<sup>14</sup> See Eskom (2009: xii), for instance, for international electricity cost comparisons for industrial volumes. Also, Van Heerden et al. (2008: 3) note that 'South Africa's US\$0.01/kWh price on electricity for industry is matched by no other country and only India (US\$0.04/kWh) comes close to the retail prices of electricity for households of US\$0.03/kWh charged in South Africa'.

<sup>15</sup> Van Heerden et al. (2008: 4) comment: 'Eskom enjoyed relatively low production costs in terms of the value of its key inputs (coal), and, hence, a low marginal cost of production – operations only (estimated to be between 4 and 5c/kWh), which allowed Eskom fairly high average profit margins'.

<sup>16</sup> See 'Annex 1: Cross-Country Tables' and 'Table 6' of Eberhard et al. (2008). South Africa had, in 2005, an average historical capital cost of US\$0.02/kWh which is the lowest of the 25 African countries surveyed with the exception of Cape Verde and Cameroon (US\$0.01). No other SADC country had capital costs of power generation close to that of South Africa. The historic operating cost at US\$0.03 was also the lowest with the exception of Benin, Nigeria and Ethiopia.

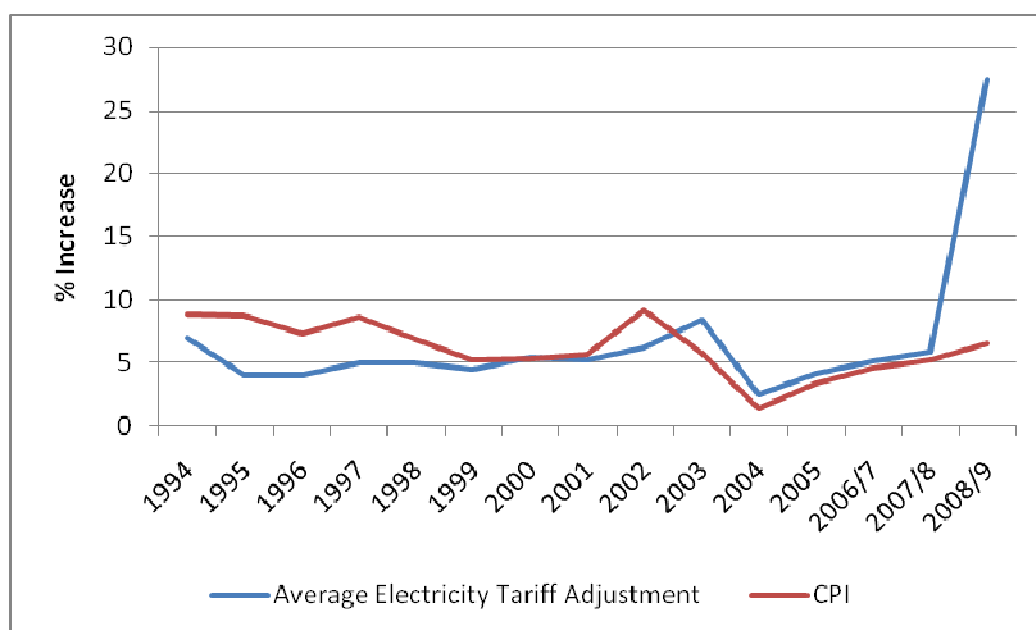
opportunity cost of new plant, or it could have sold electricity at prices that were both politically acceptable to households and achieved a subsidiary objective of providing incentives for energy-intensive projects to invest in South Africa. Fundamentally, the reasons put forward for the low costs of electricity production explain why the price of electricity could be low in South Africa but not why the government of South Africa chose to keep it low. Because Eskom is a state-owned company, the government could have chosen to earn significant profits.

To understand the situation in South Africa, one needs to understand the relationship between cheap power and the prosperity and development of the country. Since the beginning of the 20th century cheap electricity has been seen as one of the most important foundations of South Africa’s development through the expansion of mining and heavy industry. Low electricity prices, along with low wages during the apartheid era, have historically been one of the most important pillars of South Africa’s economic development (see Christie, 1984).

Eskom purposely set electricity tariffs over the last 15 years at levels that were well below the rate of increase in inflation throughout most of the period. This was a conscious policy of Eskom and government to stimulate investment and maintain rapid economic growth.<sup>17</sup> Prices decreased in real terms and it became obvious to NERSA that the price suppression was undermining the ability of Eskom to raise capital in a situation where rapid economic growth had eroded the excess capacity created during the years of apartheid. The first determination in 2003 produced a price increase above the Consumer Price Index (CPI) for the first time since the democratic dispensation. This was followed by the 27.5% price increase in April 2008 (Figure 3).

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<sup>17</sup> Van Heerden et al. (2008: 4) reiterate this point: ‘[i]n general, electricity prices in SA have declined in real terms since Eskom announced its price compact in 1991 with the conviction that cheap electricity is essential for rapid economic growth .... Under the price compact, Eskom undertook to decrease the real price of electricity substantially ... the real price of electricity for all sectors declined by 11 per cent, whereas the real price for the industrial sector decreased by 25 per cent over the period 1970-2005. Since 1990, the price of electricity for all sectors declined by 43 per cent, while for Manufacturing the price dropped by 53 per cent’.

**Figure 3 South African CPI and average electricity tariff increase, 1994 to 2008/09**

Source: Eskom

Eventually, in 2009, Eskom sought a three-year determination from NERSA that would see a price increase of 45% for each of the three years.<sup>18</sup> This increase, it argued, would cover its costs, assure its credit rating and allow it to raise 1 trillion rand (US\$134 billion) on international money markets so as to be able to double its 2009 capacity to 80 000MW by 2026 (Standard Chartered, 2010: 8). NERSA agreed to price increases that would see the average tariff rise by approximately 25% per annum over the period.<sup>19</sup>

#### **4. The price of electricity exported by South Africa to the region: dumping, subsidies, under-pricing and SACU import subventions**

The recent period marked a turning point in South Africa's electricity situation but for many years the post-apartheid government pursued a policy of pricing that, as mentioned above, had two important objectives: the expansion of electrification to those who had been denied such access during apartheid; and, though less obvious, the continuation of the trade and investment objective of maintaining low-cost electricity prices for the development of

<sup>18</sup> This was subsequently revised downwards to 35% per annum in December 2009 following opposition from the government.

<sup>19</sup> Bloomberg (24 February 2010) reported that Eskom Holdings Ltd., supplier of 95% of South Africa's electricity, was allowed to raise fees by 24.8% from April, less than requested, easing concern that inflation will remain above the government's target. Power prices will increase 25.8% in the year through March 2012 and 25.9% the year after that.

industry. These two objectives, which could be met when South Africa had excess electricity generation capacity, had, in turn, a profound effect on the industrial development in the region.

This section considers the price of electricity exported by South Africa to Botswana and those prices applicable to Eskom's international customers (in the RSA as well as in the region) relative to those which recently prevailed in the domestic markets of the two countries. This section also looks at whether electricity prices in the region amounted to dumping; it also considers under-pricing from a trade perspective and against the position of the World Bank as much of its work on pricing opposed any form of subvention. This section argues that South Africa's electricity was not sold to Botswana at its full economic costs and that definitions are important to establish whether under-pricing is occurring. Also, an additional electricity import subvention for Botswana, Lesotho, Namibia and Swaziland (the BLNS countries) is through the SACU arrangement.

The conduct of international trade in electricity from South Africa has been predicated on two markets: the three very substantial international private customers that consume 5% of Eskom's electricity capacity; and, its seven SAPP partners in Botswana, Namibia, Lesotho, Swaziland, Mozambique, Zambia and Zimbabwe.

Table 1 indicates that South Africa's exports of electricity to its international customers have been at prices well below anything offered to its domestic customers. These international customers are large aluminium smelters in Mozambique and in the RSA. The Mozul plant outside Maputo, for example, uses 950MW of electricity; the other BHP facility in RSA uses 1,300MW.

**Table 1 Average electricity tariffs in RSA and Botswana, 2008 and 2009 (ZAR/kWh)**

	South Africa		Botswana	
	2009	2008		2008/9
Residential	0.53	0.44	Residential	0.46
Commercial	0.31	0.248	Small Business	0.54
Industrial	0.21	0.17	Medium Business	0.28
Mining	0.23	0.18	Large Business	0.25
International			Government	0.70
----- <i>Utilities</i>	0.277	0.19	Water Pumping	0.55
----- <i>End-users</i>	0.148	0.118		
Average Revenue	0.249	0.19		

Notes: Tariffs in RSA are calculated on the basis of revenue by end-user. Exchange rates for Pula are based on monthly average for 2008-2009.

Sources: Eskom (2009: 228) and BPC: [www.bpc.bw](http://www.bpc.bw)

The first part of Table 1 which provides the average tariff rates in South Africa for 2008 and 2009 shows that Eskom’s rates charged to these ‘international customers’ are below any published domestic rate. This is so partially because Eskom re-exports electricity purchased from Cahora Bassa Hydroelectric (at US\$0.01-0.015/kWh in 2008/9). Moreover, Eskom had agreed to a contractual arrangement that supplied electricity to the smelters at prices based on ‘embedded derivatives’ whereby the price charged by Eskom is linked to the dollar price of aluminium. In this way BHP shifted the exchange rate, aluminium price and part of the sovereign risk of smelting in Mozambique back to Eskom. In 2009 Eskom lost ZAR9.5 billion as a result of exchange rate fluctuations and aluminium price decreases.<sup>20</sup> Eskom was reportedly selling to BHP Billiton at ZAR0.12/kWh in 2008/9 (Creamer, 2010). In 2010 Eskom renegotiated the supply agreement shifting the exchange rate and price risk back to BHP.

Whether Eskom’s actions in the market constitute dumping is another matter. Dumping is defined as the selling of a product at below the domestic price. Eskom’s selling electricity to BHP Billiton smelters in Mozambique and domestically under the terms of the same embedded derivative suggests that dumping is not occurring.

<sup>20</sup> See Eskom (2009: 10); Eskom’s losses for 2009 were approximately ZAR13 billion.

The other export sector for Eskom is to the seven (SAPP) utilities, including BPC.<sup>21</sup> Although the contracts with these were much smaller than the smelter contracts, the supply contracts were at substantially higher tariff rates than those that applied to the smelter contracts. Indeed, Eskom's exports of electricity to the utilities are, on average, at prices not lower than those offered to mining and industry in South Africa.<sup>22</sup> In 2009, Eskom sold electricity to BPC at P0.25/kWh (US\$0.035/kWh), approximately the average price of exports to the international utilities. There is therefore no evidence of dumping of electricity into the Botswana market.

The second part of Table 1, which sets out the average electricity tariffs for 2009 in Botswana, illustrates that BPC electricity tariffs to virtually all comparable sectors in Botswana in 2008 were higher than those of Eskom in RSA, but Botswana, which also aims to keep electricity tariffs low, had lower tariffs by 2009. This is because the government had not allowed any price increase in 2009<sup>23</sup> whereas Eskom was granted a substantial 27% tariff increase in 2008. Yet, the comparison indicates that Botswana does not provide a competitive price for electricity to the private sector, especially to small businesses.

The price charged for electricity exported to the electric utilities in the BLNS while not dumped did not reflect electricity sold at its full economic cost (SACU Agreement 2002, Article 34(3)b). Detailed price and volume data, which is lacking, would be required to demonstrate that Eskom was dumping onto SACU markets. Nonetheless, the average price of electricity sold to the mining industry, a large domestic private electricity purchaser, was above the average of electricity sold to the foreign utilities which have electricity usage similar to that of individual mining companies. However, Eskom's request for the substantial triennial rate increases from NERSA to cover the cost of capital expansion is *ipso facto* proof that it has not been pricing its product to cover capital costs of replacement.

The above comment is important not only because it illustrates the use of electricity to attract investment in electricity-intensive sectors but also because the World Bank has

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<sup>21</sup> Besides BPC, the other utilities are Nampower (Namibia), the Lesotho Electricity Corporation, the Swaziland Electricity Board, Electricidade de Mocambique, Zeco (Zambia) and ZESA (in Zimbabwe).

<sup>22</sup> Individual domestic contracts could be below the sale prices of electricity to utilities but these prices are not publicly available.

<sup>23</sup> The 2009 election was widely considered to be the reason why the government did not increase electricity tariffs that year.

argued that South Africa has not underpriced its electricity – unlike other countries in southern Africa.<sup>24</sup> Yet, a point that is at the heart of this position is that the aforementioned proposition bears on the technical issue of the difference between the historic valuation of capital and its opportunity cost.

Given the age of Eskom's plants the World Bank can, on an accounting definition, conclude with some technical validity that Eskom was not underpricing. This is not the case, however, if one considers the economic opportunity or full replacement cost of capital instead. A credible definition of cost would include the opportunity cost of capital which has not been covered in its pricing over the last 15 years.

Through the pricing model used by the RSA government, electricity has been priced at rates below the cost of replacement capital. This has retarded the development of electricity-generation capacity in the neighbouring states because no government could support on commercial, as opposed to economic, grounds an investment in the same physical capital when electricity could be bought from South Africa at prices that did not cover the opportunity cost of capital, the main cost of generating electricity. As such, the situation in South Africa not only impacted the development of electricity generation in Botswana, but it also had wider regional impacts.

Yet another trade distortion left Botswana (and its coal- and uranium-rich neighbour Namibia) in a position of almost total energy dependence on South Africa. Besides Eskom subsidising its electricity domestically and for export by not charging a tariff that reflected the replacement cost of capital, the South African government provided a further transfer to its neighbours by their purchasing South African electricity. This second subvention occurs through the SACU revenue-sharing formula. Since the 2002 SACU renegotiations, the formula uses the share of intra-SACU imports and this has come to include electricity imports.<sup>25</sup> If Botswana had been self-sufficient in generating electricity in 2006 this would have decreased its imports from South Africa by ZAR261 million.<sup>26</sup> This would have

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<sup>24</sup> See World Bank (2009: 191). Yet, on page 183 it argues that '[t]o help finance investment and reduce demand, electricity prices in South Africa will increase substantially over the next several years'.

<sup>25</sup> This is using data from the Statistics Office of Botswana.

<sup>26</sup> Eskom price discriminates between various foreign suppliers using 2006/7 figures. BPC, the largest importer of electricity in SACU, paid a unit price that was higher than all other electricity authorities with the exception of the Lesotho Electricity Board.



decreased Botswana's revenue from the regional revenue pool by approximately ZAR52.8 million. Put differently, the government received a further subvention on the import of electricity of approximately 20% of the total value of the electricity imports.<sup>27</sup>

## 5. Botswana's response to South Africa's electricity crisis

As the most immediate strategy to stop what would otherwise have been protracted and costly power shortages, BPC introduced 70MW of diesel-generating capacity as of 2010. This would be supplemented by a further 90MW capacity to 2011 as the Eskom contract came to an end (Table 2). Diesel-generated electricity, however, is expensive with a price of approximately US\$0.50/kWh (P3.50/kWh). This is considerably higher than the cost of generating electricity domestically at Morupule at P0.37/kWh in 2009. This difference has been, in many ways, part of the cost of failing to respond to the shortages earlier and of failing to develop existing coal deposits.

**Table 2 Supply and demand scenarios for electricity net capacity (megawatts)**

Source of supply	2008	2009	2010	2011	2012	2013	2014	2015
<b>Local generation</b>								
Morupule A	120	120	120	120	120	120	120	120
Diesel generators	-	-	70	160	160	<b>End of contract</b>		
Morupule B Phase 1	<b>Contract negotiations</b>		<b>Development</b>		396	528	528	528
Morupule B Phase 2	<b>Feasibility</b>			-	-	-	-	-
Mmamabula (CIC)	<b>Feasibility &amp; contract negotiations</b>			<b>Development</b>			285	285
<b>Imported</b>								
Eskom	327.5*	327.5	250	150	150	<b>End of contract</b>		
SAPP firm contracts	-	-	90	90	90	90	-	-
SAPP non-firm contracts	-	90	-	-	-	-	-	-
<b>Total capacity</b>	<b>447.5</b>	<b>537.5</b>	<b>530</b>	<b>520</b>	<b>916</b>	<b>738</b>	<b>933</b>	<b>933</b>
<b>Peak demand</b>	<b>503</b>	<b>553</b>	<b>592</b>	<b>627</b>	<b>690</b>	<b>731</b>	<b>768</b>	<b>845</b>
<b>Surplus/deficit (+/-)</b>	<b>-55.5</b>	<b>-15.5</b>	<b>-62</b>	<b>-107</b>	<b>+226</b>	<b>+7</b>	<b>+180</b>	<b>+103</b>

Note: \* Reduction imposed by South Africa to manage load.

Source: BPC

<sup>27</sup> However, the question of whether this subvention to Botswana constitutes an export subsidy according to the WTO definition is largely moot as the beneficiary is a signatory to the 2002 SACU Agreement which creates the subvention; hence a dispute over these transfers is improbable.

Large infrastructure projects have long and often unpredictable gestation periods that are frequently longer than initially planned and, while Table 2 reports the investments initiated for electricity generation in Botswana based on BPC’s estimates, significant slippage is likely. For example, the Morupule B project which was expected to start being developed in early 2009 to be fully implemented by 2011<sup>28</sup> has already been postponed to 2012. The next stage of the electricity generation rests in Morupule B phase 2 and in the development by an IPP (e.g. CIC Energy Corporation) of the Mmamabula deposits.<sup>29</sup> This was supposed to generate 285MW by 2014, but current estimates do not see production from Mmamabula occurring before 2020.

In the short term, as a result of the termination of Eskom contracts, between 22% and 33% of Botswana’s electricity was expected to be generated from diesel in 2011, imposing a substantial burden on Botswana’s government.<sup>30</sup> Table 3 presents the various cost options of each of the different types of electricity generation.

**Table 3 Estimates of Cost Options for Electricity Generation for Botswana**

Options	Cost USc/kWh	Availability	Remarks
Existing Coal (Morupule A)	5+	90 MW net	Decommissioned by 2020
Diesel Units	50+	160MW	Short term gap fill only
Concentrating Solar Power	20	Up to 200 MW by 2020	50 MW targeted by 2016: needs donor support
CBM	7-22	200MW by 2020;50 MW likely by 2015/6	Exploration yet to commence; costs timing and capacity to based on the availability of CBM
New coal	5+	Up to 3000 MW as per SAPP	4 year construction feasible for small units.

Source: World Bank (2009: 7).

<sup>28</sup> In a paper written in 2005/6 for the 40th Anniversary of Independence of Botswana in 2006 the government publication proclaimed that the 400MW Morupule extension would be completed in 2009 (Mgadla and Mokopagkosi, 2008).

<sup>29</sup> These are principally for exports but it is also expected that one-quarter of capacity will be sold to BPC.

<sup>30</sup> World Bank estimates of the share of electricity generated by diesel over the period are at the high end of this estimate. The BPC estimate is considerably lower.

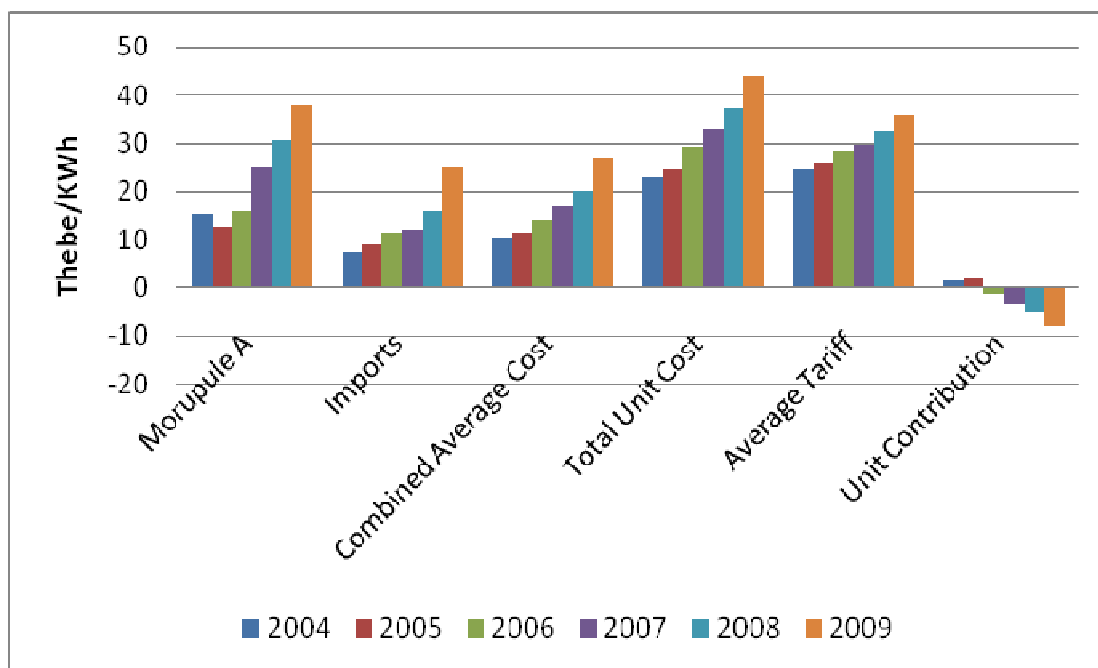
With diesel generation costing ten times more than coal, there is a problem in the high cost of the emergency diesel electricity programmes that would reach their peak in 2011/2012, although the termination of the diesel capacity is predicated on the assumption that the Morupule B project will be operating at full capacity on time. On this matter the World Bank (2009a: 5) concludes:

These costly short term supply arrangements will impact adversely on the economy and cannot be borne by small and new businesses and residential customers fully. The cost of bridging the energy deficit with this costly emergency option would very quickly go from US 0.3 billion in 2010 to about US 1.5 billion in 2013 or the equivalent of an annual average of 5% of the projected GDP over the period .... A cumulative cost of US\$4 billion.

Even in 2009 following the substantial price increase to P0.25/kWh for imported electricity from Eskom, electricity imports from South Africa remained significantly cheaper than the cost of generating electricity domestically. The contract terms of the remaining Eskom contract with BPC stipulated that prices would rise to an estimated P0.31/kWh in 2010/11 and P0.45/kWh in 2011/12 (Figure 4). BPC foresaw that its electricity prices would rise to P0.60/kWh in 2012 when it needs to start repaying the borrowing cost of the Morupule B project (World Bank, 2009a).<sup>31</sup>

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<sup>31</sup> The unit contribution may be negative but BPC has not made a substantial loss because the income generated from its very substantial reserves has meant that the net contribution only became negative in 2009. However, the current tariff rates are no longer sustainable and the government of Botswana will have to substantially increase electricity tariffs.

**Figure 4 BPC cost of electricity (thebe/kWh) average electricity tariffs and unit contribution**

Note: 100 thebe is 1 pula.

Source: World Bank (2009: 7)

The direct cost to Botswana of not implementing domestic development of electricity-generating capacity has been very high. If Botswana had implemented a national development policy for electricity soon after South Africa's 1998 *White Paper*, the cost of the current crisis, estimated by the World Bank at US\$4 billion in increased generating costs, would not have been imposed. With the entire construction cost of the Morupule B project at US\$1.6 billion, timeously saving the increased cost of generating electricity from diesel alone would have been sufficient to build enough electric-generating capacity to supply Botswana's need up to 2020.

## 6. The cost of electricity policy: loss of trade and investment policy space

The analysis thus far has been around the direct costs of electricity policy, but what has been lost by Botswana from not generating electricity domestically are the policy options used by its neighbours to stimulate investment and trade.

While Botswana maintained relatively cheap electricity it did not offer prices for industrial and commercial end-users to attract investment. Had the domestic generating capacity

existed, it would have been possible to either cross-subsidise industrial and mining firms in the way South Africa has done for the better part of the 20th century<sup>32</sup> or to have a pricing system based on marginal costs for large commercial end-users. This policy does not theoretically require domestic generation capacity; Botswana could have imported electricity from RSA and sold it at a subsidised price to industrial and commercial end-users. The government could have provided a direct subsidy to those end-users. This particular approach to electricity pricing is the one advocated by the SAPP<sup>33</sup> and the World Bank (although given that the SAPP was provided with technical assistance on an ongoing basis by the World Bank this absence of distinction is unsurprising). Yet, many countries have used electricity as an instrument of commercial policy but not open subsidies. Subsidies were always provided as opaque cross-subsidies from one end-user to another or through the pricing to large-scale users at marginal cost. Open transparent subsidies were never used because of the risk that these would be subject to removal in parliament and therefore of limited long-term commercial use to investors.

With the rate increases approved by NERSA in February 2010 spelling the end of a century-old South African policy of low electricity price policy, South Africa has an interest in ensuring that its investment competitors in the region do likewise. However, countries which have the option are likely to continue to use electricity tariffs as an instrument of commercial and development policy. This has been one of the foundations of economic policy towards trade and investment in Mozambique where cheap hydroelectricity supported the development of several important mega-projects. Mozambique has a comparative advantage in electricity generation given substantial hydroelectric capacity at Cahora Bassa as well as other hydro, coal and gas facilities. The Mozambican government could charge its principle buyer, Eskom, a price for electricity that captures the natural rents

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<sup>32</sup> The room for cross-subsidisation in Botswana is limited due to the size of the retail market for electricity but pricing electricity at marginal cost to large-scale mining and industrial users would be possible.

<sup>33</sup> SAPP has long advocated the open transparent approach to such cross-subsidies to particular sectors: 'If a government wishes to favor specific groups of consumers, then both the beneficiaries of the program and other consumers or taxpayers will be better off if the program is funded directly by the government' (Musaba, 2009: slide 27).

stemming from this comparative advantage, but, instead, it charges prices that are amongst the lowest in the world.<sup>34</sup>

Hydroelectricity, at present the only form of fossil fuel generated electricity cheaper than coal, provides a source of competition for Eskom electricity and, by extension, for South Africa's industry.<sup>35</sup> Indeed, the Mozambican government has used the cheap hydroelectric power to attract major investments; the huge Mozul I and II projects were a direct result of the cheap electricity where BHP Billiton<sup>36</sup> invested some US\$2.3 billion in a project which was expected to create approximately 2 600 jobs. The government also provided considerable fiscal incentives to BHP Billiton to locate in Mozambique<sup>37</sup>.

Low hydroelectricity costs and access to the sea make Mozambique a natural location for smelting activities and mega-projects. Thus, electricity pricing together with Mozambique's willingness to offer considerable tax concessions to attract investment means that other SADC members, especially those landlocked, are at considerable commercial disadvantage if they are unable to match the prices offered by Mozambique. This is not to suggest that a landlocked country such as Botswana should compete with Mozambique to attract aluminium smelting investments. Botswana would need much higher value to weight exports than aluminium because of the disadvantage of being landlocked; but being landlocked and having relatively high electricity prices are further disincentives to direct productive investment to the country.

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<sup>34</sup> Bucuane and Mulder (2007) have suggested that the government impose a US\$0.01-2/kWh tax on electricity generation, but this can only be imposed on electricity for domestic use. With 85% of electricity exported, such tax would be an export tax on South Africa. This is not permitted under the provisions of Article XXV of the Interim Economic Partnership Agreement with the EU which was signed by Mozambique in June 2009.

<sup>35</sup> South Africa nationalised the Victoria Falls and Transvaal Power Company in 1948. The company generated cheap hydroelectricity when flow rates along the Zambezi were high and supplemented this with coal from the Transvaal. It was considerably larger than Eskom in terms of power generation in the inter-war years. The purchase arrangements between Cahora Bassa Hydroelectric and Eskom from the 1970s until the present are also an attempt to incorporate cheap hydroelectric-generated power into the Eskom grid and also in the process eliminate the possibility of competition.

<sup>36</sup> BHP Billiton is one of the partners in Mozul I and II with a 47.1% interest in the joint venture. The project produces 500000 tonnes of aluminium annually and is now Mozambique's largest export. Aluminium smelting is amongst the most energy-intensive industries with electricity normally constituting at least one-third of the cost of the aluminium. (See [www.bhpbilliton.com/bb/ourBusinesses/aluminium/mozal/aboutMozal.jsp](http://www.bhpbilliton.com/bb/ourBusinesses/aluminium/mozal/aboutMozal.jsp)).

<sup>37</sup> See Kruegler (2007) quoted in Bucuane and Mulder (2007). The government of Mozambique offered substantial tax incentives to BHP Billiton which are estimated to have cost US\$100 million in order to obtain the Mozul project. The principle risk for BHP Billiton was sovereign risk which was diminished by having the electricity generated by Cahora Bassa run through the Eskom grid under an electricity contract with the embedded derivative arrangement reported earlier in the chapter.

## **7. Conclusion: Grand Inga Dam, national sovereignty and Botswana's development**

The argument of this study has progressed to show that a complex set of factors has been associated with the electricity situation that is currently affecting Botswana. Section 2, which focused on the energy supply situation of Botswana, set out the importance of a complex combination of historical and political motives, commercial logic, and the role of particular actors (e.g. the World Bank and national decisionmakers) as influencing the choice between electricity generation and imports within Botswana. Section 3 looked into South Africa's electricity policy and emphasised that development objectives played a key role in driving electricity generation and the electricity pricing strategy. Section 4 looked at electricity trade focusing on the price of electricity exported by South Africa. Although constrained by a lack of electricity price data, this section made the point that electricity could not have been generated in the SACU region outside South Africa given the low electricity prices from South Africa. Section 5 presented Botswana's recent response and a situation of electricity-supply crisis that will prevail over the short- to medium-time horizon. This is complemented by Section 6 that emphasised that Botswana had lost trade and investment policy space by foregoing its own electricity generating capacity.

The combined argument presents a case in favour of Botswana's engaging with own electricity generation efforts. The elements of the argument are, however, effectively part of three intertwined strains in energy policy thinking in Africa and that have impacted, mostly adversely, on Botswana's economic development. The first is the use of market signals, no matter how distorted these may be. The second is reliance on regional supply of power. The third entails the provision of energy by IPPs selling into competitive markets. These elements have forged Botswana's energy policy over the last two decades and together have caused a massively energy-rich country to be short of electricity rather than recognising that in a flawed market and politically contentious region the state must play a central role in electricity generation.

Electricity prices are extremely politically sensitive through consumers. Yet, in a developing country electricity pricing goes beyond the effect on consumer welfare; it is used by many governments as a way of attracting investment and trade. Therefore the electricity prices policy has never been, and is not now, simply a technical issue but remains a strategic

matter. The strategic choice in 1992 to rely on electricity from South Africa caused Botswana to fail to develop its own abundant natural resources. This strategy was commercially cheap at the time but economically very expensive in the longer term.

Domestic generation was expensive at the time of Botswana's 8th Development Plan but, rather than attempting to develop the economies of scale needed to become competitive, Botswana chose to import cheaper electricity. This was commercially profitable for BPC, avoided expensive capital costs and was fully consistent with advice from the World Bank. The resulting dependence upon South Africa meant that electricity prices could not readily be used in Botswana to stimulate trade and investment unless offered as open subsidies. At the same time South Africa was using subsidies for its own industrial sector.

With South Africa moving away from cheap electricity, there are increasing calls from South Africa for competitive pricing of electricity by SACU and SAPP members (Disenyana and Cezanne, 2009). As South Africa's commercial advantage from cheap electricity evaporates this approach of imposing 'competitive prices' on the miscellaneous other SAPP members is in its trade and commercial interests. Yet, this would remove the very policy instrument that South Africa has used for fifty years and which hydro-rich countries like Mozambique are using.

Botswana, a small landlocked country with high transport costs, has many cost disadvantages as an investment location. With substantial coal resources, with a good reputation for stability and reliability,<sup>38</sup> unreliable and high cost electricity should not be one of the disadvantages. The reliance on flawed market signals from distorted markets means that Botswana, an energy-rich country, finds itself dependent upon imports which are no longer available. Those policymakers who have consistently advocated a purely commercial approach in Botswana where no other signal but the price, no matter how distorted by subsidies, are responsible for Botswana's energy predicament.

The development of domestic electricity generating capacity in the hands of government is essential if the Government of Botswana is to use electricity pricing as an instrument of its

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<sup>38</sup> Botswana has sought a joint venture arrangement with Zimbabwe to generate electricity which provides Botswana with what is reported as 40MW from 2011. Botswana previously purchased small quantities of electricity from Zimbabwe but this ceased with the economic and political crisis in that country.



commercial and development policy. This does not preclude IPPs from playing a role in increasing efficiency and in helping decrease the capital burden of developing electricity generation. But the dominant role in the sector needs to remain with the state if there is to be any leverage over electricity prices. Morupule B will provide sufficient electricity for part of the current decade but will certainly be insufficient to provide a platform for the use of energy prices as an instrument of commercial policy. Nevertheless, the generated capacity of Morupule B Phase I will be insufficient to meet Botswana's consumption needs for the decade. The expeditious development of Morupule B Phase II as a state-owned project is essential for Botswana's energy reliability and will allow, in future, a private/public asset mix sufficient to be able to price electricity for industrial and mining uses that can potentially compete with neighbours such as Mozambique. If Botswana chooses to pursue the SAPP and World Bank policy advice on pricing, its competitive position as a place to invest will be further eroded as hydro-rich countries like Mozambique and the Democratic Republic of Congo (DRC) will certainly continue to use electricity as an instrument of commerce and development.

It will take Botswana about a decade to develop sufficient domestic generating capacity to assure domestic supply and excess capacity for potential investors. This wasted decade stems from insufficient preparation for the termination of South African supply contracts and from an economic policy by the international financial institutions that focused on cheap electricity from regional markets and independent power suppliers. These have consistently failed Botswana and, at present, electricity prices will rise to meet the cost increase stemming from the agreed price increases in South Africa and the added cost of diesel-generated fuel. This will adversely impact on the development of the private sector in Botswana.

The government of Botswana made contingencies in 2002/3 for alternative international electricity supply. One of the most important attempts, but one which would have emerged too late to avert the energy shortages, involved the SADC members' efforts to develop the Inga III Dam – the large hydro-power plant on the Congo River in the DRC that is set to replace the earlier two projects which are currently in a state of disrepair – in the middle of the last decade. In October 2004 the Western Power Corridor (Westcor), a project which covers electricity supply to the DRC, South Africa, Botswana, Namibia and Angola, was

reported to have signed a memorandum of understanding with the DRC for the construction of Inga III.<sup>39</sup> But, BHP Billiton signed an agreement with the DRC government for the development of an aluminium smelter at Inga III in 2006. It was reported, in 2010, to have pushed the Westcor group aside to proceed with the US\$2.5 billion aluminium smelter at Inga III Dam in 2014. BHP Billiton had also offered to build to help co-fund the dam. This case has shown that reliance on cheap hydroelectricity from the Congo River basin and the DRC is fraught with sovereign risks as are potentially other sources of offshore electricity.

The temptation remains to rely in the longer term on projects such as Inga III and the much larger Grand Inga project which is expected to generate some 40 000MW of electricity. This project, which would be twice the size of the Three Gorges Dam on the Yangtze River, would cost US\$80-100 billion to construct. It is doubtful that a country such as the DRC would be able to accept such a high debt load. Hence, only investors with public backing and an assured market would be willing to accept such sovereign risk. Following Westcor's experience with Inga III Botswana should avoid such temptation. In the coming years Botswana's economic performance will be inextricably linked to the mining sector and if this sector is to be fully developed the best option remains national energy self-sufficiency where there is the potential to develop a long-term competitive advantage. Botswana has tried and continues to try to develop national policies that support local production. These have been in areas where the country has little potential to develop a commercial advantage (e.g. grain production or garment exports). Coal and CBM, on the other hand, are resources that the country has in abundance and that can be exploited to readily assure self-sufficiency in electricity provision. Yet, Botswana has for commercial rather than for sound strategic or economic reasons chosen not to do so.

Perhaps the final irony of Botswana's electricity policy is that the very institution (i.e. the World Bank) that pushed the country to regional reliance, competitive pricing, private-sector supply and also 'Green Energy' is now, like Winston Churchill's proverbial American who will 'always do the right thing after having exhausted every other possibility', is now funding a state-owned, coal-fired power station at Morupule.

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<sup>39</sup> See <http://www.power-technology.com/projects/bhpbillitoninga3/> (accessed 1 April 2010). This was reported to be between 3 000 and 5 000MW capacity. Botswana Namibia and Angola would have purchased 1 000MW, sufficient for Botswana to replace the Eskom losses.

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*Chapter 11*

**Manufacturing and regional Free Trade Agreements:  
a computer analysis of the impacts for the BLNS**

*Ron Sandrey and Hans Grinsted Jensen*

**1. Introduction and the model**

In assessing SACU's regional trade policy options, the increasing focus on the African continent, and in particular the so-called 'tripartite' agreement have to be considered. The trade and political economic background to this agreement was discussed in Sandrey et al. (2011), along with the quantitative analysis of how South Africa's trading relationship with the tripartite countries may be advanced by the adoption of a Free Trade Agreement (FTA) between South Africa (or, more properly, the Southern African Customs Union ) and the remaining blocs of the Southern African Development Community (SADC), the East African Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA) concentrating upon agriculture. To assist with that broader analysis and to assess in more depth the implications for the manufacturing sectors in the BLNS (Botswana, Lesotho, Namibia and Swaziland) countries, the internationally accepted benchmark Global Trade Analysis Project (GTAP) database – discussed below – and its associated general equilibrium model are used as an analytical tool. In undertaking this analysis, the starting point is a simulation of the 'known' and best estimate conditions that will prevail at the end of a given period (2020 in this case) followed by an assessment of the difference that the selected FTA policy change under consideration is likely to make.

It is important to be upfront as to what our policy change is. Sandrey et al. (2011) simulated a full FTA between SADC, EAC and COMESA after each of these three regions itself has made the necessary steps to full sub-regional integration. Thus, Sandrey et al (2011) did not examine the benefits to SACU of taking the FTA steps to their logical conclusion, but rather the final steps in regional integration past these intermediate points. The focus of the 2011 book was on the Tripartite FTA only, and that research assumed that the necessary starting point for the Tripartite FTA was the fully functioning operation of the three sub-FTAs in the tripartite region. A major point of departure for this chapter is that the three initial FTA full

steps for SADC, EAC and COMESA are analysed sequentially before the full tripartite FTA is operational. This enables the separate benefits to the BLNS for each sequential FTA to be examined prior to the final Tripartite FTA.

We note that in order to reach the final tripartite FTA there needs to be a resolution about the overlapping memberships in the region, and unfortunately this problem is somewhat exacerbated

by the GTAP country/regional aggregation. For example, Kenya is aggregated into a regional group that includes, among other countries, Sudan<sup>1</sup>. Annex 1 shows a table outlining the problem of overlapping membership and how this complicates not only the politics but also our modelling results. How we treat the overlapping membership problem and the associated issue of the sequencing of the FTAs needs to be explained. In this report we run four sequential FTA scenarios: 1) SADC, 2) EAC, 3) COMESA and 4) Tripartite. Each one is deemed to be fully operational before the next simulation in the sequence is run. We deliberately model the SADC FTA first, not because we believe it is likely to be the first region to reach comprehensive FTA status but because our analysis concentrates on South and southern Africa. Basically, if a country like Swaziland belongs to both SADC and COMESA, and Kenya belongs to both EAC and COMESA, there will be no gains to Swaziland for sugar exports to Kenya from the Tripartite FTA as it already has that access due to both countries belonging to COMESA. Thus, as Sandrey et al. (2011) discuss, it is hardly surprising that as both the powerhouse of Africa and one of the few countries not claiming multiple memberships, South Africa gains the most from a final Tripartite FTA.

The objective of this chapter is therefore to simulate and report on not only the Tripartite Agreement but also the three FTA pathways to that agreement for the BLNS countries. We believe that such an analysis provides a step-by-step pointer to the potential gains for SACU. Importantly, the theme of this chapter is to concentrate upon the manufacturing sector as distinct from the earlier analysis that concentrated upon the agricultural sectors.

A full discussion on the GTAP model as it is used in this chapter is available from Sandrey and Jensen (2012) and will not be repeated here. Essentially, GTAP is supported by a fully

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<sup>1</sup> We note that in early 2011 Southern Sudan voted to break from Sudan and form an independent country. We have not factored this into the analysis.

documented, publicly available global database, as well as underlying software for data manipulation and for implementing the model, and the framework is a system of multi-sector economy-wide input/output tables linked at the sector level through trade flows between commodities used both for final consumption and intermediate use in production. The latest GTAP pre-release Version 8 database divides the global economy into 112 countries/regions with 57 commodities specified in the database. The database represents global trade in the year 2007 measured in millions of (2007) US dollars. Results are measured as a change in welfare arising principally from the reallocation of resources within an economy and the resulting changes in allocative efficiency, terms of trade effects<sup>2</sup>, capital accumulation and changes in unskilled labour force employment. The GTAP model expresses the welfare implications of a **modelled change in a country's policy** as the Equivalent Variation (EV) in income. **The EV in income measures annual change in a country's income (gains or losses) from having implemented, for example, an FTA.** These total welfare gains/losses can be decomposed into contributions from improvements in allocative efficiency, capital accumulation, changes in the employment rate of the labour force, and terms of trade.

Before simulating the trade policy (FTA) scenario, we construct a baseline scenario to serve as an updated basis for analysis. The baseline scenario updates the standard database with a projection of the world economy from 2007 to 2020, applying suitable shocks to Gross Domestic Product (GDP), population, labour and capital, as well as incorporating the most important developments, realised or planned, since 2007. We have identified and updated the database with the developments such as the implementation of the Trade, Development and Cooperation Agreement (TDCA), and, most significantly, we have assumed that the Economic Partnership Agreements (EPAs) between all African countries except South Africa and the European Union (EU) will be implemented. For the EPA we have assumed that (a) EU27 tariffs are reduced to zero for all EPA countries except for sugar and beef where reductions of 50% were made rather than to zero, (b) for South Africa the EU reduces their

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<sup>2</sup> Where terms of trade are the relative changes in import and export prices following a change. Improved allocative efficiency within a country comes about as it moves resources into more internationally competitive activities following a reduction in its own border protection. Paradoxically, it is this allocative efficiency that provides most of the benefits to the 'home' country from reducing its own protection rather than the exporter gaining better market access as the partner country reduces tariffs. This is an example of where a general equilibrium model is often able to counter the common mercantilist argument that a country needs protection to develop its own industrial sector.



tariffs by 20% in an agreement associated with the EPA, and (c) all EPA countries reduce their tariffs by a blanket 40% on EU imports.<sup>3</sup>

For the GTAP sectors we have used the full set of 16 manufacturing sectors that are available but we often only report on the main ones of interest. Agriculture is merged into (a) primary agriculture and (b) secondary agriculture, while natural resources and services are merged into their respective aggregated sectors as the focus of this report is on manufacturing.

### 1.5 The FTA scenarios

The four FTA scenarios considered in this chapter entail the results of the removal of trade barriers sequentially between 1) SADC, 2) EAC, 3) COMESA and finally 4) the full Tripartite FTA as measured in the year 2020 in a world shaped by the **baseline** scenario. This implies that:

- all ad valorem tariffs and ad valorem equivalents of specific tariffs between COMESA, the EAC and SADC, and finally all Tripartite countries are sequentially abolished;
- an assumed **two percent** blanket tariff equivalent to represent non-tariff barriers (NTBs) has been built in to proxy a reduction in these barriers from each FTA. We note that there is no empirical justification for that two percent level other than an intuitive feel that NTBs are often of that level or even considerably more;
- A similar two percent NTB has also been applied to services to proxy some gains from an FTA where services trade has been factored in.

When all ad valorem tariffs and ad valorem equivalents of specific tariffs between members are abolished, the differences between the so-called **baseline** scenario and then each **sequential FTA** scenario as measured by the gains at 2020 in 2007 real dollar terms are therefore the result of the implementation of each of the simulated FTAs.

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<sup>3</sup> We appreciate that this may not be an exact representation of the EPA outcomes but it seems to us a realistic one.

## 2. The big picture: GTAP results

We start the results review with Table 1 that shows the changes in welfare from the four FTAs as discussed earlier plus the overall final total. The data is expressed in US dollars (millions) as one-off increases in annual welfare at the assessed end point of 2020. The results for South Africa for the SADC and Tripartite FTAs in particular are impressive: for the SADC FTA welfare increases by some \$4,755 million and for the tripartite FTA welfare increases by a further \$1,312 million. South Africa is virtually unaffected by FTAs of EAC and COMESA to the north with minor losses in both instances. To put these SADC and tripartite welfare gains to South Africa in perspective: they each are significantly higher than the welfare gains found from tralac research using an earlier version of GTAP (Sandrey et al., 2010) to assess the gains from FTAs with the Mercado Comun del Sur (Mercosur) (\$236 million) and China (\$295) million. Clearly, the current policy thrust of concentrating upon firstly SADC and then tripartite integration is the best pathway for South Africa.

**Table 1: Change in welfare (EV of income) from sequential FTAs (US\$ million)**

Country /region	SADC Step 1	EAC Step 2	COMESA Step 3	Tripartite Step 4	Total Benefit
<b>SADC</b>					
<b>zaf</b>	<b>4,755</b>	<b>-16</b>	<b>-6</b>	<b>1,312</b>	<b>6,045</b>
bwa	-38	0	-1	-18	-57
xsc	323	-1	84	17	423
<b>World</b>	<b>2,041</b>	<b>-193</b>	<b>-459</b>	<b>91</b>	<b>1,480</b>

Source: GTAP results

The GTAP welfare result for Botswana demonstrates a welfare loss of \$38 million from SADC integration, effectively no change from either the EAC or COMESA FTAs, and a further loss from the Tripartite FTA to give a final loss of \$57 million. The rest of SACU as an aggregation of Lesotho, Namibia and Swaziland shows significant gains of \$323 million from SADC, a further gain of \$84 million from COMESA and a lesser \$17 million gain from the final tripartite FTA. Swaziland is a member of COMESA and our hypothesis<sup>4</sup> at this stage would be that Swazi sugar enters Kenya with better access conditions. Note that the SADC FTA and the final tripartite FTAs are welfare enhancing for the world but not for EAC or COMESA.

<sup>4</sup> This is actually confirmed in detailed agricultural results from Sandrey et al. (2011).

Not shown is that there are negative results for many member countries from the Tripartite FTA: these can be explained by the time path taken to reach the adoption of this Tripartite FTA. Here we sequentially modelled all three regional FTAs to be fully activated sequentially, and we have taken the current memberships at their face value. This means, for example, that Tanzania is a member of both EAC and SADC, with zero tariffs operating between other members of each group. Similarly, Botswana is a member of SACU/SADC and COMESA. For these countries with multiple memberships there therefore (a) there is a limited upside from a Tripartite Agreement as they already have most of the gains through being allied with an extensive grouping and (b), consequently, when South Africa, the dominant economic powerhouse in the region and a country without multiple memberships, enters the full Tripartite Agreement, these countries with multiple memberships face new competition. This suggests that provided the FTAs were to be sequenced reasonably quickly in ‘the real world’, multiple membership is not such a big an issue (aside from logistical problems such as rules of origin and the like). This is, however, a big proviso.

### **Tariff reductions and the implications for the SACU revenue pool**

Sandrey (2007) explores the implications of SACU trade agreements with respect to changes in tariff revenues, and highlights that there are large welfare transfers to the BLNS countries which arise from these countries’ obtaining revenues over and above what they would have collected at their own borders if they were not part of SACU. This has been reinforced by the recent study by the Centre for International Economics (CIE) (2010), as these revenue transfers represent a direct aid support payment from South Africa to BLNS.<sup>5</sup> The objective of this subsection is to explore the implications for BLNS countries in particular of the tariff revenue changes that would result from the series of FTAs.

There are two ways in which tariff revenues would be reduced through an FTA. The first is the obvious one in that with an FTA the vast majority of merchandise goods from the FTA partner(s) would now enter SACU duty-free, and in reality almost all imports from SADC were already entering SACU duty-free. The second relates to trade diversion. This takes place when trade is deflected away from previous sources that were paying duty to the

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<sup>5</sup> The levels of these grants are confirmed by the data in IMF (2009: Table SA20), which reports Official Grants to Lesotho of 37.5 and 32.0% of GDP for 2007 and 2008 respectively. The comparable data for Swaziland was 20.8 and 20.5% respectively, while that for South Africa’s was -1.0 and -1.1% for the two years.

sources which now benefit from duty-free access under the FTA. The overall tariff revenue effect of an FTA has a much larger impact on BLNS than the direct production and trade impacts, and of interest is what happens in South Africa rather than what happens in the individual BLNS countries. The way in which the revenue is distributed is an important and sensitive issue in SACU. Revenues are effectively collected by South Africa and then distributed to the BLNS according to a formula that bears no resemblance to the way in which the revenues are collected. Therefore, given the welfare transfer effects, South Africa's welfare will be slightly lower than that given in this chapter and the BLNS countries' welfare will be slightly higher.

Table 2 shows this data, expressed in US dollars (million) and not in rand. The second column shows the changes in SACU tariff revenue following the first FTA, that of SADC. The third and fourth columns show the addition impacts sequentially of the EAC and COMESA FTAs respectively, while Column 5 shows the addition changes from the final Tripartite FTA. The final outcome once all four FTAs are in place is shown in the right-hand column, and tariff revenue into the pool actually increases marginally as South African manufacturing imports in particular increase.

**Table 2: Revenue changes following tripartite FTAs (US\$ million, 2007)**

Change in tariff revenue, 2007 US\$ million					
	SACU	EAC	COMESA	Tripartite	Final
Primary agriculture	1	0	0	-4	-3
Secondary agriculture	15	0	0	2	17
Resources	0	0	0	0	0
Manufacturing	163	-1	2	30	194
Total	179	-1	2	28	208

Source: GTAP results

This result is in contrast to the substantive tariff revenue losses from a SACU-Mercosur and SACU-China FTA as outlined in Sandrey et al. (2010).

### **The individual GTAP sectors in BLNS**

This section presents the production, trade and relative price changes in the main GTAP sectors for BLNS. Table 3 shows the changes from the sectors used, namely of primary agriculture, secondary (processed) agriculture, natural resources, the manufacturing sectors of importance and services for Botswana. Column 1 shows GTAP sectors, with Column 2 showing the output increase in US dollar (million) values and Column 3 that output change in percentage terms. The next two columns show firstly the percentage changes in exports, then imports, and finally the right-hand column of each section shows the change in real producer output prices. The left-hand side of the table shows the changes for the SADC FTA, while the right-hand side shows the complete changes for the full Tripartite FTA which include the EAC and COMESA FTAs. Therefore, the minor difference that the EAC, COMESA and Tripartite FTAs make to Botswana can be seen by subtracting the SADC FTA on the left from the final total on the right. Following the SADC FTA the remaining changes are of little interest to Botswana. The only important changes to output are in non-ferrous metals and services with increases of \$25 and \$43 million dollars respectively.

**Table 3: Changes to Botswana's production, trade and output prices**

	SADC FTA only					Full Tripartite FTA				
	Change production		% change in			Change production		% change in		
	\$m	%	exports	imports	prices	\$m	%	exports	imports	prices
p_agr	9	0.1	6.7	-2.0	0.7	13	0.2	7.3	-2.7	0.9
s_agr	2	-0.6	-1.9	-0.9	0.6	4	-0.6	-2.1	-1.4	0.7
nat	-1	-0.1	-0.1	-0.1	0.1	-3	-0.2	-0.2	-0.2	0.1
tex	4	4.0	4.1	0.5	0.5	4	4.1	4.3	0.3	0.6
wap	-1	-1.1	-1.5	-0.6	0.5	-1	-1.4	-1.5	-0.5	0.6
lea	1	14.2	43.9	-0.3	0.6	1	14.7	44.9	-0.5	0.6
lum	1	0.2	24.0	0.2	0.5	1	0.3	24.7	-0.1	0.6
ppp	4	2.5	16.9	-0.2	0.6	4	2.7	17.5	-0.4	0.7
crp	6	2.4	8.7	-0.2	0.6	7	2.9	9.8	-0.3	0.7
nmm	1	0.0	12.2	-0.2	0.5	1	0.1	12.8	-0.4	0.6
nfm	25	7.8	7.8	0.7	0.6	25	7.7	7.7	0.8	0.5
mvh	5	17.7	18.9	-0.3	0.5	6	19.1	20.4	-0.4	0.6
fmp	5	0.7	6.1	-0.4	0.5	6	1.0	6.2	-0.7	0.6
otn	1	8.4	19.9	-0.1	0.5	1	8.4	19.9	-0.2	0.6
ele	1	18.8	32.7	-0.2	0.5	1	19.1	33.1	-0.3	0.6
ome	2	3.7	5.2	-0.2	0.6	2	4.2	5.8	-0.3	0.6
omf	1	-0.4	-3.7	0.9	0.6	1	-0.5	-4.1	0.9	0.7
serv	43	-0.3	-1.6	0.6	0.5	34	-0.3	-1.7	0.6	0.5
Total	110							108		

Source: GTAP output

Table 4 shows the same data for the rest of the SACU aggregation (Lesotho, Namibia and Swaziland). Here there is a bigger change from the SADC FTA gains of \$1,494 million in output through to the final increase of \$1,971 million. Much of this increase is in agriculture and secondary agriculture in particular, although services are the big gainers (by \$760 million from SADC and \$1,010 million from the full Tripartite FTA). Note that there are significant increases in the price of outputs from the full Tripartite FTA in particular, as these increases are around two percent in most sectors. Most of the increases from the SADC FTA through to the full Tripartite FTA actually accrue from the COMESA FTA, as there are increases on

\$103 million in secondary agriculture and \$192 million in services from COMESA due to Swaziland's membership of COMESA.

**Table 4: Changes to rest of SACU's production, trade and output prices**

	SADC FTA only					Full Tripartite FTA				
	Change product		% change in			Change product		% change in		
	\$m	%	exp	imp	prices	\$m	%	exp	imp	prices
p_agr	93	0.8	3	4	3.1	108	0.8	1	5	3.7
s_agr	209	1.5	2	3	1.9	282	2.1	4	4	2.5
nat	9	-0.3	-1	5	0.5	4	-0.5	-1	5	0.6
tex	7	0.3	5	4	1.7	36	7.7	35	6	2.2
wap	16	1.7	58	3	1.6	16	1.2	52	5	2.2
lea	6	2.8	33	3	1.7	6	2.0	28	4	2.3
lum	58	19.6	66	7	1.4	55	18.0	62	8	1.9
ppp	15	0.5	-1	4	1.6	19	0.5	-1	5	2.1
crp	53	1.1	3	4	1.5	72	1.5	5	5	2.0
nmm	94	20.7	196	4	1.6	93	19.9	189	5	2.1
i_s	17	1.9	0	4	1.6	22	2.3	-3	6	2.2
nfm	-52	-11.1	-11	-1	1.5	-68	-14.5	-15	-2	2.0
mvh	105	7.0	46	4	1.3	107	6.7	44	5	1.8
fmp	15	1.7	36	4	1.7	16	1.2	31	5	2.3
otn	-4	-4.2	-4	2	1.5	94	67.9	92	9	2.0
ele	15	9.1	103	3	1.6	13	7.4	95	4	2.1
ome	40	1.8	26	4	1.6	45	1.7	26	5	2.2
omf	37	3.7	33	5	1.5	40	3.6	30	7	2.0
serv	760	1.2	-6	5	1.7	1,010	1.5	-8	6	2.4
Total	1,494					1,971				

Source: GTAP results

Table 5 reports on the changes to imports into other countries of importance from Botswana following the SADC FTA. These extra imports (Botswana's exports) total \$59 million, with most being recorded as increased imports into Zimbabwe (natural resources and non-ferrous metals) and Zambia (natural resources). The concept of trade diversion can clearly be seen, as imports into non-African countries decline as they are diverted to SADC

destinations. The overall gainers are natural resources (\$24 million) and non-ferrous metals (\$26 million). The changes in Botswana's exports from subsequent FTAs are minimal, as they actually decline by \$3 million in total from the SADC FTA following the Tripartite FTA.

**Table 5: Changes in imports from Botswana with SADC FTA, 2007 \$ million at 2020**

	<b>zaf</b>	<b>xac</b>	<b>zmb</b>	<b>zwe</b>	<b>chn</b>	<b>EU</b>	<b>row</b>	<b>total</b>
<b>p_agr</b>	0	0	0	0	0	0	0	<b>1</b>
<b>s_agr</b>	1	0	5	1	0	-18	0	<b>-11</b>
<b>nat</b>	-2	0	27	74	-24	-42	-9	<b>24</b>
<b>tex</b>	-1	0	0	7	0	-2	0	<b>5</b>
<b>ppp</b>	0	0	1	2	0	0	0	<b>4</b>
<b>crp</b>	0	0	1	4	0	0	0	<b>5</b>
<b>nfm</b>	-8	0	0	40	0	0	-6	<b>26</b>
<b>mvh</b>	0	0	0	5	0	0	0	<b>6</b>
<b>serv</b>	0	0	0	0	0	-3	-2	<b>-5</b>
<b>Total</b>	<b>-9</b>	<b>2</b>	<b>37</b>	<b>137</b>	<b>-25</b>	<b>-65</b>	<b>-18</b>	<b>59</b>

Source: GTAP output (totals may not reconcile with cells as some minor data is omitted)



Table 6 shows the changes in imports from SADC partners following that FTA for the rest of SACU. These changes are more significant, with an overall increase of \$430 million. Most of this is the big increase of \$861 million to Angola/DRC (secondary agriculture, natural resources and non-ferrous metals in particular) but with offsets to the rest of the world for natural resources in particular. The concept of trade diversion and trade creation is clearly shown in Table 6. The former means that imports of natural resources from rest of SACU into Angola/DRC increase by \$144 million, but the overall increase is a mere \$1 million as trade of \$148 million is diverted away from the rest of the world. On the other hand, imports into Angola/DRC in non-ferrous metals increase by \$107 million and that is precisely the overall increase which shows this to be 100% trade creation.

**Table 6: Changes imports from rest SACU with SADC FTA, 2007 \$ million at 2020**

	zaf	xac	mdg	mus	moz	tza	zmb	row	tot
p_agr	-7	39	0	1	0	0	0	-7	27
s_agr	-4	300	14	5	30	1	8	-205	150
nat	-16	144	0	3	6	0	13	-148	1
tex	0	10	2	0	0	0	0	-6	7
wap	0	9	0	0	0	0	1	-1	8
lea	0	5	0	0	0	0	0	-1	4
lum	-1	53	0	0	0	0	0	0	52
crp	0	32	1	0	3	12	-1	-28	19
nmm	0	107	0	0	0	0	0	-1	107
nfm	-8	2	0	0	0	0	0	-56	-61
mvh	0	71	0	0	1	0	1	-1	72
fmp	0	9	0	0	0	0	0	0	9
ele	0	16	0	0	0	0	0	0	16
ome	0	24	0	1	0	1	7	-6	27
omf	0	29	0	0	0	0	0	-7	22
serv	0	0	0	0	0	0	0	-28	-28
total	-39	861	18	10	41	15	31	-506	430

Source: GTAP output (totals may not reconcile with cells as some minor data is omitted)

Table 7 extends the trade analysis as measured by imports from the rest of SACU following the Tripartite FTA, with the data shown as the **changes from the base of the SADC FTA**. The big increase is to rest of East Africa (Kenya probably) in secondary agriculture, 'other transport' and textiles, with these three being the only real overall winners. Imports into Angola/DRC, China and the EU decline while those into rest of North Africa, Uganda and Ethiopia increase. Note in particular the large declines in secondary agriculture into the EU and the rest of the world as defined by non-Africa, except for EU and China in this instance.

**Table 7: Changes imports from rest of SACU with tripartite FTA, 2007 \$ million at 2020**

	xnf	xac	eth	uga	xec	EU	row	total
p_agr	0.0	-6.1	0.0	0.0	0.4	-0.8	-1.1	-7
s_agr	0.0	-13.8	0.1	14.2	116.1	-50.3	-53.6	58
nat	7.8	-9.4	0.1	0.0	4.4	-3.7	-12.1	-10
tex	0.0	-1.0	0.4	0.0	32.5	-0.1	-1.7	30
lum	0.0	-2.7	0.1	0.0	0.2	0.0	0.0	-3
crp	0.0	-2.3	8.5	0.5	11.6	-1.6	-6.5	9
nmm	0.0	-3.1	0.0	0.0	0.1	0.0	-0.1	-3
nfm	0.0	-0.5	0.2	0.0	0.0	-9.4	-13.9	-16
mvh	0.0	-4.3	0.0	0.0	1.5	-0.1	-0.2	-3
otn	0.0	-0.5	0.0	0.0	98.1	-1.1	-1.2	96
serv	0.0	-0.1	0.0	0.0	0.1	-4.2	-8.0	-8
total	7.9	-52.1	11.3	14.9	273.0	-72.0	-102.7	138.8

Source: GTAP output (totals may not reconcile with cells as some minor data is omitted)

Continuing with the trade theme we examine the changes to the BLNS countries' own imports with the SADC FTA. Most of the tariffs on imports from SADC into the BLNS were at two percent, the figure used to proxy the trade facilitating benefits of an FTA, but not all as the tariff base was at 2004 levels with 2007 trade flows. There may therefore be a slight overestimate of the increased imports from SACU into BLNS in that case. These imports, however, are mostly minor, as an examination of the tariff data shows that this would make a difference only in the cases of textiles and clothing since the GTAP database has not quite kept tariffs and trade in lockstep here. Changes to imports into Botswana were minor. There were increases from Zimbabwe within SACU and non-African countries but a decline from South Africa of \$50 million for an overall increase of \$22 million (recall that Botswana

actually suffers a small loss in welfare and therefore becomes marginally poorer and less able to afford imports while, conversely, the price of South African merchandise increases). Completing the full FTA suite with the Tripartite FTA makes little difference to this result. Imports from South Africa marginally decline again while those from other sources increase with no overall difference to the total imports.

In contrast, the rest of SACU becomes wealthier and their increases in imports following the SADC FTA are shown in Table 42. Increases of \$121 million are reported from South Africa, \$99 million from the EU and \$51 million from China; and these are the main contributors to the overall increase of \$416 million. These increases are spread through most of the GTAP sectors, and effectively no significant trade diversion losses are reported. Extending the analysis to the full Tripartite FTA shows an overall increase of another \$144 million in total. Some \$29 million comes from South Africa, \$48 million from the EU and \$20 million from China – and again this is pure trade creation.

**Table 8: Changes in rest of SACU imports with SADC FTA, 2007 \$ million**

	zaf	moz	zwe	chn	eu	usa	row	total
p_agr	16	1	3	0	0	4	0	29
s_agr	23	0	9	0	7	1	2	45
tex	-1	0	0	5	1	0	0	13
lum	6	0	0	3	1	0	1	12
ppp	3	0	0	0	6	0	0	11
crp	11	0	0	2	5	0	8	34
nmm	7	0	0	3	1	0	0	12
mvh	31	0	0	1	2	2	0	43
fmp	3	1	0	1	11	0	0	18
ele	-3	0	0	10	2	0	0	17
ome	8	0	0	16	15	5	2	53
serv	0	7	0	1	40	14	4	87
total	121	11	13	51	99	29	20	416

Source: GTAP output (totals may not reconcile with cells as some minor data is omitted)

### Decomposition of the welfare changes

Output from the GTAP model allows us to examine the relative contribution of welfare changes to each country/region in the model from both (a) every other tripartite country/region, including own liberalisation as shown in Table 9, and (b) the commodity sectors as shown in Table 10. Table 10 shows the sequential **total changes** for the BLNS countries from the four FTAs. Reading across the table Columns 2, 4, 6 and 8 show the results for Botswana from SADC only, SADC plus EAC, SADC plus EAC plus COMESA, and finally the full Tripartite FTA on the right-hand side. From viewing the bottom row, for example, it is clear that Botswana loses \$38 million from both SADC and EAC, meaning that EAC has no real impact. Adding COMESA increases the loss to \$40 million while the final Tripartite increases this again to \$57 million.

Results for the rest of SACU are more interesting. These are shown in Columns 3, 5, 7 and 9. SADC and SADC plus EAC have virtually the same results, meaning that EAC has no impact. However, introducing the COMESA FTA into Column 7 shows the increased welfare coming from the rest of East Africa and, to a smaller degree, Uganda. Recall that Tanzania is already a member of SADC. Taking the final step to a Tripartite FTA increases the overall gains by \$17 million, with this essentially also deriving from the rest of East Africa. Note that the gains into Angola/DRC reduce marginally across the table row for the rest of East Africa, but not by much.

**Table 9: Welfare decomposition for BLNS by SADC countries, 2007 \$ million**

	SADC only		SADC+EAC		SAD+EAC+COM		Full Tripartite	
	bwa	xsc	bwa	xsc	bwa	xsc	bwa	xsc
zaf	2	2	2	2	2	2	3	3
bwa	1	0	1	0	1	0	2	0
xsc	0	0	0	0	0	1	0	0
xac	-22	311	-22	311	-21	306	-21	303
mdg	-1	7	-1	7	-1	7	-1	7
mwi	-2	-1	-2	-1	-2	-1	-2	-1
mus	-5	-1	-5	-1	-5	-1	-5	-1
moz	-12	4	-12	4	-12	4	-12	4
tza	-5	2	-5	2	-5	2	-5	2
uga					0	6	-1	5
zmb	-1	3	-1	3	-1	3	-1	3
zwe	8	-5	8	-5	8	-5	8	-5
xec	-1	1	-1	0	-2	77	-18	97
total	-38	322	-38	323	-40	406	-57	423

Source: GTAP output (totals may not reconcile with cells as some minor data is omitted)

Table 10 for the sector decomposition can be read in conjunction with Tables 3 and 4 which show the changes in output, trade and prices in Botswana and rest of SACU respectively. Changes to both concentrate on secondary agriculture, with Botswana losing from each FTA and the rest of SACU gaining strongly. Botswana loses consistently across all other sectors, while the rest of SACU makes some solid gains from the manufacturing sectors. Services are effectively neutral, but there are some gains from natural resources as production and trade patterns in the region readjust. Here, the aggregation problem means that we cannot really decompose these changes further into Lesotho, Namibia and Swaziland, but some of these changes can be inferred from an understanding of the structure of the trade and production patterns in each country. It is likely but not certain that sugar from Swaziland is a major factor in the COMESA FTA while much of the manufacturing gains may be concentrated in Namibia.

**Table 10: Welfare decomposition for BLNS by commodity, 2007 \$ million**

	SADC only		SADC+EAC		SAD+EAC+COM		Full Tripartite	
	bwa	xsc	bwa	xsc	bwa	xsc	bwa	xsc
p_agr	-5	4	-5	4	-5	4	-6	2
s_agr	-17	132	-17	132	-17	186	-25	170
nat	7	22	7	22	7	23	7	23
tex	0	5	0	5	0	18	0	18
wap	-1	3	-1	3	-1	3	-1	3
lum	0	20	0	20	0	19	0	19
crp	-6	19	-6	19	-6	32	-8	29
nmm	-1	45	-1	45	-1	44	-1	44
i_s	-2	-1	-2	-1	-2	-1	-3	-2
mvh	0	30	0	30	0	31	0	30
fmp	-4	1	-4	1	-4	1	-4	1
otn	0	2	0	2	0	2	0	45
ele	-2	7	-2	7	-2	7	-2	7
ome	-7	11	-7	11	-8	14	-9	13
omf	-1	18	-1	18	-1	19	-1	18
Total	-38	322	-38	323	-40	406	-57	423

Source: GTAP output - totals may not reconcile with cells as some minor data is omitted

### Summary

Regarding the **BLNS countries**, the results for the SADC FTA show that Botswana's loss is 0.05% of GDP while the rest of SACU gains \$323 million or 1.15% of GDP. Botswana loses across all sectors of the economy except for natural resources which expand marginally. For the rest of SACU, secondary (processed) agriculture is the big gainer from better access into Angola/DRC, and most manufacturing sectors gain.

We can conclude overall that the next step of EAC regional integration has virtually no impact upon the BLNS countries. However, there are solid gains to the rest of SACU from the third step of the COMESA FTA. These come about because Swaziland is a member of COMESA and consequently granted better access for sugar into the rest of the East African aggregation in particular. There are virtually no other changes, however, but these gains

effectively carry through to the final Tripartite FTA. Conversely, there are no impacts on Botswana from either COMESA or the full Tripartite FTAs.

Botswana loses marginally from the SADC FTA and that situation does not change with the other steps to full regional integration, whereas the rest of SACU gains (a) from the SADC FTA and then again (b) from the COMESA FTA by virtue of its linkage to COMESA through Swaziland's membership. Importantly, following each of the sequential FTAs, total revenue for the SACU tariff revenue pool actually increases by a final end result of an extra US\$179 million following the full Tripartite FTA. This is as a result of South Africa manufacturing imports from non-SADC countries increasing in response to a more buoyant South African economy.

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## Annex 1

### Membership of the regional blocs

Country	SADC	EAC	COMESA
Angola	X		
Botswana	X		
DRC	X		X
Lesotho	X		
Madagascar	X		X
Malawi	X		X
Mauritius	X		X
Mozambique	X		
Namibia	X		
Seychelles	X		X
South Africa	X		
Swaziland	X		X
Tanzania	X	X	
Zambia	X		X
Zimbabwe	X		X
Burundi		X	X
Kenya		X	X
Rwanda		X	X
Uganda		X	X
Comoros			X
Djibouti			X
Egypt			X
Eritria			X
Ethiopia			X
Libya			X
Sudan (now two countries)			X



**Table 1: GTAP countries/regions used and their associated GTAP codes**

<b>The tripartite countries</b>	
zaf	South Africa
bwa	Botswana
xsc	Rest of SACU (Lesotho, Namibia and Swaziland)
xac	Rest of southern Africa (Angola and DRC)
egy	Egypt,
xnf	Rest of north Africa (Libya and non-tripartite Algeria)
eth	Ethiopia
mdg	Madagascar
mwi	Malawi
mus	Mauritius
moz	Mozambique
tza	Tanzania
uga	Uganda
zmb	Zambia
zwe	Zimbabwe
xec	Rest of eastern Africa (including Kenya and Sudan)
<b>Rest of Africa – all non-tripartite countries/regions in Africa</b>	
chn	China
eu	EU27
us	United States of America
ind	India
bra	Brazil
rus	Russian Federation
row	Rest of the world

Source: GTAP database

## **Editors' and Authors' Profiles 2011**

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