A Cost-Benefit Analysis of Monetary Integration
The Case of Lesotho, Namibia, and Swaziland in the CMA

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List of Acronyms

BLNS  Botswana, Lesotho, Namibia and Swaziland
CEMAC  Central African Economic and Monetary Community
CET  Common External Tariff
CMA  Common Monetary Area
CRP  Common Revenue Pool
ECCU  Eastern Caribbean Currency Union
EDA  Exploratory Data Analysis
EMU  European Monetary Union
FDI  Foreign Direct Investment
IMF  International Monetary Fund
LNS  Lesotho, Namibia and Swaziland
OCA  Optimum Currency Area
RMA  Rand Monetary Area
SA  South Africa
SACU  Southern African Customs Union
SADC  Southern African Development Community
SARB  South African Reserve Bank
UNCTAD  United Nations Conference on Trade and Development
WEMAC  West African Economic and Monetary Union
Abstract

This paper investigates the cost and benefits of the smaller member countries in Southern Africa on their participation in the currency area, namely the Common Monetary Area (CMA). Monetary unification may help economic integration; this in part is viewed as a way of improving macroeconomic management for the various member countries involved. To this effect, it was found that given the high degree of openness of the economies of Lesotho, Namibia and Swaziland (LNS) and their small size, the use of nominal exchange rate as an instrument of adjustment will render limited impact. For that reason, the current peg to the Rand affords greater benefits than costs to the LNS countries. Nonetheless, if the South African economy becomes unstable at any point in time, this will have major repercussions to the rest of the CMA given its powerful muscle in the current arrangement and the degree of dependency of the LNS countries on the anchor economy. Furthermore, fiscal consolidation within the currency area is deemed necessary and the management of fiscal accounts should be highly considered for the LNS economies as this also leads to more synchronized business cycles between member countries.

Relevance to Development Studies

Regional integration continues to be advocated by international institutions as a way of achieving higher growth and development. As a result, developing countries are resorting to creating regional blocs as an instrument for achieving growth and development, and therefore the effectiveness of this approach needs to be assessed. For the African continent specifically, it is viewed that greater benefits will accrue to the region if more cooperation between the states are undertaken, taking advantage of economies of scale that is realized during this process. Furthermore, monetary unification is deemed to generate fewer costs, increase trade and reduce instability among participating countries. In view of the South-South cooperation, this study adds to the current debate on how the developing countries’ integration could lead to growth in the region.

Keywords

Optimum currency area, economic and monetary integration, monetary union, currency area, regional integration, customs union
CHAPTER 1

Introduction

1.0 Background

Monetary integration in the developing world is still finding its ground at the moment, especially in the case of sub-Saharan Africa. After the end of the Bretton Woods system, the period following it saw diminished appetite in fixed exchange rate regime, however greater interest of monetary integration, most notably in Western Europe re-emerged in the late 1980s. In view of the successful establishment of the European Monetary Union, greater attention both in the theoretical and empirical sphere has been witnessed with regards to monetary integration. As a result, given the effective integration of the European economies, more countries around the globe are in negotiations to mirror the same cooperation. By the same token, with the pursuit of financial stabilisation in both developing and the emerging market economies, there has been a rising revival of interest in the institutional framework of currency boards (Boyd and Smith 2003).

Fundamentally, it is thought to be beneficial for economies with similar characteristics to form a monetary area due to the gains that accrue to member states that makes up part of such an alliance. There is currently no universal definition of what a monetary union is, this is due to the fact that presently we find a wide range of monetary arrangements that exhibit different features and yet are referred to as monetary integrations. In view of that, one main reason for the observed varying degrees of integration on the monetary side is attributed to the “fundamental incompatibility of the three desiderata of governments: exchange rate stability, capital mobility, and monetary autonomy” (Cohen 1992: 556). The early literature on monetary integration by Mundell (1961) defines an optimum currency area (OCA) as a “currency area for which the costs of relinquishing the exchange rate as an internal instrument of ad-
justment (i.e., within the area) are outweighed by the benefits of adopting a single currency or a fixed exchange rate regime” (Ricci 2008).

In a currency area, member countries adopt a fixed exchange rate regime or a single currency within the area, and maintain a floating exchange rate regime with the rest of the world. Revoking the use of nominal exchange rate instrument as a policy tool to mitigate shocks is quite the commitment and hence participating economies must consider this beforehand. In this regard, for a currency area to fall within the definition of “optimality” it means the impact of shocks is reduced by participating in the monetary integration. Accordingly, optimality is defined in terms of various OCA properties from earlier literature, this includes price and wage flexibility, financial integration, mobility of factors of production (including labour), financial market integration, the degree of openness, diversification in production and consumption, similarities of inflation rates, fiscal integration which also links with political integration. In light of these factors, naturally countries forming a currency area expect the benefits to outpace the costs. Nonetheless, as was previously mentioned, not all currency areas are the same, hence the factors suggested to be in place for a monetary integration to be dubbed as “optimal” will not always be applicable.

The role of Africa in South-South cooperation deserves some sort of attention, the region’s economic integration started growing during the 1990s (Murshed, Goulart et al. 2011). For that reason, this paper strives to evaluate the current costs and benefits of membership to the currency area for the smaller member economies of the Common Monetary Area (henceforth CMA), including whether current talks of welcoming more regional states to the monetary area are feasible or not. Accordingly, the CMA, the currency area between the Southern African countries; namely Lesotho, Namibia, South Africa and Swaziland represents a large regional entity. In 2004, it had an estimated combined GDP of US$224 billion, making up about 43 percent of the total of sub-Saharan Africa (Harris et al. 2007). However, despite the impressive muscle it seems to display, economic and social developments in the CMA have remained uneven among the member states.
The existing monetary arrangement found in Sub-Saharan Africa is as a result of a variety of choices made after the colonial era came to an end. In the CMA, unlike customary monetary unions, there is no common central bank, no common pool of reserves, and more importantly no surveillance of domestic, mainly fiscal and structural policies. Under the current terms of the agreement, Lesotho, Namibia, and Swaziland issue their own national currencies—the loti, the Namibian dollar, and the lilangeni, respectively; these currencies are pegged (at par) to the South African Rand since their introduction. In addition, the Rand is legal tender in each of the other three countries; however, none of the three currencies are legal tender in South Africa. As a result, given that the Rand is legal tender in the other three countries, South Africa reimburses each of the countries for forgone seigniorage\(^1\) (Tavlas 2009). In this regard, seigniorage is a source of revenue for government obtained through printing national currency. Furthermore, the amount of revenue obtained through the printing of national currency is the residual of the difference between the value of the currency and the total cost of producing it. As a result, South Africa makes payment to the small member countries as a form of compensation for allowing the Rand to circulate as legal tender in their economies. Furthermore, having the other CMA currencies pegged against the Rand, the South African monetary authorities have adopted a floating exchange rate for the Rand against other currencies. Consequently, monetary policy for the CMA countries is set by the South African Reserve Bank guided by events in the (South African) domestic market.

In addition the agreement outlines that member countries may introduce measures for domestic resource mobilization in the interest of developing their respective economies. This may include governments increasing spending for developmental projects to raise employment and enhance infrastructure, result-

\(^1\) For the case of the CMA, seigniorage on the Rand currency circulating in the LNS countries is calculated as follows: \(s = (2/3)^*\text{Bond yield}^*\text{cu}\), where Bond yield represents annual yield on the most recently issued long-term South African government stock and cu an estimate of the volume of Rand in circulation in LNS countries. The 2/3 is based on interest on earned by a portfolio in the currency area, which is likely to contain both long-term and short-term assets with lower yields. See Grandes (2003) for more on this.
ing in uncoordinated policies of the participating states, especially with regards to fiscal policies synchronization within the currency area. However, the Tinbergenian approach argues that national fiscal policy should enjoy a higher degree of autonomy given the loss of independent monetary policy in combating shocks of individual economies. In addition, as it stands, there is no commitment from the smaller economies to keep a given parity and there exist no arrangement currently, providing mutual support if the exchange rate peg comes under pressure (Harris et al. 2007: 14). However, in light of this, the small member countries – Lesotho, Namibia and Swaziland (henceforth LNS)- according to the terms of the agreement are explicitly required that at least a proportion of its monetary liabilities must be supported by the reserve currency, the Rand, or other foreign assets (Kalenga 2001).

Adding to the literature, Grandes (2003) and other authors who have undertaken similar studies have shown that external shocks impact the member states of the CMA unevenly; making it a less optimal currency area when considering the factors that makes a monetary integration “optimum”. Similarly, specific to the case of the CMA, it is an integration of a major lead economy (South Africa) and very small open economies, themselves very dependent on the former and hence very restricted decision-making power (Grandes 2003: 7). The larger economy, South Africa, shifted from a pegged exchange rate regime to flexible exchange rate, adopting inflation targeting as a policy tool (Harris et al. 2007: 47). However, the same study by Harris et al. (2007) revealed that the small member states have failed to benefit equally from a more flexible exchange rate thus far. In this regard, the small economies have used fiscal deficits as a response to shocks and these are mainly financed through borrowing, both domestically and in the foreign markets, subsequently resulting in the lowering of the stock of international reserves of the LNS countries. Due to the negative consequences that the ongoing uncoordinated policies within the currency area impose on monetary agreement, this study will also evaluate the current policies of the LNS countries and how they impact on the existence of the monetary area. In doing so, the study attempts to assess the cost and benefits of membership to the CMA for the smaller states, thereby also evaluating the optimality of the existing currency area and finally, whether
current discussions of extending membership to neighbouring economies is practical.

1.1 Problem Statement and Justification

Studies have shown that countries with similar business cycles are better candidates to form monetary integration and that integration further reinforces synchronization within a union (Rybacek 2009). The monetary integration of the Southern African region is one unique set-up from what is thought to be the standard structure in a currency area. As previously highlighted, the CMA comprises of three small open economies that have adopted the currency of an emerging market economy, South Africa. Consequently, South Africa acts as “big brother” for the LNS countries, with the South African Reserve Bank undertaking the monetary policy decisions for the area as a whole. On the other hand, the structures of the member countries of the CMA are different. In this regard, the LNS countries’ production and export base is narrow being heavily dependent on minerals and agricultural production. Whereas the South African economy is extremely diversified, when compared to the other participating countries, having a wide base with regards to its mineral, agricultural, and manufacturing production. As a result, the small member countries are at a greater risk of facing different shocks, dissimilar to those of the anchor economy. Accordingly, Table 1-1 shows the member countries of the CMA with a few indicators to show the extent of diversity amongst the group of countries.

Table 1-1: CMA Countries: Selected Economic and Social Indicators, 2012-2013

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Lesotho</th>
<th>Namibia</th>
<th>South Africa</th>
<th>Swaziland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income level</td>
<td>Lower</td>
<td>Upper</td>
<td>Upper middle</td>
<td>Lower</td>
</tr>
<tr>
<td></td>
<td>middle income</td>
<td>middle income</td>
<td>country</td>
<td>middle income</td>
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<td>country</td>
</tr>
</tbody>
</table>
The current set-up is one that depicts a polarisation of economic development towards the South African economy, even though there are some instruments in place that aim at compensating the smaller economies for the divergence within the monetary area (Gibb 2007). Accordingly, unlike in a conventional currency board setting, the small economies of the CMA all have central banks that execute functions such as providing loans to their individual governments when need arises (Tjirongo 1995). At the moment, policy decisions made by the South African Reserve Bank are in line with addressing the events in that economy and not necessary those of the currency area as a whole. Consequently, since the LNS countries are tiny economies all different in their own nature, overcoming this inequality amongst the member states requires both institutional-building and institutions-sharing. The CMA in a way could be viewed as a combination of both currency board and currency area, although the Rand remains the anchor currency, member countries have not

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2 The World Bank uses the Atlas conversion factor instead of simple exchange rates to compute GNI per capita. The purpose of the Atlas conversion factor is to reduce the impact of exchange rate fluctuations in the cross-country comparison of national incomes.
made an irreversible pledge to keep a given parity (Grandes 2003: 9). And for that reason it is argued that the monetary area is not actually a complete monetary union even though it is a currency board since foreign assets back domestic currency issuance and given the fact that the monetization of fiscal deficit is not permitted.

Fundamentally, currency unions are seen as an agency of restraint for governments as they are left with minimal policy muscles to impact on their economies. Monetary cooperation, at least in the African context, and especially for the case of the CMA was largely formed due to administrative convenience and seigniorage considerations at the time, as issues of exchange rate policy and fiscal restraint were not major focus areas initially (Honohan and Lane 2000: 3). Although many of the monetary integrations in Africa were dissolved right before and after attaining democratic independence, owing this move to the notion that adopting a national currency is a symbol of sovereignty. Conversely, this was however not the case for CMA, as most conditions are still prevailing long after independence with minimal adjustments to the original agreement. It is therefore difficult to conduct an impact evaluation of before-and-after effects for the member countries given the longstanding monetary arrangement, with the exception of Botswana who opted out after independence. Consequently, the countries of the LNS are rather highly dependent on the anchor economy, given that most of the decision making power rests on South Africa, quite understandably since about 95% of the GDP in the CMA is from that economy (see Table 1-1). As a result, it is argued that during this process the anchor economy has positioned itself remarkably having the neighbouring countries highly dependent on its economy for most of its products (for both goods and services).

The setup up of the CMA involves some of the following features in order to uphold the currency peg of the Rand zone. In this regard, the CMA (multilateral) Agreement provides the three smaller economies the permission to issue their own national currencies, and the bilateral agreements between each one of them with South Africa outlines the areas where their currencies are
legal tender. Consequently, the LNS can only use their respective currencies as legal tender within their domestic economies. While the South African Rand, however, is legal tender throughout the member states of the CMA. The bilateral agreement between Lesotho and South Africa, and that of Namibia and South Africa obligates these small economies to maintain their foreign reserves at least equivalent to the total sum of their respective domestic currencies. It goes without saying that it is crucial to uphold checks and balances in a monetary union to ensure it at least remains beneficial for each member country to continue to be a part of the arrangement. This may include the need to establish strict bounds on central bank lending to governments and a requirement on minimum levels of foreign reserves, these are yet to be put in place for the CMA. Accordingly, this paper will identify some of the loopholes in the current agreement and in doing so this will help in weighing the current costs and benefits for the participating economies of the CMA, and to decide whether more effort is needed to increase optimality in the currency area.

The smaller economies of the CMA have in recent years recorded increasing balance of payment deficits and this can lead to pronounced imbalances, and in the process threatens the monetary integration. The aim is to maintain a stable equilibrium in the balance of payments for all countries, which is a core objective of macroeconomic policy. What is more, the countries’ membership to the CMA in the process is at risk due to the depletion of international stock of reserves, more so for the smaller economies. As previously highlighted, empirical analysis has confirmed that external shocks impact unevenly on the member countries of the CMA. In response to the asymmetric shocks, each CMA country has reacted differently, sometimes resorting to fiscal tools to lessen the impacts. Moreover, South Africa moved from a pegged exchange rate regime to a flexible exchange rate regime, adopting inflation targeting as its monetary framework (further details with regards to this will be discussed in Chapter 4). Consequently, as a way of mitigating shocks, all of the small countries (most especially for the Namibian and Swazi economy) have resorted to fiscal deficits that are largely financed through borrowing, resulting in the lowering of international reserves. Additionally, by virtue of the CMA arrangement, there are no restrictions on current account and capital flows between
member countries. As a result, institutions in the LNS countries record continuous capital outflows to the anchor economy, whose financial sector is more developed in search for better yields as well as diversification into different financial instruments.

Over the past 30 years, the magnitude of economic activities for the LNS countries has not changed much, showing minimal alterations over the years. Consequently, along the years, it can be argued that greater dependence on the anchor economy has intensified; this is evidenced in the statistics from the region. The ongoing trends in the smaller member states of the monetary union has led to a continuous below par growth in trade flows which in turn has negative consequences not only on their domestic economies but also to the monetary arrangement. Accordingly, the LNS countries continue to record low levels of growth in general which can undermine the countries’ individual objectives of attaining much needed development, further increasing the vulnerability of the CMA countries, especially of the small members to external shocks. To illustrate the level of disparity between the LNS countries and South Africa, Figure 1-1 depicts the share of merchandise trade flow of the CMA countries for the period between 1980 and 2013, to show the developments along the years.

**Figure 1-1: CMA shares of merchandise trade flows 1980-2013**

Data Source: Author’s calculations using data from the UNCTAD website
A glimpse at the trend in shares of trade flow over the years in Figure 1-1 manifests South Africa’s dominance in the monetary integration. This is not surprising given that the anchor economy of the currency area is an emerging market economy, unlike its partner countries. We observe very minimal or no changes in shares for the LNS countries, with some depicting lower shares than was initially recorded in 1980. In this regard, on average, over 90 per cent of the CMA’s merchandise trade flows are those of South Africa, with Namibia trailing behind with a mere 5 per cent followed by Swaziland and Lesotho. Of course, as was highlighted from the introductory section, this is not an arrangement amongst equals which is typically one of the factors that bring economies together to form monetary integration. However, this does not justify the low performance of the LNS countries and hence as previously alluded to, this trend will only result in vulnerabilities to external shocks for the countries in question and the region as a whole. Accordingly, maintaining a fixed exchange rate in the presence of sizeable terms of trade shocks requires significant cushion in the form of foreign exchange reserves, and this may be achieved in many ways, one major one is increasing export earnings for the small economies to increase their reserves (Déché and Martijn 2008: 118). Increasing the level of foreign reserves in the currency area will ensure the economies against shocks and help mitigate imbalances. Therefore, it is vital for the monetary union as a whole to find ways in which growth can accrue evenly amongst the partner countries. Evidently, this just goes to show that South Africa’s monetary policy decisions may at most time not meet the requirements of the LNS countries given their diverse economies and different needs.

In an effort to enhance stability within a monetary integration, there are certain measures to be upheld in order to ensure security of the fixed exchange rate. Again, most importantly this includes a sufficient amount of the pool of international reserves to serve as buffer. This is because for the LNS countries there continuous to be inadequate levels of foreign exchange stock, which renders to be costly in the end. Accordingly, theory suggests that the choice of
reserve adequacy is inclined to the quantity theory of money, whereby for governments the measurement is thought to be via imports (Pao 2003:20). In this regard, Figure 1-2 shows the most common standard measure of reserve optimality, the import coverage ratio for the small member countries.

**Figure 1-2: Trend in Import Cover ratio for the LNS countries, 1992-2013**

A glance at the trend of the import cover ratio (which measures a country’s imports in terms of its foreign exchange reserves) for the LNS countries, in Figure 1-2 above, indicates the low level of reserves for most periods for Namibia and Swaziland. The two economies have in the past 21 years recorded low months of imports as per international standards of at least 3 months, barely ever recording above four months. For this reason, preserving the current economic and monetary integration is crucial to these economies, especially in an effort to ensure that gains outweigh the costs. In addition, credit rating agencies continue to highlight the low level of international reserves for Namibia and Swaziland and can result in the downgrading of these economies. Furthermore, the International Monetary Fund (IMF) has on several occasions cautioned the inadequacy of the stock of international reserves, specifically for Namibia.
It is against this background that this research paper is aimed at investigating the costs and benefits of current participation by the LNS countries in the CMA, and in doing so also answer the question of optimality of the monetary integration. In addition, we will establish the conditions that should prevail for all participating countries to reap benefits in a currency area. For that reason, recommendations with reference to similar monetary settings will serve as guidance.

1.2 Research Question

1.2.0 Main Question

The main question is: Is the current monetary integration in the CMA beneficial to member countries, especially in the case of the small participating economies?

1.2.1 Sub-Questions

i. What are the conditions that should prevail for the CMA to be referred to as an optimal currency area?

ii. What are the costs and benefits of participating in such an exchange rate arrangement for the LNS countries?

iii. What are the policy implications for the outcomes of this research on the participating economies of the CMA and the economic desirability of extending membership to other neighbouring countries?

1.3 Methodology and Limitations in carrying out Research

1.3.0 Data

Secondary data from the various databases and from the website of the different central banks will mainly be used. In this regard, macroeconomic data from the balance of payment accounts, fiscal accounts, and measures of opti-
mality in monetary integration will be analysed to aid in answering the research questions.

In this regard, secondary data will be obtained from international institution’s websites and various national data sources, which largely includes the following:

- World Bank
- Trading Economics
- International Monetary Fund
- Southern African Customs Union (SACU)
- Central Bank of Botswana
- Central Bank of Lesotho
- Central Bank of Namibia
- Central Bank of Swaziland
- South African Reserve Bank
- United Nations
- United Nations Conference on Trade and Development (UNCTAD)

For the purpose of the study, the data used will focus on all the CMA countries namely; Lesotho, Namibia, South Africa and Swaziland. However, greater emphasis will be made on the LNS countries throughout the paper as they are the main focal economies for this study. Additionally, Botswana will also feature when analysing some variables given that the economy is highly linked to the CMA. The time period will vary depending on the availability dates as all countries attained independence in different years and this influences data starting periods. As a result, the earliest data set will include data from 1980 and the latest year will be 2013, except when data for all the member countries are not available for a certain period.

1.3.1 Methodology
To answer the main and sub-questions, the research will apply quantitative data analysis, focusing on macroeconomic data. Though, it should be noted that this paper will not utilize econometric methods for the purpose of solving the research questions. Therefore, to solve the research questions and present the data, the exploratory data analysis (EDA) approach will be used as a way to produce visual summaries of the data sets. Based on the simplicity and clear visuals of the trend in a specific variable, this alternative method compared to conventional econometrics forecasting techniques serves as the best option in tackling the questions (Naylor et al. 1972: 135). Moreover, the use of EDA is found suitable for both quantitative and qualitative data as it permits the author to summarize the key characteristics of a specific economy together with the variable in question. In addition, not only does this approach help the researcher and readers to gain insight into data in a clear and concise manner, but it also brings out the most important elements of the data. And so through this method the presentation of data will be by way of tables and graphs to show relevant indicators and trends. Therefore, this approach analyses data sets to summarize their main characteristics, mainly with the visual methods mentioned above. In this regard, EDA will essentially be useful in telling a story of the different data sets which goes beyond the techniques such as modelling or hypothesis testing.

In addition, to address the research questions, I will analyse the trends in data by using graphs, tables and using theoretical analysis of existing monetary arrangements in an effort to examine the costs and benefits and in turn the optimality of the currency area. Furthermore, a description of time series data on macroeconomic variables and commenting on time trends and patterns of the data will be carried out, with the aid of packages like excel to trend time series data e.g. going up or down, breaks in them and causation.

1.3.2 Limitation

The use of secondary data has the danger of being outdated and at times inaccurate. Therefore, the risk in using secondary data is having less infor-
mation on how it was collected and what precision was assigned to it. Quality of data is hence compromised. In addition, for this paper there is variations in data published by different institutions i.e. World Bank vs the various central banks, deciding on which to use might serve as a limitation. Furthermore, data for all member countries have different availability date and not all of them are up to date, so this is will be tricky to harmonize and determine the cut-off date. For this research specifically, data availability dates differ for the CMA member states, ranging from the earliest; 1960 (SA) and to 1990 (when the latest member attained political independence).

1.3.3 Layout of Paper

The subsequent sections are organized as follows:

- Chapter two reviews the literature on topics of optimum currency union, looking at both “old OCA” theory and the “new OCA” theory for a monetary union; this is set to give background and scholarly debates on the optimality of currency areas in order to address questions pertaining to this study. Empirical evidence will also feature, looking at monetary union and literature. Additionally, the chapter will introduce the theory of business cycles synchronization, which ties in with topics under currency areas.

- Chapter three gives an overview of the Common Monetary Area, its history and the customs and trade integration within the currency area.

- Chapter four focuses on the South African exchange rate dynamics which determines overall exchange rate within the Common Monetary Area.

- Chapter five is entirely dedicated to analysis of the macroeconomic data/ accounts of the CMA member countries, especially the small member countries as they are the main focus of the topic.
• Chapter six will present the conclusion and policy recommendations
CHAPTER 2

Literature Review and Empirical Evidence

2.0 Overview

This part of the paper will examine existing theories and empirical literature in line with optimum currency areas and the theory on businesses cycles synchronization within a monetary union/currency board.

2.1 A Theory of Optimum Currency Areas

The 20th century experienced a growing number of monetary integration, most notably when the first twelve European countries adopted a single currency and also with the application of dollarization in countries like Ecuador and El Salvador. In addition, many of the Latin American countries are heavily considering dollarization due to their close trade links with the United States of America. Adopting another country’s currency or maintaining a currency board were seen as credible commitment devices and a mechanism for stabilizing an economy. In this connection, currency unions typically take one of two arrangements. The first option, which is the widely known type of monetary integration, is when the importing nations (which in most cases are small open economies) adopt the currency of a large anchor economy (Alesina et al. 2003: 301). In the second option, a group of countries creates a new currency altogether and a common central bank, as in the case of the Euro Zone. The first option is what we find in most emerging and developing countries and this is where the CMA falls under. Fundamentally, literature indicates that the greatest benefit of such integration is that transaction costs are lowered for countries that are members of a currency union as the elements of exchange rate volatility and uncertainties are eliminated during such an arrangement (Mundell 1961). In addition, trade between union members is enhanced, resulting in significant convergence of participating countries.
The core theory of optimum currency areas (OCAs) was first initiated by Mundell (1961) who viewed factor mobility as the key criterion in the choice for deciding whether or not to join a currency union (Bayoumi 1994: 538). In addition to factor mobility, McKinnon (1963) supplemented Mundell’s assessments with the observation that openness to external trade is a crucial factor when making a judgement for currency integration. What's more, he was of the opinion that for an open economy, a flexible exchange rate is less effective given its destabilizing element as exchange rates are more volatile and hence impact the terms of trade and real wages negatively. Another factor on the optimality of currency areas was added by Kenen (1969), stating that product diversification is a necessary component for economies who are considering to be a part of a monetary integration as risks are minimized. By the same token, Fleming (1971) added that countries that faced similar inflation rates are better options of forming currency unions, implying that, ceteris paribus, an equal amount of current-account flows will be distributed amongst member countries (Tavlas 1994: 213). All the work by Mundell (1961), McKinnon (1963) and Kenen (1969) is what forms the fundamental theory of optimum currency areas and have been the foundation for much of the recent studies on this subject matter (Bayoumi 1994).

Nevertheless, the early theory of OCA went through a few adjustments along the years, especially with the end of the Bretton Woods system. For that reason, several features of the early OCA theory was found to have a few weaknesses, hence there has been some amendments especially with the negotiations drawing to the creation of the European Monetary Union (EMU henceforth) and with the passing times, and dynamics of monetary integration. The reassessment phase of the OCA especially during the 1980s and 1990s led to the creation of the “new OCA theory”. The main distinguishing element between the two theories is that the new theory argues that the perceived high cost of monetary policy loss was highly exaggerated at the onset, however if low levels of inflation can be achieved, loss of monetary policy is not a big sacrifice when compared to the benefits (Mongelli 2002: 12). However, this view has received some criticism; even though countries in a currency union may be faced with similar shocks they possibly will have different starting points, for
example varying degrees of price and wage flexibility, different tax structures, trade responsiveness and preferences.

On the decisions to join an existing monetary integration, studies suggest that countries that gain the most from adopting another currency are those that have recorded a long trend of high and volatile inflation rates. This is attributed to the lack of internal discipline when it comes to monetary policy (Alesina et al. 2003: 309). Hence it would only seem beneficial for them to rely on the discipline provided by an external authority in the form of an anchor economy. In addition, the decision to peg ones’ currency to another is more attractive when relative price levels between the two economies are stable (Alesina et al. 2003). Similarly, and most importantly, trade and geography plays a major role in the case of optimum currency areas. In this regard, countries that trade more can benefit more given a shared currency and also from the lowered transaction costs given the proximity.

A critique that has been cited is that while a currency union can raise the welfare of the member countries of a union, it however lowers welfare in those regions that are outside of the currency area. This is due to the fact that the advantages from the union in the form of lower costs of transacting business accrue only to the members of the union, even though the losses from the union in the form of lower output due to interaction between the common exchange rate and the nominal rigidity affects all countries, within and outside a currency union (Bayoumi 1994: 552). Therefore, regions that are outside of the union only bear the costs and not the benefits. This also explains the reason why we observe increased interest by neighbouring non-participating economies of a currency union.

2.2 Theory of Business Cycle Synchronization in a Currency Area

The theory of business cycle synchronization and its effect on currency areas is vital in answering the research questions. For the purpose of this study,
if business cycles synchronization for partner countries is found to be low, then it is less desirable to form or be a part of a monetary integration. In addition to the factors previously mentioned, optimality is also measured according to the extent of symmetry shocks within a monetary integration. Accordingly, the general consensus in economic theory is that monetary integrations are more suitable “for countries with synchronized business cycles, integrated markets, flexibility, and mechanism to share risks” (Darvas et al. 2005: 7). In this regard, a set of countries in a monetary integration is considered an OCA when the correlation of output shocks within the area implies that an exogenous level of benefits are higher than the costs required for adjustment (Ricci 2008: 6).

Studies have shown that when determining the degree of synchronization of business cycles between partner countries, the general measure is usually the amount of trade that the two countries engage with each other (Rose 2009: 5). Consequently, an increase of trade between partner countries increases the degree of business cycle synchronization. Accordingly, if countries that trade extensively with each other were to form a monetary union, their trade will increase even further given the elimination of exchange rate barrier to trade. In the end, more trade is argued to raise harmonization of businesses cycles for an economic integration. The study by Rose (2009) concluded that in the Asian case, although there is absence of monetary integration, trade seem to rise relative to GDP due to the decline in transportation costs and greater integration of supply chains within the region.

Furthermore, economies that adopt foreign monetary regime i.e. fixed exchange rates are generally expected to have greater correlated business cycles compared to countries with independent monetary policies. In line with this, it is thought that if the anchor economy adopts formal inflation targeting, a greater degree of integrated business cycles are to be realized within a currency area. In this connection, when one of the countries within a currency area utilises inflation targeting as a policy instrument, Rose (2009) found that business cycle synchronization between the industrialized economies (G7) and emerging
economies (of Asia) seem to be higher for the periods after adopting inflation targeting. However, it is also argued that the structures of countries and hence their different shocks remain a function of the monetary regime at hand. Accordingly, literature argues that inflation targeting seem to increase correlation of business cycles just as it is argued for monetary integration and fixed exchange rate regimes.

In addition, for instance in the case of the EMU some studies have argued that fiscal policy divergence within the monetary union is used as an instrument of dealing with asymmetric shocks this then may result in enhanced coherence of business cycles within the union (Darvas et al. 2005). Accordingly, to establish the divergent in fiscal policy across member countries and hence estimate the extent to which business cycles synchronization is low within a union, the general measure is the ratio of government net lending (or borrowing) to GDP. As a result, it is found that when there is fiscal convergence in an area, business cycles move together, when there is fiscal budget instability within a monetary integration this also leads to asymmetric shocks within a union. In view of that, it is argued that irresponsible fiscal policy results in distinctive shocks which then bring about macroeconomic imbalances.

2.3 Empirical Literature Review

This section will look at studies that were previously conducted and that are somewhat in line with the focus of this paper. For this reason, the empirics discussed here will be looking at monetary integrations between developing countries as this can somewhat be related to the case of the CMA.

2.3.0 Sub-Saharan Monetary unions

Optimality in currency unions of developing countries is found to be tricky to measure, especially given that most factors under OCA literature are hardly met for these groups of countries. A study by Asante and Mason (2001) found that for West African monetary integration risks of asymmetric shocks
are high in the region due to the lack of product/export diversification (Asante, R.D and Masson, P.R. 2001). For these monetary integrations, although there seem to be high labour mobility between countries, administrative and at times military conflicts tend to yield higher costs. On the other hand, given the high dependence on primary products for export earnings, it is suggested that this increases the cost of nominal exchange rate volatility against major currencies, given that this directly impacts export earnings in domestic currency (Bénassy-Quéré and Coupet 2005: 12). As a result, the OCA theory on high costs associated with the loss of policy instrument given that nominal exchange rate is relinquished is viewed less costly for the case of Sub-Saharan monetary integration. In this regard, Table 2-1 displays the product base of the Central and West African countries that form two of the regions’ monetary integration.

Table 2-1: Sub-Saharan main export commodities, 2001 (in percentage)

<table>
<thead>
<tr>
<th>Country</th>
<th>Commodity</th>
<th>Export contribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>Cotton</td>
<td>65</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>Cotton</td>
<td>53</td>
</tr>
<tr>
<td>Cameroon</td>
<td>Oil, Wood</td>
<td>46, 13</td>
</tr>
<tr>
<td>Chad</td>
<td>Cotton</td>
<td>69</td>
</tr>
<tr>
<td>Congo</td>
<td>Oil</td>
<td>74</td>
</tr>
<tr>
<td>Cote d’Ivoire</td>
<td>Cocoa</td>
<td>38</td>
</tr>
<tr>
<td>Gabon</td>
<td>Oil</td>
<td>77</td>
</tr>
<tr>
<td>Guinea Bissau</td>
<td>Oil, Nuts</td>
<td>49, 45</td>
</tr>
<tr>
<td>Mali</td>
<td>Cotton, Electronic circuits</td>
<td>54, 19</td>
</tr>
<tr>
<td>Niger</td>
<td>Uranium, live sheep</td>
<td>56, 15</td>
</tr>
<tr>
<td>Nigeria</td>
<td>Oil</td>
<td>87</td>
</tr>
</tbody>
</table>

Data Source: Selected sub-Saharan countries from the study done by Bénassy-Quéré and Coupet (2005)

Accordingly, Table 2-1 shows the main export sources for some of the sub-Saharan countries, of which most belong to either the CFA franc zone, Central African Economic and Monetary Community (CEMAC) or the West
African Economic and Monetary Union (WAEMU). It is argued that adopting floating exchange rates and hence, independent Central Banks instead of a monetary union is better, as theories of OCA are generally not met in Africa (Guillaume and Stasavage 2000: 3). However, for the sub-Saharan countries that have retained monetary independence it is generally thought to have failed to build monetary credibility through monetary instruments which should be geared towards counteracting against destabilization shocks. What is more, for the CFA franc zone which has adopted an external peg, asymmetric shocks are further worsened as monetary policy is set by the European Central Bank, according to events in that region.

Finally, for the existing literature on African monetary integration, it shows that credibility of monetary policy has been considerably undermined for most part. In this regard, governments are said to often deviate from announced monetary policy after the private sector has established wage rates and other contracts (Guillaume and Stasavage 2000). However, with this in mind, monetary integration is still very much present in despite all the challenges and reaping very minimal benefits in some instances where it is assumed to lack the necessary determinants of meeting standard OCA measures.

Table 2-2: African Monetary Unions

<table>
<thead>
<tr>
<th>Monetary Union</th>
<th>Starting Period</th>
<th>Changes and Exits</th>
</tr>
</thead>
<tbody>
<tr>
<td>East African Board</td>
<td>1960-1966</td>
<td>1966: Demise of the EACB</td>
</tr>
<tr>
<td>Central African Monetary Area</td>
<td>1960</td>
<td>1973: Relaxation of rules</td>
</tr>
<tr>
<td>West African Monetary Union</td>
<td>1960</td>
<td>1962: exit of Mali</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1973: exit of Mali</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1973: relaxation of rules</td>
</tr>
</tbody>
</table>
Currently, three African monetary integrations remain in operation although there are talks of resurrecting the East African Board and also welcoming more states to the existing integrations, especially with the vision of having a common central bank for the Southern African Development Community (SADC).

Table 2-3 below outlines some features of the existing African monetary unions in comparison to the EMU.

**Table 2-3: Main features of Selected Monetary Unions**

<table>
<thead>
<tr>
<th></th>
<th>Euro Area</th>
<th>WAEMU</th>
<th>CAEMC</th>
<th>CMA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of countries</strong></td>
<td>18</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td><strong>Single currency?</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No, but de facto common currency</td>
</tr>
<tr>
<td><strong>Common central bank</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No, but SARB considerate influence</td>
</tr>
<tr>
<td><strong>Common pool of reserves?</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Regional surveillance of fiscal policy?</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Free Trade Area?</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----</td>
<td>----</td>
<td>----</td>
<td>-----</td>
</tr>
<tr>
<td>Common External tariff?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>External current account convertibility?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Degree of capital mobility within region?</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>External exchange rate anchor?</td>
<td>No</td>
<td>Yes (peg to Euro)</td>
<td>Yes (peg to Euro)</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: Author's update and modification from Table 2.1 in Harris et al. (2007)

As previously mentioned all the monetary unions in Table 2-3 are distinct in their own nature with some shared features, however not one is identical to the other.

### 2.3.1 The Eastern Caribbean currency union

A parallel comparison of a monetary integration outside of the African context but having somewhat similar setup is deemed necessary. Accordingly, this time we assess optimality of the currency union of the Eastern Caribbean countries also comprising of developing countries. Just like the CFA franc zone, the Eastern Caribbean Currency Union (henceforth ECCU) consist of sovereign countries that have adopted a common currency and relinquished independent monetary policy, with a common Central Bank. Given the small size of all member countries of the ECCU, the one benefit for the currency arrangement is that it allows them to take advantage of scale economies, additionally allowing the currency area to diversify risks. As a result, if one country gets hit by an external shock or natural disaster (which the region is prone to), all other member countries can pool resources to mitigate the shock. In addition, the currency area of the ECCU has a long history of a currency board ar-
rangement, initially pegged to the British pound. However, since 1976 the Eastern Caribbean dollar has been pegged to the U.S. dollar. One benefit that the area seems to have enjoyed since monetary integration is that not only has this resulted in relatively low rates of inflation for the region, but also the harmonization facilitated in the development of the financial sector. As a result, this facilitates the process of business cycle synchronization within the ECCU.

Nevertheless, for countries that are heavily dependent on foreign income, as is the case of the ECCU that relies on the tourism sector as the main source of foreign revenue and are highly prone to natural disasters, the income base is very narrow hence having limited sources to earn foreign earnings. Therefore, “a higher level of reserves is typically required in countries where: (i) the export base is narrow and the price of the key exports is particularly volatile; or (ii) in countries where natural disasters can severely affect export capacity (e.g., tourism) and import needs (e.g., foodstuffs).” (Dehesa et al. 2009: 8). Despite the risks outlined in the study by Dehesa et al. (2009) the Eastern Caribbean Central Bank (ECCB) reports showed that the level of its reserves seem to be well above standard requirement, at the time, when measured by the traditional ratios and using an optimal reserve framework. Nevertheless, the pace of international integration through capital account liberalization and increasing financial deepening in recent years recommend that the central bank’s methods of measurement may need to be improved to aid against adverse capital flows.
CHAPTER 3

Basic Features and History: The Common Monetary Area in Southern Africa

Greater regional integration has become a trend in recent times, increasing trade volumes and reducing costs at the same time. In this regard, the countries of the CMA are part of the recent growing effort of increasing Africa’s role in engaging in South-South trade. Although some scholars argue that from the point of view of the small member countries of LNS, the monetary arrangement is actually more of North-South coordination than a South-South arrangement, given South Africa’s dominant role and its economic capacity. What started as a mere informal integration between South Africa and its small neighbouring states at the beginning progressed into the monetary area that we observe today. Whereas the four countries (Botswana, Lesotho, South Africa and Swaziland; excluding Namibia) were at one time under British rule or protectorates using the Pound Sterling as their common currency. The main reason that led the three smaller territories economies building stronger ties with the South African economy is believed to have been due to neglect by the British for these economies.

As was anticipated, when the three small countries re-attained their political independence in the 1960s, they were not just members of a common monetary area, but also de facto members of a currency union with South Africa, which was only formalized in 1974, with the signing of the Rand Monetary Area Agreement (RMA). However, Botswana withdrew from the monetary area shortly after the ratification of the RMA, in 1975. The Government of Botswana decided to exit the monetary area, citing that “…the economic benefits of introducing a national currency were possibly greater than the advantages of continued membership to the RMA” (Asonuma et al. 2012). In addition, Botswana further held on to the view that continued membership of the RMA would limit its ability to formulate and influence monetary policy affecting Botswana, and therefore resolved that it was necessary for the country to be able to stimulate and control its own financial institutions’ operations.
With the signing of the Rand Monetary Agreement (RMA) by South Africa, Botswana, Lesotho and Swaziland in 1974, the Rand Zone was formally ratified. At the time it was officially called the Rand zone as the pound was slowly being replaced by the Rand throughout the member states. However, Botswana, Lesotho and Swaziland (Namibia was a territory under South Africa’s administration) did not link their currencies irrevocably to the South African legal tender on the outset (Grandes 2003: 8). It is worth noting that the Rand Zone had informally existed before 1974, under the administration of Britain, the pound was operative as the common currency until 1961, when the Rand replaced it (Grandes 2003). As previously alluded to, in just two years after the RMA was established, the authorities in Botswana exited the monetary zone and opted to pursue its own independent monetary and exchange rate policies. However, Botswana remains linked to the Rand as it constitutes a large percentage of the currency basket, weighing an estimated 70 per cent (Grandes 2003). Another adjustment that took place in the monetary area was in 1986 when the Trilateral Monetary Agreement replaced the RMA with the CMA. This agreement and the associated bilateral agreements between South Africa and each of the two smaller members (Lesotho and Swaziland) provided a framework for exchange rate and monetary policies in the member countries. It is worth stating the broad objectives that are set out for the CMA in the foreword of the trilateral agreement (Article 2): “The monetary arrangements should provide for the sustained economic development of the Common Monetary Area as a whole” and to attain this “the arrangement should encourage the advancement of the less developed members of the Common Monetary Area and should afford all parties equitable benefits arising from the maintenance and development of the Common Monetary Area as a whole” (Harris et al. 2007)

The fourth member state, Namibia, joined in 1992 two years after attaining independence from South Africa. The past couple of years saw some significant alterations within and outside of the monetary area including the end of the apartheid in South Africa and external developments in the global setting affecting the CMA members’ external trade and financial flows (Harris et al. 2007: 5). In addition to using the Rand, Namibia, Lesotho and Swaziland introduced their own national currencies after becoming independent states
(namely the lilangeni, the loti, and dollar in 1974, 1980 and 1993, respectively). However, their exchange rate have remained fixed at parity with the Rand since the introduction of their respective currencies. The Rand is legal tender in both Lesotho and Namibia as a result; South Africa compensates the two countries for loss of seignorage that is relinquished. On the other hand, since 1992, the Rand has not been legal tender in Swaziland (although in practice it was widely used), with the possibility of delinking the lilangeni entirely (Grandes 2003). Subsequently, following years of interruption, the Kingdom of Swaziland in 2003 reauthorized the use of the Rand as legal tender alongside its national currency, the lilangeni. To date, all member countries have maintained the parity of their currencies with the Rand, and foreign exchange regulations and monetary policy throughout the CMA have continued to reflect the influence of the South African Reserve Bank.

It is worth mentioning that the CMA, unlike most monetary arrangements, is a mixture of a currency board and a monetary union. So, even though the Rand remains the dominant currency within the CMA, member countries did not make an irreversible commitment to keep a given parity hence the arrangement is considered to be something short of a fully-fledged monetary union (Grandes 2003: 9). On the other hand, it is a currency board because foreign assets back domestic currency issuance and the monetisation of fiscal systems are administered by the member countries’ respective Central Banks which perform functions such as extending loans to their respective governments (Tjirongo 1995). In addition, member countries have established full capital and current account convertibility between themselves with no restrictions on transactions in the current and capital account (Grandes 2003). As previously mentioned, there are compensatory payments made to the member countries who pegged their currencies to the Rand and other authorized provisions for intra-zone transfer of funds are allowed. It is worth recalling that these countries together with Botswana belong to the Southern African Customs Union (SACU), so they have common external tariffs, and hence a common revenue pool intended to make up for the imbalances in tax collections that arise from asymmetric trade patterns, more details on the customs union to follow in the next section.
3.0 Regional Integration in Southern Africa: The Southern African Customs Union

Since all of the countries that make up the membership of the CMA are also part of the customs union, it is worth briefly looking at the functioning of this regional trade integration. Botswana being the only country that does not make up the monetary union, the Southern African Customs Union (hereafter SACU) between Botswana, Lesotho, Namibia and Swaziland (BLNS) and South Africa is commonly regarded as one of the most effectively functioning trade arrangements in Africa (South African Department of International Relations and Cooperation. 2004). The regional arrangement represents a good model of the variable geometry under the linear regional integration model, with South Africa as dominant member (McCarthy 2013). The customs union remain extremely important to South Africa and even more crucial for the smaller member states of BLNS. Furthermore, not only is SACU hailed as the longest unbroken period of Customs Union integration in Africa (some studies suggest that it is possibly the oldest Customs Union in the world), but studies have shown that it is also the most effectively functioning regional arrangement in Africa. This therefore demands an analysis of the customs union in order to understand the linkages it has with the monetary union and how this influence decision making in the two arrangements within the region.

The regional integration between the five countries of the south is believed to be the oldest and most functional customs union in sub-Saharan Africa presently (Foroutan 1992). SACU dates back to 1889 Customs Union Convention between the British Colony of Cape of Good Hope and the Orange Free State Boer Republic. Subsequently, a new agreement, signed on 29 June 1910, was further extended to include the Union of South Africa and the British High Commission (SACU Annual Report 2012). However, the SACU as we know it today was formally established on 11 December 1969, with official arrangement of the Customs Union Agreement between South Africa, Botswana, Lesotho, Namibia and Swaziland. Successively, the Customs Union Agreement of 1910 was replaced on 1 March 1970, with all member states at the time ratifying the union. There are points that define the distinctive features of SACU to other customs union one being the element that it was creat-
ed as a colonial dispensation to cope with a number of separate British entities being locked into an economically interdependent region (McCarthy 2013). Also, SACU was initially not set up as an integration arrangement between independent states, but as a practical arrangement to cope with the colonial regime at the time. Therefore, the latest amendments to the arrangement took place in 2002, after prolonged discussions where it aimed at correcting past loopholes and also to reflect the political transition to democracy in South Africa and to address an up-to-date dealings of the union.

Fundamentally, the customs union’s objective is to uphold the free exchange of goods between member countries. To maintain this, it seeks to improve the trade environment within member states; therefore trade facilitation is a key component of the SACU’s mandate. In this regard, the key goal is to ensure that trade facilitation is efficiently carried out in the customs union, it remains important that transaction costs are low and also to combat the complexity of international trade for business and thereby improving the trading environment in the region, while at the same time enhancing efficient and effective levels of government control and revenue collection. Consequently, trade facilitation is largely used to improve the regulatory interface between government bodies and traders at national borders within the customs union (SACU Annual Report 2012).

The customs union provides for a common external tariff (CET) and a common customs excise tariff to the member states. All customs and excise collected within the common custom area are paid into South Africa’s national Revenue fund. In this regard, the revenue pool is managed by South Africa and it manages the collection of revenue from excise duties derived from imports within intra-SACU. The SACU tariff on the onset became an instrument of industrial policy, “…designed and implemented to meet the industrial development objectives of South Africa” (McCarthy 2013). Primarily, under the 1969 Agreement the CET continued to be the South African tariff, overseen by the South African authority mainly in the interest of the South African economy. However, BLNS benefits to the customs union should not be overlooked given the costs that come with the management of the union and the revenue transfers they received. In this connection, the collected revenue is distributed to the member states according to three components embedded
within the revenue sharing formula. Subsequently, payment from the pool is first made to the BLNS member countries share with South Africa receiving the residual amount. It is worth mentioning that the revenue from the pool has been a significant fiscal support for the small member countries and as a result serves as primary source for international reserves of these economies. Therefore, the less developed SACU states rely heavily on the receipts from the pool for their budgetary operations as show in Table 3-1 below.

Table 3-1: Trends in SACU members’ revenue share

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>8,330</td>
<td>9,473</td>
<td>9,167</td>
<td>7,115</td>
<td>11,502</td>
<td>12,608</td>
<td>10%</td>
</tr>
<tr>
<td>Lesotho</td>
<td>3,822</td>
<td>4,901</td>
<td>4,918</td>
<td>2,908</td>
<td>4,103</td>
<td>4,980</td>
<td>21%</td>
</tr>
<tr>
<td>Namibia</td>
<td>6,015</td>
<td>8,502</td>
<td>8,585</td>
<td>6,447</td>
<td>9,567</td>
<td>11,339</td>
<td>19%</td>
</tr>
<tr>
<td>South Africa</td>
<td>20,796</td>
<td>24,264</td>
<td>24,125</td>
<td>22,651</td>
<td>25,747</td>
<td>28,651</td>
<td>11%</td>
</tr>
<tr>
<td>Swaziland</td>
<td>4,591</td>
<td>6,009</td>
<td>5,189</td>
<td>2,956</td>
<td>4,310</td>
<td>6,078</td>
<td>41%</td>
</tr>
<tr>
<td>CRP3</td>
<td>43,554</td>
<td>53,149</td>
<td>51,984</td>
<td>42,077</td>
<td>55,229</td>
<td>63,656</td>
<td>15%</td>
</tr>
</tbody>
</table>

| Botswana (%)   | 19.13   | 17.82   | 17.63   | 16.91   | 20.83   | 19.81   |
| Lesotho (%)    | 8.78    | 9.22    | 9.46    | 6.91    | 7.43    | 7.81    |
| Namibia (%)    | 13.81   | 16      | 16.52   | 15.32   | 17.32   | 17.81   |
| South Africa (%)| 47.75   | 45.65   | 46.41   | 53.83   | 46.62   | 45.01   |
| Swaziland (%)  | 10.54   | 11.31   | 9.98    | 7.03    | 7.8     | 9.55    |

Data Source: SACU Annual Report 2012

3 Values in South African Rand
In addition, Figure 3-1 is aimed to further substantiate the trends in SACU for the last seven fiscal years of the SACU.

**Figure 3-1: Value of SACU receipts, 2006-2013**

The seven periods in Figure 3-1 depicts a mixed trend, with increases in revenue and also declines over the period. Like most economies, the SACU was negatively affected by the financial crises in 2007, as demand for primary products at the time declined due to economic slowdown in the Eurozone, SACU’s largest export destination. Despite this, we observe an overall growth in the common revenue pool of 15% for the period between 2005 and 2013.

As previously highlighted, SACU is an integration of unequal partners, each with their own unique features. In this connection, South Africa being the largest having strong financial and trade links with the rest of the world. It is argued that the customs area is characterised by diverged growth benefitting the South African economy and hence the revenue-sharing formulae is currently set-up to compensate the rest of the member states (IvÄ et al. 2013). Furthermore, scholars are of the view that a customs union between a rich and a poor nation typically yields divergence of economic development, with the superior economy growing at the expense of the smaller economies (Grynberg and Motswapong : 5). The SACU in recent years has recognised this and in their efforts to address the gaps the customs union has made provisions to re-
distribute resources to the smaller states, therefore working towards the development of all member countries.

Customs revenue in the union is heavily dependent on the South African imports and as previously mentioned it accounts for a sizable amount of fiscal revenue in the BLNS countries (IvÅ et al. 2013). The high level of dependence on the SACU revenue pool by the smaller member countries as a source of income is risky, especially if drastic changes are to be made to the current arrangement. Below, Table 3-2 indicates the member countries’ share of the common revenue pool for the previous three fiscal years.

Table 3-2: Share of SACU revenue to total Revenue in BLNS

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>2010/11</th>
<th>2011/12</th>
<th>2012/13</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of SACU to total Revenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botswana</td>
<td>14.8</td>
<td>19.7</td>
<td>29.7</td>
</tr>
<tr>
<td>Lesotho</td>
<td>30.7</td>
<td>28.0</td>
<td>43.4</td>
</tr>
<tr>
<td>Namibia</td>
<td>25.7</td>
<td>26.6</td>
<td>38.9</td>
</tr>
<tr>
<td>Swaziland</td>
<td>38.0</td>
<td>39.0</td>
<td>58.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of SACU Revenue to GDP</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>4.5</td>
<td>6.5</td>
<td>10.1</td>
</tr>
<tr>
<td>Lesotho</td>
<td>16.1</td>
<td>14.9</td>
<td>28.5</td>
</tr>
<tr>
<td>Namibia</td>
<td>7.1</td>
<td>7.7</td>
<td>13.5</td>
</tr>
<tr>
<td>Swaziland</td>
<td>10.0</td>
<td>10.0</td>
<td>22.0</td>
</tr>
</tbody>
</table>

Source: SACU Annual Report 2012

The statistics in Table 3-2 suggest that there continues to be a heavy reliance on the customs revenue pool by the BLNS countries. As previously highlighted, there is an upward trend in the revenue indicating that SACU continues to enjoy increases in customs and excise tariffs. However, it should be stressed that the dependency on the customs pool (especially by Lesotho, Namibia and Swaziland) will not be economically sustainable and these economies should find wider options to generate revenue. This is because imports are normally more volatile in relation to overall economic activity, and given the
small tax bases in the BLNS countries, the revenue sharing formula results in sharp volatility in fiscal revenue in the customs union (IvÅ et al. 2013: 15). For example, following the global financial crises, the customs revenue in Lesotho declined by 20 percent of GDP and 15 percent in Swaziland. Consequently, this led to a fiscal deficit in Swaziland and severe fiscal stress for the economy. For this reason, there is need to find precautionary measures as sharp volatility in real activity leads to undue stress during recessions (IvÅ et al. 2013).

As evidenced in the prior analysis, the continued reliance of the small CMA countries on the SACU revenue makes these economies highly vulnerable, especially if this form of revenue should decline or cease altogether. In light of the difficulties associated with growing reserves in Lesotho, Namibia and Swaziland given the open nature of these economies, the fixed exchange rate regime coupled with the free movement of capital within the CMA; targeted policy interventions to diversify revenue sources and hence enhance foreign reserves to levels meeting adequacy are required.

3.1 Trade Relations in the CMA

It goes without saying that trade performance in the monetary area is predominantly determined by the South African economy. All member countries are greatly reliant on the imports of South African goods. This has been the trend observed throughout the years, which supports early evidence by Rose (2000) against the idea that countries with a common currencies tend to engage in more trade, creating a link between trade and monetary integration. However, data proves that trade relations in the monetary area is one-sided, BLNS countries engage more with the South African economy and not amongst each other. To that effect, the CMA data shows that monetary integration has not significantly heightened intra-zone trade (Grandes 2003: 9). Moreover, South African exports alone consist of an estimated 80% of total intra-SACU trade. For this reason, due to SA led exports within the customs union, one can argue that the BLNS countries benefit hugely from the arrangement compared to
South Africa. Thus, intra-zone trade within the customs union depicts more of an inter-industrial pattern, South Africa being a net manufactured goods supplier (Grandes 2003). However, it is also worth mentioning that for South Africa the European Union (EU) and the United States (US) constitute a considerably larger portion of its export destination. Although, given the arguable importance of the South African economy to the BLNS countries (than it is the other way around) the trade relation does appear unambiguous.

Table 3-3: Intra-SACU Trade, 2012

<table>
<thead>
<tr>
<th></th>
<th>Intra-SACU exports</th>
<th></th>
<th>Intra-SACU imports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value (ZAR billion)</td>
<td>% of total</td>
<td>% growth</td>
</tr>
<tr>
<td>Botswana</td>
<td>5.7</td>
<td>14.2</td>
<td>22.4</td>
</tr>
<tr>
<td>Lesotho</td>
<td>2.6</td>
<td>75.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Namibia</td>
<td>7.7</td>
<td>20.9</td>
<td>-2.1</td>
</tr>
<tr>
<td>Swaziland</td>
<td>8.1</td>
<td>68.2</td>
<td>8.7</td>
</tr>
<tr>
<td>South Africa</td>
<td>71.2</td>
<td>8.1</td>
<td>9.1</td>
</tr>
</tbody>
</table>

Source: SACU Annual Report 2012

As previously mentioned, there is an upward trajectory growth, although we notice differences in trade patterns for each of the SACU member states (see Table 3-3 above). An element of trade diversion can be noticed for the case of SACU, especially given the “protectionist external trade regime” compelling member states to forgo imports of what could be efficiently produced goods from non-member countries with more expensive imports from within the partner countries (Gibb 2007: 78). In this regard, exports from SACU members are largely destined to the rest of the world, e.g. the EU and the US. While, between 70-90 per cent of all imports by Botswana, Lesotho, Namibia and Swaziland is sourced within SACU, particularly from the anchor economy, South Africa. The trend is that of an overall increase in SACU exports to the rest of the world and also exports of the BLNS countries to South Africa are increasing. Accordingly, this suggests that the trade partnership is equally bene-
ficial, and although South Africa takes by far the largest share of the benefits, the pattern indicates that the BLNS countries are making use of the opportunity to reduce the trade deficit somewhat. Also to be noted is that the current arrangement is vital to all the member states; South Africa remains an anchor economy for the for the BLNS countries in it being an important partner in their achievement of trade expansion.

Figure 3-2: Intra-SACU Imports (% of total imports)

As previously alluded to, there seem to be elements that suggest the existence of trade diversion within the customs union (Figure 3-2). On the other hand, given the fact that the proceeds of the common revenue pool represent a substantial part of total tax collection in all South African partners, lowering external tariffs or diversifying trade away from extra-zone countries to South Africa may bring about a fiscal problem economy (South Africa) and a few small satellites, themselves being very dependent on the former and with very limited decision-making power (Grandes 2003). However, empirical studies undertaken for SACU mostly based on neoclassical analysis shows that free trade areas can both be trade-diverting and creating, and even when there is diversion, they argue that there is welfare gains overall (Gibb 2007: 85). Nevertheless, overcoming these asymmetries requires institution-building and institution-sharing and that is exactly what the 2002 SACU agreement aimed at renegotiating with special focus on common industrial policies for member states.

Source: SACU Annual Report 2012
Nonetheless, the suggested amendments to the agreement still remain a topic of ongoing discussion for the member countries.

Given the many issues that came out in this chapter a brief conclusion is essential before moving on. Accordingly, in light of the importance of maintaining the Rand peg, it is shown that it is important to support reserve growth over the long term for the LNS countries, hence there is a need for structural adjustment to the small CMA member countries. In this regard, for the purpose of reserve accumulation, measures to increase domestic production in the LNS countries so as to reduce the import bill and at the same time increase exports are crucial. In doing so, these economies will be able to prevent the outflow of millions of money to pay for foreign goods and services, and reverse this process by accumulating foreign reserves in the long run. One recommendation to be highly considered is import substitution policies, directly related to the LNS economies’ industrial policies with a clear focus on priority areas, and together with support areas designed according to each country’s identified ‘potential’ sector rather than a one-size-fits-all approach. Import (as evidenced in the statistics) has a huge impact on the level of reserves and could potentially improve both reserve level as well as the import coverage if careful measures are taken to bring it down to tolerable levels.
CHAPTER 4

The Rand as the Anchor Currency of the CMA: Monetary Policy and Exchange Rate Dynamics in South Africa

For an open economy such as South Africa, the real exchange rate is a key variable as it serves as an important comparative price signalling for the different sectors of the economy. In this regard, the level of the real exchange rate together with its stability, have been shown to influence important variables like exports and private investment (Aron et al. 1997). For that reason it is vital to look at the monetary system of South Africa as it determines and affects the value of the Rand which directly impacts all the participating economies of the CMA. In this regard, while the current arrangement requires Lesotho, Namibia and Swaziland to defend their peg to the Rand, the South African Reserve Bank is responsible for defending the external value of the Rand vis-à-vis the rest of the world, which results in a common bloc floating of the CMA against the major currencies, specifically the British Pound, the Euro and the US dollar.

In addition, South Africa is an emerging market economy which has experienced more than once for the past two decades a high net capital outflow following capital account liberalization, resulting in significant depreciation rates of the Rand at some point in time. It is for this reason that this chapter will be dedicated to a closer analysis of the monetary policy stance of the South African Reserve Bank with special attention on the exchange rate development so as to aid in understanding the dynamics of the Rand over time. Firstly, I will begin with the historical path of the exchange rate policies adopted from the onset by South Africa and the changes along the years, including the policy that is currently implemented; this will follow by way of a timeline starting with the earliest events. By doing this, I believe it will assist in clarifying the different dimensions the Rand undertook throughout history and how it has fared until recently as the anchor currency for the CMA as a whole and more im-
portantly how monetary policy stance by the South African authorities has impacted on the smaller member countries.

At the outset as a signatory to the Bretton Woods Agreement of 1945, South Africa became a member to the system of “stable but adjustable par values” in that same year. In this regard, the arrangement obliged member states to maintain their exchange rate within 1 percent on one or the other side of the stated parity rates (Van der Merwe and Bank 1996: 5). Nonetheless, at the time, it was acceptable for a member country to adjust its exchange rate by more than the stated margin only when the extent of the disequilibrium was seen as a major threat for the balance of payments and this was done with the consultation of the International Monetary Fund (IMF).

By way of a quick glance, the Table 4-1 indicates the many regimes that South Africa’s exchange rate underwent. A summary of what transpired during the different periods will follow.

<table>
<thead>
<tr>
<th>Episode</th>
<th>Date</th>
<th>Exchange Rate Regime</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1961q1-1971q2</td>
<td>Pegged to fixed British Pound (£)</td>
</tr>
<tr>
<td>2</td>
<td>1971q3-1974q2</td>
<td>Pegged in episodes†</td>
</tr>
<tr>
<td>3</td>
<td>1974q3-1975q2</td>
<td>Controlled independent float§</td>
</tr>
<tr>
<td>4</td>
<td>1975q3-1979q1</td>
<td>Fixed regime: pegged to US$</td>
</tr>
<tr>
<td>5</td>
<td>1979q2-1982q4</td>
<td>Dual Foreign exchange system</td>
</tr>
<tr>
<td>6</td>
<td>1983q1-1985q3</td>
<td>Unification to a floating Rand</td>
</tr>
<tr>
<td>7</td>
<td>1985q4-1995q1</td>
<td>Return to a dual system</td>
</tr>
<tr>
<td>8</td>
<td>1995q1-1999</td>
<td>Unification to a floating Rand</td>
</tr>
<tr>
<td>9</td>
<td>1999 - to date</td>
<td>Freely floating currency</td>
</tr>
</tbody>
</table>

Source: Author’s alterations and Akinboade et. al (2006: 349)

† Pegged to floating US$ or British Pound (£)
§ Devaluations took place every few weeks under this exchange rate regime
Generally, South Africa maintained fairly restrictive foreign exchange control measures during the whole period from the end of the Second World War up until 1971 (Van der Merwe and Bank 1996). Following the collapse of the Bretton Woods system, most countries were forced into the adjustment of their exchange rates regimes; consequently the South African Reserve Bank took a decision to peg the Rand to the US dollar rather than the Pound Sterling. The exchange rate policy decisions went through a great deal of changes for the period between 1971 and 1979, employing controls that were either restrictive or liberal depending on the events at the time. Signs of exchange rate stability became noticeable only after the president tasked a “Commission of Inquiry into the Monetary System and Monetary Policy in South Africa (commonly referred to as the “De Kock Commission””). In this regard, the reform was aimed at the development of the South African foreign exchange market and also to make it relatively free from state interference (Van der Merwe and Bank 1996). However, after the large amount of reforms that took place over that period, it was overturned by the socio-political events which heightened in the period between 1985 and 1994, which prompted the authorities to return to policies aimed at regulating and managing the exchange rate of the Rand. After the country transformed to a democracy in 1994, the management of the exchange rate has been top priority for South Africa as it helps achieve and maintain both macroeconomic stability and also directs constant growth of the domestic economy (Mtonga 2006: 6).

As was highlighted in the previous section, the 1990s saw significant structural changes in South Africa with the switch to democracy, the end of foreign sanctions, and the elimination of most capital controls (Frankel 2007: 9). For a greater part the liberalization of the capital account is thought to be the most significant cause of these changes for the exchange rate of the Rand. A great amount of volatility of the exchange rate of the Rand has, however, been observed ever since South Africa attained democratic independence in 1994.

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6 Known as the Commission of Inquiry into the Monetary System and Monetary Policy of South Africa. This specific Commission is said to have laid the foundation for the monetary policy model applied in South Africa.
These fluctuations in the Rand’s exchanges rate has raised great concerns as it directly impacts the economy’s foreign trade and capital flows, not only that of South Africa but also that of the rest of the CMA member countries. A significant real depreciation of the Rand was observed for the period between 1995 and 2000, which was followed by a large drop in the value of the currency in 2001 (Ricci and MacDonald 2003: 7). In this regard, Figure 4-1 below illustrates a trajectory of “the Rand on the run”, with a visible continuous drop in value of the currency.

**Figure 4-1: South Africa Exchange rate; Rand units per US dollar, 1980 - 2013**

Data Source: Trading Economics

As evidenced from the graph above, the Rand depreciated substantially since the end of the apartheid regime in 1994. The spike in the appreciation indicated in the graph was during the end of 2001 when the Rand plunged by an estimated 40 percent against key convertible currencies, reaching a high of 13.86 against the US dollar. During this time the Rand became the world’s second worst performing currency in 2001, just above Argentina (Akinboade and Makina 2006: 354). Thereafter, the figure illustrates an appreciation for the period between 2002 and 2006 (the downward arrow illustration in Figure 4-1), this was during the time there was an observed natural resource boom (Frankel 2007: 426). A sign of the typical “Dutch Disease” circumstance where the value of the currency falls when mineral exports decline and a surge in the value...
of the currency when exports booms. The trend in exchange rate movements observed for the Rand’s real exchange rate against the US dollar in the graph above suggests that the current focus on exchange rate stability still leaves much room for improvement as the fluctuations may negatively impact on the domestic economy and that of the rest of the CMA members. Therefore, given the effects that exchange rate volatility presents to economies, monetary policy geared towards exchange rate stability is argued to be necessary.

It is worth noting that fluctuations in exchange rates are central in the determination of monetary policy as they impact significantly on domestic prices of goods and services. Moreover, in the case of small open economies exchange rate movements are of even greater importance than in advanced industrialised economies as they are likely to have a proportionally greater influence on prices, price competitiveness, the distribution of resources and productivity (Van der Merwe 2004: 12). The impact is further intensified for developing countries that are highly indebted and especially for those whose debt is denominated in foreign currency, as large exchange rate depreciation is a high risk to financial meltdowns. Although South Africa’s debt is predominantly denominated in Rand, this is unfortunately not the case for the small member countries that are pegged to the currency.

Previous studies have attributed the depreciation of the Rand to the high inflation rate of South Africa compared to its trading partners. As a result, in its effort to curb rising inflation, the South African Reserve bank in February 2000 announced that it will adopt formal inflation targeting as the monetary policy framework (Van der Merwe 2004: 5). As highlighted, inflation targeting was undertaken with the main objective of containing domestic inflation to help the economy achieve its broader national objectives of long-term economic growth that will fundamentally result in employment creation. Currently the target is specified as an inflation rate between 3 and 6 per cent which must be obtained constantly for every month measured over a twelve-month period. The central bank attributed this type of monetary approach to the element that inflation targeting has a set of clear targets and hence ensuring that the central bank is held accountable as it is assumed that this type of framework promotes a disciplined monetary policy stance.
A number of economists are of the opinion that the most notable distinctive element of inflation targeting compared to other monetary policy frameworks is that it makes forecasting explicit and at the same time transparent, facilitating accountability (Van der Merwe 2004: 10). As a result, inflation-targeting central banks are expected to keep abreast of developments in the exchange rate at all times. This is mostly due to the essential detail that the exchange rate carries; that of being a key transmission mechanism for monetary policy. In this regard, exchange rate changes affect inflation, aggregate demand, economic growth, employment creation and income distribution, which are all a part of the national goals for the South African authorities as well as the small CMA countries. For that reason, it is imperative for monetary policymakers to keep abreast of exchange rate developments for decision making purposes and to ensure that necessary mechanisms are in place to mitigate threats.

In the case of South Africa, the external value of the Rand is completely influenced by supply and demand conditions in the foreign exchange market, making it an absolute flexible exchange rate of the currency. In as much as the policy makers would have desired to have greater influence on the exchange rate in order to maintain and uphold stability, they have gathered that fluctuation in the value of the Rand is regrettably unavoidable (Van der Merwe 2004). For that reason, development in the external market continues to influence the exchange rate value of the Rand under the current monetary framework. As a result, sizeable fluctuations in financial flows, at times triggered by developments in other economies are hard to regulate and this can in turn lead to exchange rate volatility. By observing the data since the South African Reserve Bank implemented the inflation targeting together with the floating exchange rate, we can see major swings in the Rand exchange.

The literature attributes main explanatory variables for exchange rate fluctuations in developing countries to changes in commodity price, productivity and real interest rates differentials vis-à-vis those of the major trading partners, the degree of openness, the extent of the fiscal balance, and the country’s net foreign asset position (Ricci 2005).
The trend of the Rand exchange value against all its major currency is the same (Figure 4-2). It goes without saying that the observed fluctuations in the exchange rate of the Rand makes monetary policy decision making complex even more so for companies that engage in foreign trade. “Substantial foreign exchange reserve build-ups which promote a competitive exchange rate in favour of exports” (Murshed et al. 2011) is advisable for the South African Reserve Bank and in turn this will improve the country’s terms of trade. The study by Aron et al. (1997) cautioned against growth that is accompanied by high inflation, and concluded that it is important for the South African Reserve Bank to guard against volatility in the nominal exchange rate and this can be achieved through the accumulation of international reserves, together with a sound monetary and fiscal policy. This still remains important for the South African economy today and especially given the impact its policy decision has on the rest of the members of the currency area.
CHAPTER 5

Analysis of the Optimality of the CMA and Cost-Benefit Analysis for the LNS countries

In order to evaluate the benefits and costs for the small member countries in participating in the CMA, and hence determine the optimality of the monetary integration, firstly it is vital to go over the determining factors of optimality according to the literature before moving on to data analysis. Accordingly, the traditional literature on OCA outlines economic interdependence of partner countries; this includes the level of openness of member countries, the degree of diversification and factor mobility between countries as major measures of optimality within a monetary integration. I will identify the important economic variables that should be examined in order to answer the research questions. In the previous chapters, I introduced some of the indicators used in previous studies; this will be further expanded with a few other variables for the case of the CMA.

5.0 Current and Capital account factors for OCA

Fundamentally, the net gains of a monetary integration to its members are mostly determined by how well partner countries are able to absorb the shocks from outside the area. In this regard, key factors affecting the adjustment process include variables in the trade account and current account in general, especially for the small open countries of the CMA. As highlighted in the previous chapters, the LNS countries are very dependent on the primary sector, with a tiny base of export earning commodities (Table 5-1).
Table 5-1: Export Diversification in CMA including Botswana

<table>
<thead>
<tr>
<th>Country</th>
<th>Main Export Products</th>
<th>% Of Total Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>Diamonds</td>
<td>84</td>
</tr>
<tr>
<td>Lesotho</td>
<td>Clothing/Textiles</td>
<td>60</td>
</tr>
<tr>
<td>Namibia</td>
<td>Diamonds/Fish</td>
<td>48/30</td>
</tr>
<tr>
<td>South Africa</td>
<td>Minerals(gold, platinum)</td>
<td>59</td>
</tr>
<tr>
<td>Swaziland</td>
<td>Sugar cane or derivatives</td>
<td>40</td>
</tr>
</tbody>
</table>

Data Source: SACU Annual Report (2012)

As evidenced in Table 5-1, the CMA countries are heavily dependent on a very few primary commodities. It is essential for countries of LNS to diversify its revenue sources in order to lessen risks especially where commodity prices are highly volatile and dependent on external demand. In addition, having fundamentally open economies, the LNS countries are highly dependent on foreign goods and services for consumption. As highlighted previously, most of the import is sourced from the anchor economy, South Africa. As a result, the small member countries have recorded persistent trade deficits (Figure 5-1), with Namibia being the only member having recorded a few periods of surplus since 1980.

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7 Data for Botswana is included in the analysis because it is part of the free trade area and also to indicate its high dependence on its diamond export.
The ongoing trend in trade deficits means that the LNS countries must compensate for the loss of foreign income through other factors; this may include increasing services exports, current transfers and/or implement measures aimed at reducing imports through import substitution. There has been a growing trend in imports of oil, manufactured products and vehicles for the currency area as a whole. Consequently, the LNS countries acquire imports through its foreign reserves, resulting in the drawing down of reserves in these countries. Although South Africa too continue to record trade deficit, it compensates for the loss through its growing services, capital and financial account. Recently, the South African economy has been hit by ongoing strikes within its mining sector, which has had a negative impact on its trade account as well.

Growth in exports between 1980 and 2013 remain very insignificant for the LNS countries compared to that of the anchor economy (Figure 5-2). As a result, this can be evidenced by the concentration of exports in primary products that are exported raw without much value addition. Subsequently, many of the products face negative impact due to price volatility in the global market and current trend in low demand, mostly due to the impacts of the recent financial crises. Another factor that has contributed to the dismal performance
of the export figures for the LNS countries is attributed to the dependence of these countries on the anchor economy for a major share of its imports. The domestics industries of the LNS countries are not well developed and most face foreign competition. On the other hand, South Africa has recorded substantial growth in its export products and services, mostly owing to the market it has within the currency area and also the rest of the world.

It is necessary for the LNS countries to develop their local industries in order to become more competitive, this will be challenging as the South African market is more developed and catering to most of the needs of the rest of the CMA. It is essential for all the CMA countries to become more competitive so they participate meaningfully in global trade.

**Figure 5-2: Comparison of Total exports of Goods and services in 1990 and 2013**

![CMA Exports in goods and services (US$ million)](image)

Data Source: UNCTAD (2012)
Data extracted from: [http://unctad.org/](http://unctad.org/) on 16/10/2014 at 7:54 PM

Data for CMA suggests that, not surprisingly, shocks to the terms of trade are not correlated (Figure 5-3). This is owed to the diversity of countries within the area, as previously alluded to. The difference in export composition of the CMA is one driving factor for the lack of interrelation. Accordingly, world market prices of the different commodities do not always move together, hence we notice the different trends. The fall in the terms of trade of Lesotho compared to the rest of the currency areas is as a result of significant declines.
in prices of textiles that have been on a downward trend since 2003 (Harris et al. 2007).

**Figure 5-3: CMA Annual Terms of trade, 1980-2013**

As highlighted in Chapter 3, by far, the receipt of SACU revenue serves as the biggest source of revenue in the current account of the LNS countries, surpassing income from trade. As a result, the customs revenue is one of the major sources of international reserves for the small member countries of the CMA. However, studies have argued that the allocation of SACU revenues to the small member countries have not been to the effect of fighting asymmetries that these countries face (Harris et al. 2007). In this regard, Figure 5-4 indicates the trajectory in customs revenue for the past eight years for the LNS countries, including Botswana.
Figure 5-4: Trends in SACU revenue for the LNS countries including Botswana

Current transfers recorded under the current account of the LNS countries are sizeable due to the component of SACU transfers. SACU revenue is increasing, although after recording noticeable declines, since the financial crises. As was experienced elsewhere in the global market, the region was negatively impacted by the turmoil when prices for mineral prices plummeted. As mentioned throughout the paper revenue from the customs pool is very important for the LNS countries at the moment, being one of the major sources for government revenue for these countries. Moreover, the income from the CRP helps the small member countries to avoid huge current account deficits in the process (see Figure 5-5). In addition, the excise revenue generated under the free trade area is distributed in proportion to each member country’s GDP. This has helped Namibia, for most periods between 1980 and 2013 to register current account surpluses; this also applies to Lesotho and Swaziland for some of the periods, although at times SACU couldn’t surpass the deficits from the trade and investment account.
The development of prices within the region is well correlated, except for the periods when Lesotho experienced a natural disaster. Accordingly, at the end of 2001 when good rains were received in the region and prices for agricultural products declined massively owing to oversupply, Lesotho recorded deflation. This was however reversed in 2002 when the country experienced adverse weather conditions that left the economy with demand that could not be met, increasing the price of food in the end. However, the inflationary pressures for Lesotho eased in the following year averaging 6.63 percent. Moreover, after the introduction of formal inflation targeting by SARB, the CMA has enjoyed an average inflation rate of 5.97 percent for the past decade. This is well within the target band of 3-6 percent set by the Reserve Bank and is lower than most countries within the region. It can be argued that exchange rate flex-
ibility has been beneficial for South Africa, as a more flexible rate assisted the economy to deal with negative terms of trade and the high volumes of capital flows since independence helped the SARB to focus more on containing domestic inflation, which in turn had a positive impact on the currency area as whole.

**Figure 5-6: Comparisons of Inflation Performance in the CMA, 1980-2013**

![Inflation Performance Graph](http://unctad.org/)

Data Source: UNCTAD

The relatively good inflation rates within the CMA are owed to the reasonable independence of monetary policy in South Africa. In addition, the SARB strives to maintain price stability as one of its main objective in line with national economic goals. Similarly, interest rates of the small member countries remain broadly in line with those of the anchor economy, this is mainly due to the free movement of capital within the currency area and free access to the financial market of South Africa for the LNS countries this arrangement has ensured price correlation within the CMA.

With the democratic independence of South Africa in 1994, two main external developments have had great impact on its economy. Firstly, the removal of sanctions ensured the re-integration of the economy with that of the rest of the world, as evidenced from the trade statistics (Harris et al. 2007). Secondly, world prices for the main export commodities of the economy rose remarkably leading to positive impacts for the exchange rate of the Rand.
Since 1994, the average GDP growth is 3.48 for the entire currency area. This is worrisome, as a rate of less than 8 percent for developing countries will not bring them to industrial phase anytime soon. Swaziland has lagged behind its counterparts for most part, mostly because when sanctions were lifted for South Africa, investors relocated from the Swazi economy to South Africa. In turn, the South African economy fast became an emerging market. On the other hand however, foreign investment in Swaziland started to decline affecting GDP, falling below 2 percent growth per annum for most periods. Similarly, Lesotho also faced a downward trend in its real growth following massive declines in remittances received (one of the main income for the economy), as mining jobs declined in the South African economy. In addition, the elimination of textile quotas by the developed countries in January 2005 severely affected manufacturing production of Lesotho (Harris et al. 2007: 35). On the other hand, Namibia has recorded growth rate of 12.27 in 2004, the highest in the CMA so far. This is mostly owing to significant production and exports of diamonds and all other minerals including uranium that is fast becoming a major foreign income earner. In this regard, export from minerals at the time accounted for a share of over 60 percent of the country’s total export earnings. However, following the notable growth in that year, GDP growth averaged between 3 and 5 percent ever since for Namibia. Likewise, the anchor economy has not fared very well like the rest of the CMA members. In this regard, given South Africa’s high integration with the rest of the world, especially as an emerging market economy the financial crises had a direct impact on the economy. As a result, South Africa and Namibia given the magnitude of mining exports suffered the negative impacts of the recent financial crises, recording their highest contraction of 1.53 and 1 percent, respectively in 2009 (Figure 5-7).
The main source of external reserves primarily is from a country’s engagement with the rest of the world. Accordingly, this will mostly reflect in the country’s foreign trade where it export a good or service and in return receives foreign exchange. In the case of the CMA countries, especially in the LNS countries, export diversification is very restricted, dependent mainly on primary commodities (see Table 5-1).

Although we notice a general increase in the stock of foreign reserves in the LNS countries (Figure 5-8), this does not grow at the same pace as the import bill of the said countries. Furthermore, since the small member countries are not restricted as such when it comes to fiscal spending, they run a risk of worsening the international reserve position. This is mostly owed to the fact that “…a substantial part of official reserves in small CMA countries has a counterpart in government deposits, and domestic financing of the fiscal deficit could lead to a rise in the net domestic assets of the central bank that cannot be accommodated by domestic money demand.”(Harris et al. 2007: 38).
Figure 5-8: Foreign exchange reserves including gold in LNS countries, 1989-2013

![Graph showing foreign exchange reserves including gold in LNS countries from 1989 to 2013.]


**FDI in the LNS countries:**

For the currency area as a whole, huge investment flows were experienced right after the abolition of sanctions in 1994 with the democratic independence of South Africa. Moreover, this period was followed by many reforms including the free movement of capital in and out of the region. Most notably, a great part of FDI in the region was destined for South Africa and Namibia (Figure 5-9), as these economies have booming mining sectors. In this regard, for Namibia, with the discovery of uranium in late 2003, the economy experienced significant FDI flows from that period onwards. Conversely, both Lesotho and Swaziland attract very little FDI in their domestic economies, this could be attributed to the type of commodities that the countries specialize in which has failed to attract significant amounts of FDI.
As is expected, the lion’s share of the stock of FDI in the currency area is that of South Africa (Figure 5-10). In 2013, South Africa had an estimate 96 percent of the total stock of FDI in the CMA, the remaining portion is shared between the LNS countries.

Figure 5-10: Composition of stock of FDI in the CMA (%), 2013
5.1 Fiscal Account Management within the LNS countries:

On the Fiscal front, the LNS economies show mixed results for the trend in fiscal debt in terms of GDP. Nonetheless, the trend in debt usually shows that the more rapidly a country grows they higher their levels of debt also tend to move, evidently this is also the case for the small member countries of the CMA, see Figure 5-11. In this regard, Lesotho has maintained a debt to GDP ratio between 15.5 percent and 27 percent, while that of Namibia reached a high of 40.6 percent. On the other hand, Swaziland’s debt to GDP ratio remains below 10 percent. Currently, no explicit ceiling on the fiscal deficits and government debt is set for the CMA to serve as caution for all the participating countries.

Figure 5-11: LNS’s Government Debt as % of GDP

<table>
<thead>
<tr>
<th>Year</th>
<th>Lesotho</th>
<th>Namibia</th>
<th>Swaziland</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009/10</td>
<td>17.6</td>
<td>12.49</td>
<td></td>
</tr>
<tr>
<td>2010/11</td>
<td>15.5</td>
<td>8.92</td>
<td></td>
</tr>
<tr>
<td>2011/12</td>
<td>27</td>
<td>9.21</td>
<td></td>
</tr>
<tr>
<td>2012/13</td>
<td>23.8</td>
<td>8.17</td>
<td></td>
</tr>
<tr>
<td>2013/14</td>
<td>23.9</td>
<td>9.68</td>
<td></td>
</tr>
</tbody>
</table>

Data source: Trading Economics (2014)
Data extracted from: http://www.tradingeconomics.com/ on 16/10/2014 at 7:08 PM

The LNS countries continue to record fiscal deficits for the past five fiscal calendar periods (Figure 5-12). In this regard, Lesotho managed to report two
years of surplus for the period under review. Notwithstanding the large SACU revenue for these governments, overall expenditure exceeds revenue. Moreover, Namibia has recorded a fiscal deficit as a percentage of GDP of about 3.0 percent, worsening from the previous year. Swaziland recorded long periods of unsustainable fiscal deficits financed mostly by domestic borrowing that eventually led the economy’s external reserves falling below international standard. However, there has been a turnaround in spending for the government of Swaziland, although it still records deficits this has narrowed to 1.1 as a percentage of GDP. The deficits in the LNS economies can be largely attributed to the continuous drawing down of international reserves and constant accumulation of domestic debt. This is calls for discipline, as it is vital for the small member countries to maintain sufficient levels of international reserve to absorb domestic and foreign shocks. In this regard, coordination of macroeconomic policies within the CMA is necessary; this is because most existing monetary integrations aim to maintain a sustainable fiscal position for all members to ensure equitable growth and optimality in the currency area.

**Figure 5-12: LNS's Fiscal Balance as a % of GDP**

![Chart showing fiscal balance as a percentage of GDP for LNS economies over five years]

Data source: Trading Economics

Data extracted from: [http://www.tradingeconomics.com/](http://www.tradingeconomics.com/) on 16/10/2014 at 7:29 PM
5.2 Labour Mobility within the CMA:

During the colonial era, cross-border labour mobility for the currency area was more extensive when compared to recent years. This is because border control measures were not in place, especially for the two countries (Lesotho and Swaziland) that are within the borders of the anchor economy. In this regard, unskilled and semi-skilled labour from both Lesotho and Swaziland were mostly employed in the mining sector of South Africa, ensuring remittance income for the two economies. Accordingly, a large number of the labour force was employed in South Africa; 25 percent and 9 percent for Lesotho and Swaziland, respectively (Harris et al. 2007: 27). However, with the increase in capital expenditure mining production has become less labour intensive in recent years and in the process many workers were laid off. In addition, all member states of the CMA face large unemployment rates (Table 5-2), which makes it very difficult for labour to move freely across borders as each country’s priority is to address domestic unemployment and not that of the currency area at large.

Table 5-2: CMA Employment to population ratio, 15+, total (%)

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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesotho</td>
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<td>43</td>
<td>45</td>
<td>49</td>
<td>49</td>
<td>49</td>
<td>50</td>
<td>50</td>
<td>48</td>
</tr>
<tr>
<td>Namibia</td>
<td>47</td>
<td>49</td>
<td>49</td>
<td>51</td>
<td>40</td>
<td>44</td>
<td>48</td>
<td>48</td>
<td>49</td>
</tr>
<tr>
<td>South Africa</td>
<td>40</td>
<td>41</td>
<td>42</td>
<td>42</td>
<td>42</td>
<td>40</td>
<td>39</td>
<td>39</td>
<td>39</td>
</tr>
<tr>
<td>Swaziland</td>
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<td>43</td>
<td>43</td>
<td>43</td>
<td>43</td>
<td>44</td>
<td>44</td>
<td>44</td>
<td>44</td>
</tr>
</tbody>
</table>

Data source: World Bank databank

Data extracted from: http://databank.worldbank.org/data/ on 23/10/2014 at 1:32 PM
Data on labour composition for each country is currently unavailable, especially the breakdown in sector employment. Nevertheless, it is clear from Table 5-2 above that unemployment is an issue that needs to be addressed by all the member states of the currency area. Accordingly, policies aimed at creating jobs for the eligible masses are necessary, as this will also reinforce free movement of labour between the countries to deal with skill shortage. To sum up, the currency area has to come up with strategies that will ensure free movement of all the factors of production and labour is one of the areas that need greater attention as capital is freely flowing between the members.
CHAPTER 6

Conclusions

In summary, for the LNS countries in particular, the monetary integration does not necessarily lead to higher growth for these economies as evidenced in the data. As a result, economic growth performance can easily be diverted due to the different shocks that the small countries face. Nevertheless, the cost of the use of the nominal exchange rate as an instrument of adjustment is found to be ineffective for the case of these small economies. In this regard, all the LNS countries are small open economies, greatly integrated in the South African market, with free current and capital flows between member countries. However, it can be concluded that the CMA arrangement is beneficial for the LNS countries in terms of ensuring low inflation rates experienced when compared to neighbouring economies. In addition, the small member countries enjoy business confidence due to the links they have with the South African economy as the area continues to attract foreign investment. Moreover, the LNS countries enjoy a great degree of stabilization of exchange rate with its major trading partners due to the performance of the South African Rand. Also, given that most of the imports are sourced from the South African economy the LNS countries benefit from the elimination of exchange rate risks, conversion costs, including largely transport cost reductions. In addition, all the member countries of the CMA are neighbours and all bordering the anchor economy, this is also one of the features that determine optimality of a monetary union.

In view of the longevity of the SACU and hence its importance to the member countries, and also given that the free trade area also represents a huge regional agreement which attracts neighbouring countries, the arrangement surely does seem to reap more benefits especially for the small economies. However, extending membership to other countries within the region is not feasible at this point in time as more institutional building within the monetary integration, including the free trade area is required. For this reason, policy re-
response on diverging growth performance within the CMA countries need to be tackled. On the policy from, the member states need to address the unemployment problem in the currency area; this will facilitate both economic and social development in the currency area. In addition, macroeconomic policy coordination to deal with market flexibility and fiscal surveillance within the currency area needs to be reinforced. Moreover, the trend in deficit for both the current account deficit and fiscal account is worrisome and needs to be addressed. For that reason, fiscal prudence needs to be exercised within the currency area; this may include the introduction of limits for ratios of deficit with respect to GDP and caps on the level of public debt. In this regard, it is imperative for the central banks of the LNS countries to enforce limits on lending to their governments as this will ensure good fiscal performance in the small member economies. Moreover, economic surveillance within the CMA is essential as the current CMA agreement lacks to identify bounds with regard to the level of international reserves, which are quite important in mitigating the asymmetric shocks that each member country is faced with. Similarly, an overall strategy needs to be put in place to oversee the building of reserves to safer levels so as to serve as buffer in times of shocks, this is important given the negative impacts associated with primary commodity export uncertainties in the global market. Correspondingly, measures aimed at diversifying the export base of the LNS countries are long overdue given the continuous trend in trade deficits registered over the past three decades.

On the other hand, we observe a synchronized business cycle given the free flow of capital between the member states and this in turn results in similar trends in interest rates and inflation within the currency area. Given the high degree of dependency on the anchor economy there is need for South Africa to consider the impact its policy decisions has on the LNS countries and try to lessen any negative consequences that might occur due to a policy undertaken. Overall optimality with regards to the conventional OCA theory is tricky to measure in the current CMA agreement as much of what is outlined in the theory is more suitable to developed countries. Notwithstanding, the currency integration has had overall benefits for the area and especially for the LNS countries who are interconnected to one of Africa’s fast growing economy and
members have managed to enjoy periods of stable economic environment. Likewise, the free trade area along with the currency area is another plus side which serves as a strong incentive for the small member countries due to the significant government revenue they obtain. Lastly, taking all the costs and benefits of the current CMA agreement discussed throughout the paper it is only fair to conclude that the smaller economies’ participation serves as an advantage than a drawback and withdrawing from the monetary integration at the moment will cause an impediment for these countries.
References


IvÃ, J., F. Gwenhamo and S. Thomas (2013), Inward and Outward Spillovers in the SACU Area.


McCarthy, C. (2013) A Perspective on common industrial policies for the member states of the Southern African Customs Union. Stellenbosch: Trade Law Centre


UNCTAD (2014) 'World Investment Report'. Geneva:

