



Working Paper
FISCAL SUSTAINABILITY: LESSONS FROM
THE EUROPEAN UNION FOR SADC

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Abstract:

The primary objective of this paper was to trace the source and evolution of the European Union debt crisis in order to identify lessons for SADC and potential problems SADC should avoid as it works towards the establishment of a monetary union.

With regards to EU fiscal sustainability, it is evident that results generated from the indicators that are used by the EC are not able to provide adequate information to track fiscal sustainability in the EU since they are based on a mechanical and partial equilibrium examination. Such projections are sensitive to the underlying assumptions and in some cases demonstrate highly accentuated profiles which do not give a true picture of what is happening on the ground.

The study also reveals the following limitations on EU fiscal rules: they do not deal with country-specific circumstances in a consistent manner; their rigid adherence to annual deficit targets can impart a procyclical bias to fiscal policy through contractionary measures to buttress revenues in a downswing and a temptation to spend windfall tax receipts in an upswing; the mechanism permitted pro-cyclical loosening of fiscal policy during the good times; the process is complicated and not consistent, and it has been difficult to communicate effectively with the media, markets, and the public on how the EU Stability and Growth Pact (SGP) works; the measurements of potential output and budgetary elasticity have led to confusion. It is evident that failure to apply sanctions to Germany and France after defaulting demotivated other member states to keep their fiscal affairs on track. Also, in the absence of a fiscal union at EU level it is difficult if not impossible to coordinate fiscal and monetary policy.

Using past and current literature on monetary unions and fiscal policy as applied to the Eurozone, this paper provides evidence that the EU is not an optimal currency area (OCA) and it was not from inception. Furthermore, some member states failed to meet the Maastricht convergence targets before the adoption of the euro.

In SADC, it remains a precondition to observe the following conditions before adopting a single currency: the OCA criteria; SADC macroeconomic convergence targets; establishing a fiscal union at the same level as the SADC monetary union; to design rules that will allow for country-specific circumstances; and to implement a system that will ensure quality data and adherence to regional standards.

Key words: optimal currency Area, convergence indicators, fiscal rules, fiscal sustainability, European Union, SADC.

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1. Introduction

1.1 Background

The financial and economic crisis of 2008/2009 and beyond saw unprecedented government interventions to support economic growth and financial institutions. This was especially the case in the developed countries. This intervention took the form of injections of liquidity by central banks and stimulus packages through large fiscal deficits, in some cases resulting in high public debt-to-GDP ratios. In the European Monetary Union (EMU), poor fiscal governance, coupled with persistent fiscal deficits prior to the crisis, saw public debt levels in some countries exceed the original 60% of GDP limit for government debt as outlined in the Maastricht Treaty. Consequently, rising debt levels in the peripheral EMU states have triggered a decline in investor confidence in governments' creditworthiness and raised doubts about fiscal sustainability in these countries. The on-going turmoil of the sovereign debt crisis, specifically in Greece, has led some economists to question the future existence of the single currency Eurozone in light of the inability and unwillingness of sovereign states to institute politically unfriendly austerity measures and in light of problems with the compatibility of the "no bailout clause".

The sovereign debt crisis has focused attention on the relationship between a single monetary authority and various fiscal authorities in an environment where each sovereign state conducts an independent fiscal policy.

It is evident that fiscal policy across the Euro area is uncoordinated and at times incompatible, giving rise to severe macroeconomic vulnerabilities in some member states. This problem, whilst anticipated early in the establishment of the EU, and to some extent addressed by the 3% of GDP deficit and 60% of GDP public debt ratio in the convergence criteria, was violated through poor enforcement and surveillance once countries became members of the Eurozone, and through misrepresenting the actual fiscal position - especially in Greece.

The evolution of the sovereign debt crisis in the Eurozone, concerns about fiscal sustainability as well as policy responses and debates in the academic sphere about the relationship between independent fiscal policy within a monetary union provide valuable insights to existing and potential monetary unions. The developments in the Eurozone present important lessons for SADC in its pursuit of a monetary union. To avoid a repetition of the current questions and frictions in the EMU, SADC would have to thoroughly investigate, understand and anticipate all the risks to the success of a monetary union prior to the full establishment of a SADC Monetary Union. This could result in a revision of the policy decision to establish a SADC Monetary Union by 2016 or could promote SADC to establish new and stricter convergence criteria and new fiscal mechanisms.

1.2 Research Issues

The main research question that this study aims to address is: What are the lessons SADC can learn from economic theory on monetary unions, monetary and fiscal criteria in the establishment of a monetary union and how this is applied in the Eurozone. The study also assesses the sources and the evolution of the Eurozone sovereign debt crisis of 2010/2011. This is in order to ensure that the proposed SADC Monetary Union will avoid the kind of fiscal problems that threaten the long term sustainability of the European Monetary Union.

1.3 Objectives

The key objective of this research is to identify the main lessons from the theory, criteria for establishment of the EMU and evolution of the Eurozone's sovereign debt crisis that SADC can apply to the establishment of a SADC Monetary Union. The paper also explores appropriate fiscal rules and forms of fiscal coordination to consider for long-term viability of the monetary union. The research also highlights measures, policies and procedures that are perceived to undermine or threaten the future of the EMU. The research expects to use the lessons from the Eurozone as evidence for SADC to relook

at the process and redefine the criteria for the establishment of a single currency union.

1.4 Limitations of the study

As noted above the study is geared to identify the main lessons from the European sovereign debt crisis that SADC can apply to the establishment of the SADC Monetary Union. Therefore a detailed review of fiscal sustainability in SADC is outside the scope of this study.

1.5 Methodology

This research is desk-top research and the focus is on past and current literature on monetary unions and fiscal policy as applied to the Eurozone to identify the lessons SADC can learn and potential challenges SADC should avoid as it works towards the establishment of a monetary union. Therefore, this study does not involve econometric modeling or in-depth empirical analysis of the Eurozone's fiscal sustainability and sovereign debt crisis.

1.6 Structure of the paper

The paper is organised as follows: Section 2 provides background information on the establishment of the European Union. Section 3 analyses the source and evolution of the EU Debt Crisis; Section 4 provides an analysis on fiscal sustainability in the EU; Section 5 explores application of fiscal rules in the EU; Section 6 reviews the concept of an optimal currency area and its relevancy to the EU; Section 7 assesses the implementation of the convergence program known as Maastricht convergence criteria; Section 8 assesses the coordination arrangement of fiscal and monetary policy; Section 9 provides an analysis of SADC macroeconomic indicators; Section 10 presents lessons for SADC; and the last section concludes and provides some recommendations.

2. Establishment of the European Union

2.1 The formation of the European Union

The process of establishing a single European currency began in 1969 with the Barre Report¹, produced by the then six-member European Economic Community (EEC). The Barre Report was further discussed by the Heads of State or Governments in The Hague who then initiated a plan for the formation of an economic and monetary union. The collapse of the Bretton Woods System in 1971 and the oil crisis of 1972 delayed the process of establishing the union. Despite these challenges the EEC grew to include nine states, many of which were reluctant to surrender their national currencies.

The EU is a product of three major organizations. The first one was the European Coal and Steel Community (ECSC), which was created in an attempt to unite Europeans. Originally the ECSC was made up of six members: Belgium, West Germany, Luxembourg, France, Italy, and the Netherlands. The other two organizations became active after the Rome treaty² was signed and these were the European Atomic Energy Community, known as EURATOM³, and the European Economic Community or the EEC. The ECSC, EURATOM, and the EEC were merged and became the European Union in 1992 when the Maastricht Treaty was signed (European Commission, 2005).

As noted above the ground-breaking of European monetary integration was the signing of Maastricht Treaty in 1992. The EMU was established according to section II, Articles 102A to 109M, with eleven Protocols and six Declarations. The process consisted of three major stages.

¹ That highlights the need for greater co-ordination of economic policies and monetary cooperation in the Eurozone.

²The Treaty established the European Economic Community and contributed to the formation and development of Europe's nuclear industries. This Treaty also guarantees high safety standards for the public and prevents nuclear materials intended principally for civilian use from being diverted to military use.

³ Belgium, France, Germany, Italy, Luxembourg and Netherlands.

Stage 1: July 1990 to December 1993

Developments during this period included: significant progress with regard to the liberalisation of capital movement; a decision that the European System of Central Banks would be composed of the European Central Bank and national central banks of the EU members and would conduct the common monetary policy which would be aimed at price stability. Another achievement was to practically complete all required laws concerning free movement of goods, services and capital.

Stage 2: January 1994 to December 1998

During this period the European Monetary Institute (EMI) was established. The EMI was established to prepare and publish the operational framework for the single monetary policy. In May 1998, during the European Union summit in Brussels, the eleven member states of the EMU were announced. Also during this event the EMI was transformed into the European Banking Committee (EBC) and permanent bilateral exchange rates between national currencies were announced.

Stage 3: January 1999 to July 2002

The last stage is characterised by three phases. The first one entailed the introduction of the euro as a legal tender in eleven member states, but at that time no coins and notes were distributed. During this time exchange rates between the new European currency and all national currencies were irrevocably locked. The second phase was when the European Central Bank (ECB) took full responsibility for the common monetary policy, and government bonds in member countries were issued in euros for the first time. The third phase started in January 2002 when the euro notes and coins appeared for the first time and national currencies were withdrawn. In this very year Greece qualified to join the EMU.

2.2 Expansion of the EU

In 2004, ten countries (Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic and Slovenia) joined the EU. As shown in Table 1 of appendix 1, these countries were functioning market economies and the macroeconomic situation was robust with moderate GDP growth except for Malta and relatively low inflation. Analysts concur that these countries are not the source of the prevailing debt crisis in the EU. The main effect was that the enlargement altered the cost-benefit calculus of existing members of the Euro-zone.

2.3 Costs and benefits of joining the EU

Benefits associated with joining the EU are twofold: elimination of transaction cost, and of the risk which comes from uncertainties and fluctuation of the exchange rates.

Transaction cost involves fixed commission or the spread between the buying to the selling prices of any given currencies. After joining the EU, the currency conversion costs were eliminated and this was an incentive for member countries, more especially for individuals or companies in business with foreign partners. Common currency also avails an opportunity for price comparison, making price differences more noticeable and helps to equalise it across borders. In the EU, disappearance of transaction costs induced price transparency and increased effectiveness of financial markets in further strengthened integration. Since after adopting the euro all financial instruments were issued and listed in euros, these created confidence to prospective investors to invest in different EU members' financial markets. In addition, such integration provided different channels of risk-sharing in EMU (De Grauwe, 2000).

Also the euro completely removed exchange rate risk between all member states. The most important argument in this case is that exchange rate uncertainty is inherently damaging to the volume of real flows of trade and investment. So if exchange rate risk is eliminated, international business is

induced. Logically, if the exchange rate is unpredictable, foreign investments (both, portfolio and direct) become risky and this reduces appetite to invest (De Grauwe, 2000).

Although the euro benefits are significant, it also provides some disadvantages to member states: i.e. cost incurred by institutions' and individuals' adjustment to a new currency and relinquishing national monetary policy as an important tool for a member state to adjust to the economic disequilibrium when it experiences an economic shock.

Also to adopt a single currency implies that both public and private institutions of the new EMU member states have to spend huge amounts of money to adjust invoices, price lists, office forms, payrolls, bank accounts, databases, software, parking and postage meters, etc.

As noted above, the EU is not an OCA, therefore external shocks affect the region asymmetrically and this may trigger imbalances in production, consumption, investment, government spending and trade in certain countries within the currency area while other member states are not severely affected. In the absence of national monetary policy, member states are less able to deal with such shock in time and to avoid undue frictions and complications.

Results of the EU convergence criteria in 1999 with some countries not convincingly converging also provide evidence that the decision to adopt a single currency was not based on a solid foundation.

3. The source and evolution of the EU Debt Crisis

Expectations of a sovereign debt crisis in Europe gained momentum from late 2009 as it became evident that Greece, Ireland, Portugal, Italy, and Spain were likely to default in repaying their debts to Eurozone lenders. Analysts agree that the prevailing situation partly originated with the market lending to Greece, Ireland, and Portugal at the same interest rate as it did to

Germany in 2008, convinced that the Euro could never break up and holding the assumption that every country in its zone is as safe as the safest: Germany (SESRIC Report on Global Financial Crisis, 2011).

As it became evident that the risk of defaulting of some debtor governments was in fact very high, market attitude changed quickly, making it substantially costly for the risky countries to borrow further. This aggravated the likelihood of a debt crisis in the Eurozone as it worsened the debtor countries' chance to honour their debt obligations and consequently the chance of insolvency of banks in creditor countries (SESRIC Report on Global Financial Crisis, 2011).

Therefore, if the prevailing debt crisis was a result of recklessness of governments in the European Union that took advantage of membership in the EU to increase spending, this should be visible in the budget deficits widening significantly in these countries after the introduction of the common currency in 1999. On the other hand, if the crisis was driven by a post-euro adoption surge in capital flows from the Eurozone core (which later on came to a sudden stop), this should be visible in the current account deficits (i.e. capital flows) expanding after adoption of the euro. To analyze the source of the crisis, we explore relevant developments in the EU, especially Greece, Ireland, Italy, Portugal, and Spain (GIIPS).

Greece

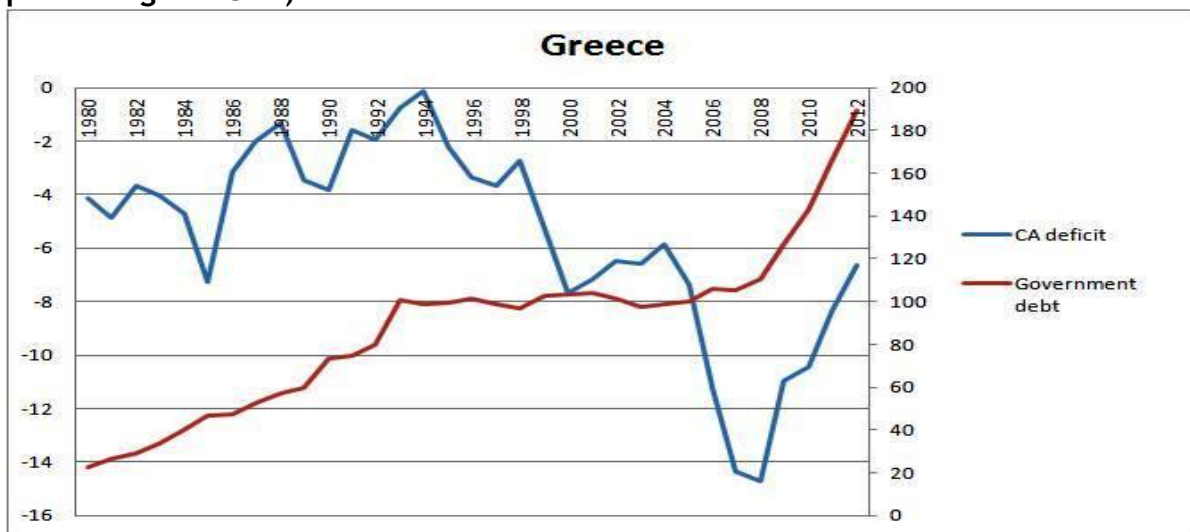
There are several factors that contributed to the government profligacy that triggered the crisis. Greece's sovereign debt crisis is largely driven by the government's high borrowings to fund budget and current account deficits. The adoption of the euro currency allowed more favourable terms for the refinancing of government debt, and the strong GDP growth masked the weakness of Greece's public finances. Domestically, the country started to experience high government spending and low tax collection, which, coupled with an ageing population, contributed to the Hellenic Republic's ballooning deficits. Central government expenditure increased by 87 per cent in nominal terms between 2004 and 2010, while tax revenues only grew by 31 per cent. In addition, Greece maintains a generous pension system which has strained

the country's public finances. While access to capital at low interest rates and over-borrowing by the private sector are considered as possible causes, some arguments suggest that the crisis can primarily be chalked up to the mismanagement of public finances. The situation was further worsened in October 2009, when the new Finance Minister, George Papakonstantinou, revised the budget deficit from 6.7 per cent to 12.7 per cent of GDP (SESRIC Report on Global Financial Crisis, 2011). Such developments were later accompanied by the following abnormalities:

- There were accusations that banks like Goldman Sachs had helped Greece “obscure billions in debt” through exotic financial instruments; for example, by borrowing billions through trading currencies at favourable exchange rates, Greece could report these transactions as swaps instead of loans.
- The Greece's long-term sovereign debt rating was downgraded to “castoff” status.
- Investors lost confidence.
- the yield on Greek 10-year bonds fell upon the announcement of an EU/IMF aid package and austerity measures,
- yields have since trended upwards as there were growing expectations that Greece's debt, which escalated, was indeed unsustainable.

As a result of above developments, Greece's government debt reached 115 per cent of GDP in 2009 and its current account deficit was 14.6 per cent of GDP in 2008. It was during this episode when Greece admitted that its national statistics had been consistently unreliable for years, even before joining the euro in 2001. Greece became the first EU country to receive a bail-out from the EU and the IMF in May 2010, worth EUR 110bn (Minescu, 2011).

Figure 3.2.1: Greece deficits before and after adoption of the Euro (as a percentage of GDP)



Source: Adapted Organization for Economic Cooperation and Development Report (2012)

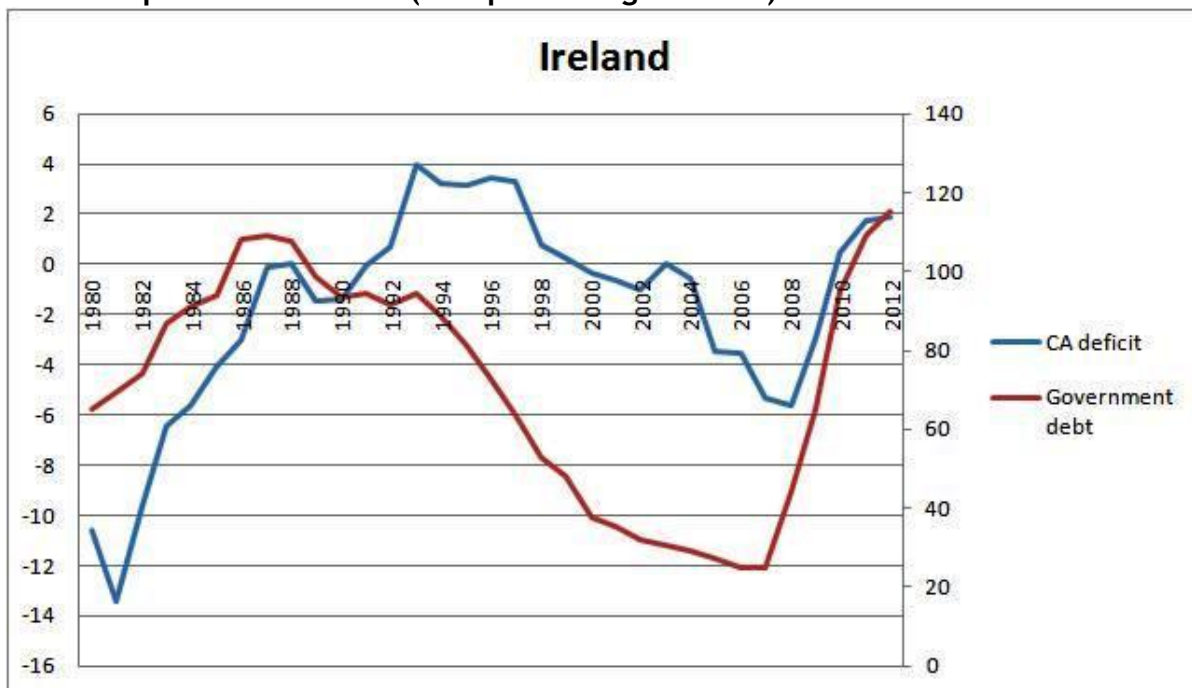
Ireland

In Ireland the source of the crisis was not the public sector but it originated from a property bubble that erupted during the global financial crisis and put several private-sector Irish banks in severe anguish later on. In this case, EMU entry triggered the Irish housing price surge by lowering real interest rates and making mortgages more attractive. After 10 years, Dublin saw greater property appreciation than any other capital in the world. These developments in house prices set off a residential construction frenzy that far surpassed demand; 15 per cent of the housing stock was vacant in 2006. In 2006, two thirds of loans to first time buyers had loan-to-value above 90 per cent. Despite these warning signs, the regulatory authorities failed to respond on time (Minescu, 2011).

When the property bubble finally burst and the exposure of Irish banks were realised by the public, creditors withdrew themselves from rolling over inter-bank funding to these banks. The situation was uncontrollable because the Irish banking sector, Bank of Ireland and Allied Irish Bank alone held three-quarters of the country's consumer accounts. In an attempt to save the banking sector, the Irish government issued a blanket guarantee of Irish banks' liabilities, including deposits, senior debt and dated subordinate debt,

on September 30, 2008. Such an intervention fuelled the crisis because by December 2008, losses on Irish banks' balance sheets escalated beyond their expectations and the only option that was left for the government was to recapitalize the three largest banks, effectively nationalizing Anglo-Irish bank (Minescu, 2011).

Figure 3.2.2: Ireland's current account and government debt before and after adoption of the Euro (as a percentage of GDP)

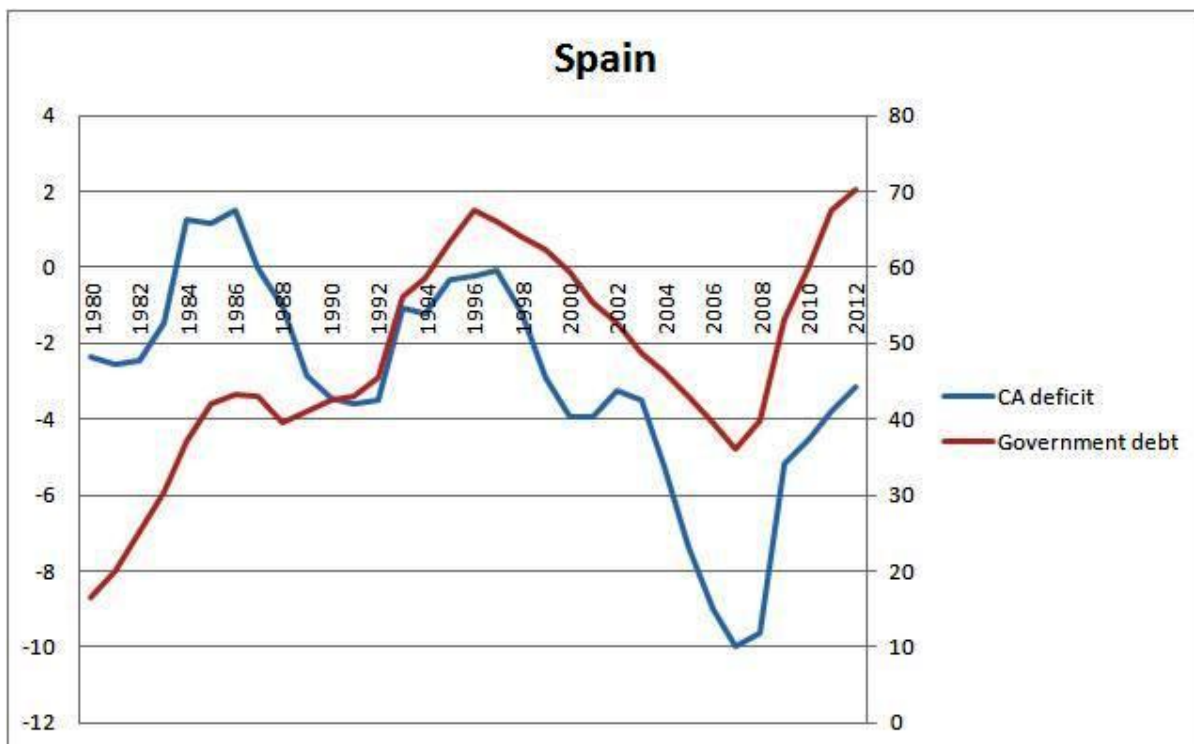


Source: Adapted Organization for Economic Cooperation and Development Report (2012)

Spain

The spill over effects of the Greece and Ireland crisis were first experienced by Spain and Portugal. Like in Greece investors' confidence was the first to be shaken when it was evident that local banks (cajas) and the property system were failing. When the property bubble finally burst, Spanish banks already had outstanding loans of EUR323bn to property developers (equivalent of 31% of GDP); and they already had provisions of EUR87bn for bad loans by the end of 2010. In addition to this exposure of the banking system, Spain was among developing countries that suffered high unemployment (Deutsche Bank, 2011).

Figure 3.2.3: Spain's current account and government debt before and after adoption of the Euro (as a percentage of GDP)

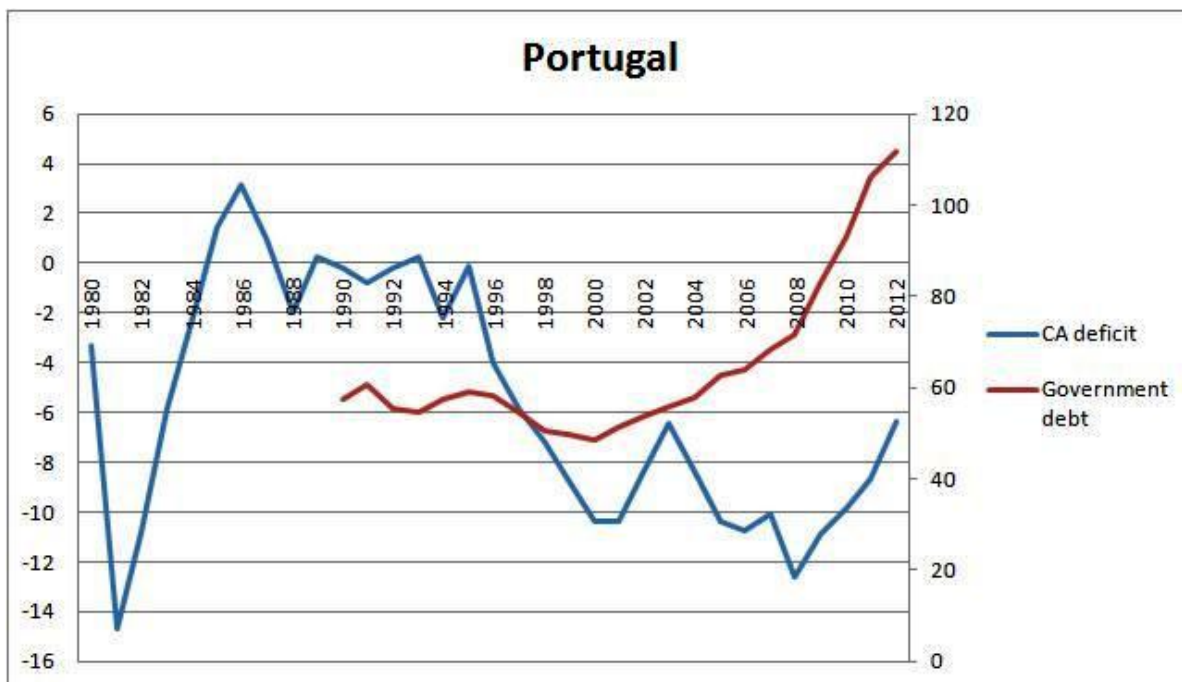


Source: Adapted Organization for Economic Cooperation and Development Report (2012)

Portugal

The main problem with Portugal was high public debt coupled with high budget deficit. Portugal's situation varied slightly to Greece because it enjoyed rapid economic growth before joining the euro in 1999. Portugal was crippled by the expansion model of the European Union to cover Eastern Europe, which diverted part of the foreign direct investment away from Portugal towards the new members (Minescu, 2011). April and June 2011 was a hectic period for Portugal, as it was expected to refinance EUR 9.5bn of public debt. In addition, the yield of 6.7 per cent paid by Portugal for the 10-year bonds sold in January 2011 was very close to 7 per cent and the public declared from the onset that it was not sustainable. In 2011, Portugal became the third euro area member state to request a bailout from the European Union and the International Monetary Fund (Lourtie, 2011).

Figure 3.2.4: Portugal's current account and government debt before and after adoption of the Euro (as a percentage of GDP)



Source: Adapted Organization for Economic Cooperation and Development Report (2012)

Italy

Italy suffers from a combination of high debt, declining competitiveness, and weak growth such that even if the contagion from the source is controlled, the Italian economy is still vulnerable to adverse shocks. Therefore, Italian policy response to ensure sound public finances requires a range of interventions to ensure sound taxation, pensions, competition in product and services markets, the business environment, efficiency of the public administration and labour market (SESRIC Report on Global Financial Crisis, 2011).

In April 2012, Italian borrowing costs surged and raised fresh concerns amongst investors about the country's ability to reduce its high levels of debt. The situation became worse such that in an auction of three-year bonds, Italy paid an interest rate of 3.89%, up from 2.76% in a sale of similar bonds the previous month (Minescu, 2011).

In a nutshell, the debate on the EU debt crisis is still on-going and the crisis has not yet subsided. A deeper analysis on the source of the EU debt crisis can be summarized as follows:

- Confidence in the prospects for growth and stability of the economies of Greece, Ireland, Italy, Portugal, and Spain (GIIPS) increased tremendously when the euro was introduced, causing their interest rates to decline to those of Europe's more stable members.
- Such confidence and lower interest rates triggered domestic demand in the GIIPS, and investors and consumers were emboldened to increase spending and run-up debts, often owed abroad as foreign capital flowed in.
- Growth augmented and the prices of domestic activities (especially, those least vulnerable to international competitions, such as housing) rose relative to the price of exportable or importable products, drawing investment into the less productive non-tradable sectors and away from exports and industries competing with imports.
- Also, exports increased extraordinarily as a share of GDP in Germany, the Netherlands, and other historically stable countries in the European core. Growing demand in the GIIPS enabled these core countries to increase exports. The adoption of a common currency, whose value was based on broader European competitiveness trends that made it lower than the deutschmark or guilder might have been, made their exported goods more affordable.
- The domestic demand explosion in the GIIPS induced a sudden wage growth that outpaced productivity, increasing unit labour costs and eroding external competitiveness beyond their expectations. This development was reinforced by rigid labour markets in most of the GIIPS. The emergence of China, as well as currency depreciation and the hike in labour productivity in the export sectors of the United States and Japan, added to the competitiveness glitches of the GIIPS.
- The single European monetary policy was affecting the Eurozone asymmetrically, too loose for the rapidly growing GIIPS (Spain, Greece,

and Ireland) and too tight for Germany, whose domestic demand and wages grew very slowly compared to the European average. This further exacerbated the loss of competitiveness in the GIIPS.

- Lower borrowing costs and the surge in domestic demand enhanced tax revenues in the GIIPS. Surprisingly, instead of recognizing this as temporary revenue and saving the windfall gains for when growth slowed, GIIPS governments expanded their expenditure. This fiscal negligence added to the problems in Greece.
- The beginning of the debt crisis in 2009 marked an unforeseen end to the post-euro growth model in the GIIPS. When the GIIPS situation worsened tax revenues collapsed and their spending models were revealed to be unsustainable. Loss of competitiveness in GIIPS eroded confidence of turning to foreign demand for recovery. As a result the GIIPS were left with high public and private debts and weak long-term growth prospects.

Another aspect that is worth addressing is to explore whether fiscal debt was sustainable or not.

4. Fiscal sustainability in the EU

4.1. Theory on Fiscal sustainability

The concept of fiscal sustainability refers to the likelihood of continuing current fiscal policy: sustainable policies are those that remain relevant overtime while unsustainable policies will ultimately have to be modified. However, while the general perception is clear, different specifications have been provided in the theory and literature, commonly relating to restrictions on the evolution of public debt.

Theoretically, the notions of fiscal sustainability subscribe into two broad families. The first one suggests that the public debt ratio should converge to a finite value in order to avoid increasing the tax burden. Furthermore, other specifications in the same tone, such as those advocated by Buiter (1985) and Blanchard et al (1990), are more specific and require the debt ratio to

converge back to its initial level. According to Balassone *et al* (2009), these specifications capture the idea, first advocated by Keynes (1923) that an ever-increasing tax rate is not sustainable in the long run.

According to the second idea, the less restrictive notion of sustainability, fiscal policies are sustainable as long as the discounted value of all future primary surpluses equates to the current level of public debt. This idea holds if and only if in the long run the rate of growth of the debt-to- GDP ratio is lower than the interest rate. Therefore, the 'intertemporal budget constraint' denoted in ratios to GDP is more agnostic with respect to the path of public debt than the other definitions of sustainable policies (Blanchard et al, 1990).

Regardless of the absence of a clear-cut theoretical yardstick, the 'conventional wisdom' definition of fiscal sustainability suggests that a continuous increase and/or exceptionally high debt ratios are unsustainable.

4.2. Fiscal Sustainability in the EU

The European Commission uses two quantitative indicators to track public finances sustainability in member states (Balassone et al., 2009). These indicators are complemented by two alternative sustainability indicators S3 and S4.

Box 1. The European Commission's sustainability indicators

The S1 indicator is inspired by the tax-gap indicator (Blanchard *et al.*, 1990) and the reference value for public debt defined in the Treaty establishing the European Community. It is defined as the size of the permanent budgetary adjustment necessary for the gross consolidated debt to reach 60% of GDP in 2050. The S1 indicator is time dependent and is typically linked to a target year in the medium term (*e.g.* at the end of the time horizon of the stability programme) but in principle can be calculated using any target year.

The S2 indicator is similar to the S1 indicator but is a permanent budgetary adjustment, *i.e.* the difference between the primary balance required in a certain target year to equal the present value of the sequence of all future primary balances in percentages of GDP to the debt ratio projected at the beginning of the target year and the primary balance actually projected for the target year. The S2 indicator thus operationalizes the theoretical benchmark of the inter-temporal budget constraint. In addition, two alternative sustainability indicators have been proposed:

The S3 indicator is a variant on the S2 indicator but, rather than defining the budgetary adjustment required to reach a debt-stabilising budget balance in 2050 (or, more generally, at the end of the period considered) as an “abrupt” increase in the target year, the required adjustment is calibrated as a gradual improvement of the primary balance in the years leading up to the target year.

The S4 indicator is a variant on the S1 indicator but measures the required gradual adjustment in the primary balance in the period up to the target year in order to reach the balanced budget by 2050. Since the restriction imposed by the S4 indicator (a balanced budget) is stronger than the one associated with the S1 indicator (a debt ratio of 60% of GDP in 2050), the public finance position at the end of the period considered is generally much sounder.

Source: Balassone *et al* (2009)

The major setback of the indicators can be summarized as follows:

- The S1 indicator turn to narrow the sustainability gap. Logically by bringing the primary balance to the level stated by the indicator, only leads to a certain debt ratio in 2050 but does not restrict debt dynamics after that date in any way. Therefore, debt dynamics would remain unfavourable if they implement the fiscal adjustment suggested by the S1 indicator: keeping the primary balance constant after 2050 would suggest an increasing debt ratio from the level of 60 per cent in 2050. This is also contrary to the Maastricht convergence criterion which emphasizes on the reduction of debt ratios to 60 per cent or below (see, Langenus (2006)).
- Generally the results generated from these indicators do not provide a solid approach to track fiscal sustainability in the EU because they are based on a mechanical and partial equilibrium examination. Such projections are sensitive to the underlying assumptions and in some cases demonstrate highly accentuated profiles, which does not give a true picture on what is happening on the ground. For an example, the alternative assumption regarding the primary balance at the start of the projection period can result in sizeable differences regarding the projected behaviour of the debt ratio. Also, diverse assumptions regarding the real interest rate and the growth rate (possibly reflecting measurement problems for past values) can lead to substantial different conclusions in the assessment. Therefore, the projected evolution of debt levels is not a forecast of possible or even likely outcomes. Instead, the

indicators are instruments to facilitate policy debate and at best provide an indication of the timing and scale of emerging budgetary challenges that could occur on the basis of “no policy change”. It is for this reason that the European Commission’s valuation supplements the quantitative indicators by qualitative assessments of the overall economic and fiscal situation (European Commission, 2009).

Based on the limitations of the indicators and the prevailing sovereign debt dynamics, it is safe to conclude that, the EU requires a comprehensive policy to foster timely correction of excessive deficits, reduction of government debt to more sustainable levels and a re-organisation of banks to minimize the strong inter-linkage between government and financial sector balance sheets, which the current system does not address.

Schipke (2012) suggest that the success of the common currency highly depends on simultaneously satisfying national budget constraints, since cross-border spillovers via the financial sector - from ailing member states are potential to undermine confidence and cause a region-wide crisis.

To address the prevailing situation in the EU, governments of ailing economies should adopt a comprehensive and multipronged reform program similar to that which was employed by the Eastern Caribbean Currency Union to bring their debt-to-GDP ratio to 60 percent (see appendix 2 for details).

5. Fiscal Rules in the EU

5.1 The concept of fiscal rules

A fiscal rule is a restriction on fiscal policy that influences political decisions of the executive and the legislature. According to Kopits and Symansky, (1998), rules are usually expressed in terms of fiscal indicators to reduce the time permitted for inconsistent fiscal policy. Fiscal rules address shortcomings in budgeting and the political decisions underlying the budget that may lead to expansionary fiscal policies. Basically there are four broad and distinct sets of rules:

- Expenditure rules (or ceilings) impose a ceiling on the amount of government spending, either in nominal or real terms, or using nominal or real growth rates, or using a specific government expenditure-to-GDP ratio.
- Budget balance rules impose a ceiling on government spending vis-à-vis revenues, using either cyclically adjusted/structural or nominal measures, or using percentage of GDP measures.
- Debt rules set limits on the amount of government debt, either in nominal terms, as a ratio to GDP, or even an explicit reduction of debt in terms of the debt-to-GDP ratio.
- Revenue rules impose constraints on the allocation of higher-than-expected revenues in good times, and can impose constraints on expansion of the tax-to-GDP ratio.

Empirical evidence suggests that fiscal rules can enable governments attain fiscal stability and sustainability but their contributions cannot be easily established. Countries that have fiscal rules but not enforcing them cannot claim to be pursuing fiscal discipline.

Arguments against deficit and debt rules are:

- non-compliance can be hidden by creative accounting;
- they can encourage the executive to run the largest permitted deficit;
- they can create a risk of excessive deficits under unexpected adverse conditions;
- they limit the use of automatic stabilisers in economic downturns;
- they undermine the predictability of resources; and
- core government functions such as public investments can be cut as a result of the rules.

The concept of fiscal rules is further expanded by Anderson and Minarik (2006), who conclude that practically there seems very little identifiable advantage in the use of deficit rules for fiscal behaviour. Instead the balance would seem to lean towards spending rules that are simpler and less prone to

be manipulated. To motivate their argument Anderson and Minarik provide a summary that weighs the pros and cons of the various options to assist governments achieve fiscal stability and sustainability.

Table 5.1.1: Alternative rules for fiscal stability and sustainability

	Deficit rules (Unadjusted)	Cyclical adjusted deficit rules	Expenditure rules
Fiscal responsibility • Expansionary • Recession	• Encourage large deficit • May require small deficit	• Encourage large deficit • May require small deficit	• Support the saving of budget surplus • Allow deficit to grow
Macroeconomic stabilisation • In fiscal expansion • In fiscal recession	• Pro-cyclical • Pro-cyclical	• Pro-cyclical, but less than unadjusted deficit rule • Pro-cyclical, but less than unadjusted deficit rule	• Counter-cyclical, through automatic stabilisers • Counter-cyclical, through automatic stabilisers
Administrability	• Verification complicated	• Verification complicated	• Verification easier
Credibility	• Status more contentious	• Status more contentious	• Status more transparent
Public investment	• Can be protected	• Can be protected	• Can be protected, possible better than under deficit rules
Core government functions	• Volatile funding	• Volatile funding	• Predictable funding
Monetary policy	• Co-operation difficult	• Co-operation difficult	• Co-operation easier

Source: Anderson and Minarik (2006)

5.2 EU fiscal rules

The EMU fiscal rules not only ensure that each country upholds a sound fiscal stance but also that adequate margin for budgetary flexibility in critical times. Worth noting is that, fiscal sustainability is a central principle of EMU: it is a precondition for financial and monetary stability. For policy stabilisation, budgetary flexibility is crucial at the national levels more especially because member states can no longer rely either on a monetary policy tailored to national needs or on exchange rate adjustments (Franco and Zotteri, 2009).

5.2.1 The Maastricht Treaty

The Maastricht Treaty (1992) provides rules for all countries to reach in order to achieve Economic and Monetary Union and these entail: low inflation, low interest rates and controlled public debt and spending. The Maastricht Treaty articulates that budget deficits cannot exceed 3 percent of GDP unless under exceptional circumstances, such as severe recessions; even then budget deficits should remain close to 3 percent; and the excess deficit should last only for a short period of time. In the event that the limit is exceeded and the three conditions are violated, the deficit is deemed “excessive” and it prompts a procedure intended to force adoption of corrective measures. Regarding national debt the treaty emphasizes that it should remain lower than 60 per cent of GDP.

5.2.2 The Stability and Growth Pact

The Stability and Growth Pact (SGP) enacted in 1997 complemented the Maastricht rules by introducing that each country should also aim at a medium-term objective of a budget which is close-to-balance or in surplus. The SGP reinforced the surveillance of budgetary positions (the preventive arm of the Pact) and specified the implementation of the excessive deficit procedure (the corrective arm of the Pact). Under SGP member states are obliged to choose a budgetary target in structural terms and let programmed stabilisers or discretionary action operate symmetrically around it. A relatively low budget deficit with respect to the 3 per cent threshold increases the leeway for countercyclical policy without the risk of an excessive deficit. Therefore, compliance with the deficit threshold and the ceiling for the debt-to-GDP ratio would prevent the public finances of EU member states from taking unsustainable paths.

EU fiscal rules also emphasize that each member state submits its budgetary targets in multi-year budgetary documents. Updates and assessments are done annually by the European Commission to ensure consistency with EU fiscal rules. Assessments include a mid-year examination of public finances and an ex-post evaluation of results, as compared to planned targets. In case

there are anomalies the European Council makes recommendations to governments on the need to assume corrective measures. Countries with excessive deficits are expected to implement corrective measures according to a fixed timetable or sanctions are imposed. While the EU fiscal rules are aimed at fiscal discipline in the medium term, they do not overlook the relationship between fiscal discipline and sustainability of public finances.

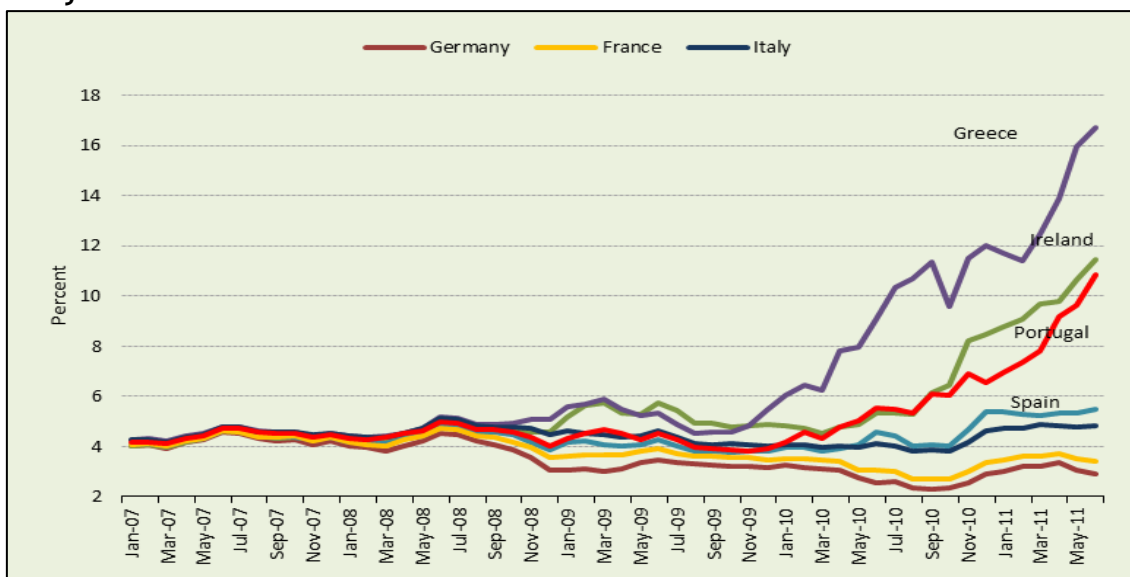
It is evident that at the national level, the EU fiscal rules have been characterised by frequent breaches of the deficit ceiling as well as by perpetual deviations from the medium-term fiscal objectives, making it difficult or impossible to reduce debt levels on time. EU member states had been unwilling to follow articulated procedures in general and the Council failed to apply sanctions to defaulters. The SGP was relaxed in 2005 to accommodate France and Germany. This action further undermined the credibility of the EU and created a room for other countries to default (Calmfors, 2005). The latter later resulted to general bias to avoid political conflicts, collusion among Member States simultaneously breaching the rules, “strategic awareness” among current non-violators that lenient treatment of violators likely increases the chances of lenient treatment for the own country if it were to breach the rules in the future, and insufficient legitimacy for sanctions (Hallet, 2008).

5.3 EU action to deal with the Debt Crisis

In 2011, the ECB announced unlimited loans for three years to the 7,500 banks in the eurozone. Before the end of 2011, about 489 billion EURO was borrowed and in February 2012, 530 billion EURO was advanced to 800 banks. These loans relieved the strain on banks whose finances were so troubled that they were not able to access any loan. The ECB made the loans in its capacity as emergency lender of last resort that banks can turn to if no one else would lend to them. Worth noting is that, the ECB is not allowed to afford government such loans. Although such an intervention came as a relieve for some banks especially in the short run, it is becoming clear that these banks are likely to default since the demand for loans from businesses has declined.

Critically, most banks invested in higher-yielding government bonds, which increased the bond prices and lowered bond interest rates. Spain and Italy took advantage of lower interest yields and borrowed, but as noted above the relief proved too short since the cost of borrowing has started to increase.

Figure 1: Secondary market yields of government bonds with maturities of ten years



Source: European Central Bank

Recently, the ECB has been reducing interest rates by a quarter percentage point each time down to 1.0 per cent. At the beginning, Eurozone countries benefited from the low interest rates since investment capital was increased. Suddenly, the increase in liquidity raised wages and prices, making their exports less competitive. This was followed by a surge in inflation and public spending, while tax revenues declined drastically.

While the surge in public debt may be the obvious manifestation of the Euro crisis, its roots go much deeper and the question still holds that ‘Is the EU an optimal currency area?’

6. Optimal Currency Area Theory (OCA)

The theory of optimal currency area essentially probes the question: “Under what circumstances should two countries choose to adopt the same currency instead of having two distinct currencies?” Mundell (1961) published the first

article on the OCA which defines OCA as an area with internal factor mobility and external factor immobility. The word “optimal” according to Mundell refers to a regime that currency union maintain external and internal economic balances in a particular region. The term “area” denotes an economic region where homogenous products are produced, the technology and knowledge are at the same level, and the region is equally affected by changes. Other research in line with Mundell are: Viner (1972), Myrdal (1956), Tinbergen (1965), Johnson (1972), Fleming (1971) Machlup (1976), Balassa (1976), Kenen (1969, 1976), Bröcker (1988), Flam (1992) and Pohl and Sorsa (1994). The latest version of the OCA theory discusses the following criteria:

a. Price and wage flexibility

If nominal prices and wages are flexible between and within countries planning to adopt a single currency, the transition towards adjustment following a shock is less likely to be associated with sustained unemployment and inflation. Basically, this lessens the need for nominal exchange rate adjustments. On the other hand, if nominal prices and wages are downward stiff some measure of real flexibility could be attained by means of exchange rate adjustments. The loss of direct control over the nominal exchange rate instrument represents a cost (Friedman, 1953).

b. A high degree of labour mobility between the countries

The second condition is that if countries in a monetary union are affected by asymmetric shocks then they should have a high degree of labour mobility between them to remain in the union. The idea in this case is that recession in the asymmetric country causes unemployment to rise in certain countries. If unemployed workers can easily move to other parts of the monetary union and find jobs, then the adverse impact of the shock will not be significant. This implies that a monetary union should involve a blurring of national identity in some manner. If countries are not unified any adverse shock that hits the entire economy will leave workers and the economy worse off.

c. Financial market integration: Another contribution on the OCA theory suggests that financial integration can reduce the need for exchange rate adjustments. Financial integration may cushion temporary adverse disturbances through capital inflows - e.g. by borrowing from surplus areas or decumulating net foreign assets that can be reverted when the shock is over. If the region has a high degree of financial integration, modest changes in interest rates would elicit equilibrating capital movements across partner countries (Mundell, 1973).

d. Inflation rates: When inflation rates between countries are low and similar over time, terms of trade also remain stable. This would in turn boost equilibrated current account transactions and trade, significantly reducing the demand for nominal exchange rate adjustments (Fleming. 1971).

e. A centralized fiscal policy for redistribution

The idea in this case is that if countries in a monetary union are hit by asymmetric shocks the central fiscal authority cushions member states by transferring the tax revenue it collects from the countries that are doing well to the country that are heavily affected by the shock. Worth noting is that, this would require an advanced degree of political commitment at national level and willingness to undertake such risk-sharing at regional level (Kenen, 1969).

f. Political integration. The political will to integrate is considered the most important condition for adopting a single currency. A similar attitude fosters compliance with joint commitments and ensures cooperation on various economic policies. Therefore, similar attitudes on policies are relevant in turning a group of countries into a successful currency area (Mintz (1970).

g. Degree of openness

A country, where trade within the OCA accounts for a high proportion in domestic output, can profit from joining in a currency area. Openness of an

economy determines the effectiveness of exchange rate changes as a macroeconomic policy instrument.

h. Similarities of shocks and business cycles

When countries relinquish their currencies and join a monetary union, they are giving up their autonomous monetary policy. This implies that they are imposing costs on their ability to respond to external shocks. Asymmetric shocks and business cycles raise the need for country-specific adjustment policies; however in a single-currency area, country specific monetary policy is not possible.

Having analysed the broad economic intuition for the conditions that determine whether a region is indeed an optimal currency area, the question still holds that “Is the EMU an Optimal Currency Area?”

6.1 Is the EU an Optimal Currency Area?

Empirical studies done before and after the adoption of a single currency in the EU suggest the following:

Table 6.1.1: EU Empirical results on Optimal Currency Area

Theory	Empirical Results (Conclusions)
1. Price and wage flexibility (Friedman, 1953)	Significant wage-price rigidity persists across Europe, so that market flexibility is unlikely to prevent the generation of areas ruined by high and persistent unemployment (Eichengreen, 1993; Kenen, 1995; Goodhart, 1995).
2. High degree of labour mobility (Mundell, 1961; Ingram, 1962)	Labour mobility within the EU is one-third the level found in the USA (Eichengreen, 1991). The Eurozone has ‘rigidities in labour and product markets, limited labour mobility, differing national industrial structures and rates of productivity growth (Issing, 2005).
3. Similarity of inflation rates (Haberler, 1970; Fleming, 1971; Magnifico, 1973)	ERM membership has caused most EU member states to adapt their economic strategies to achieve similar inflation rates at the cost of persistently high unemployment (Baimbridge, 1998).
4. Fiscal integration and inter-region transfers (Kenen, 1969)	The current size of the budget, at only 1.24 % of total EU GDP, precludes the development of any significant inter regional fiscal transfer system for the foreseeable future (MacDougall (1992), Whyman (1997)). The EU lacks centralized fiscal transfer mechanism, and

	has decentralised responsibility for fiscal and other economic policies' (Issing, 2005). Issing believes that the decentralized approach to fiscal policy in the euro zone and the SGP can be very effective and can work given "sound government finances" and "provided that they strive to achieve surpluses or balanced budgets in periods of favourable economic activity".
5. Openness and size of the economy, depending on the fixed exchange system (McKinnon, 1963)	Most small or medium sized industrialized nations fulfil this condition (Baimbridge et al., 1998)
6. Political integration (Mintz (1970).	De Grauwe (2006) suggests that the major fault of the EMU is lack of political integration. The EMU lacks an overarching authority to ensure that none of the member states choose to leave the currency area. Therefore, to maintain members, he believes that it must create as much political union between the states as possible.
7. Intra-trade (Frankel and Rose, 1997)	Horst (1998) point out that intra-EU trade has increased consistently since WWII, while low factor mobility and low wage flexibility have continued to get worse over the same time frame.
8. The similarities of shocks and business cycles (Mundell, 1961)	The Eurozone shocks are asymmetric in that the weaker countries such as Greece, Ireland, Portugal, and Spain are severely affected by slow growth, low labor productivity, and lack of competitiveness whereas the German, and to a lesser extent, the French economies have relatively much higher labor productivity and are much more competitive (Kar, 2011)

Source: Different EU studies

Base on the above analysis one can safely conclude that the EU is not an optimal currency area. Although, the EMU decided to adopt a common currency in 1999, the euro, EU failed to satisfy all of the criteria for an optimum currency area. This conclusion is further echoed by the results of the EU convergence criteria before the adoption of the euro.

7. EU Convergence Criteria

In 1992, the Maastricht Treaty established a set of convergence criteria that all prospective members would have to meet before joining the EU. This approach was meant to ensure convergence in economic performance across the EU, so that countries aspiring to join the single currency entered on the basis of sound public finances and similar economic conditions (see Maastricht Treaty 1992). The EU convergence criteria are summarized below:

- **Price Stability:** the rate of inflation may not exceed the average rates of inflation of the three member states with the lowest inflation by more than 1.5%.
- **Interest Rates:** long-term interest rates shall not vary by more than 2% in relation to the average interest rates of the three Member States with the lowest interest rates.
- **Deficits:** national budget deficits must be close to or below 3% of GNP
- **Debt:** public debt may exceed 60% of GNP only if the trend is declining toward this level.
- **Exchange Rate Stability:** a national currency shall not have been devalued during the two previous years and must have remained within the EMS 2.25% margin of fluctuation.

Table 4.1 below shows a summary of Maastricht convergence criteria before adopting the euro.

Table 7.1: Maastricht convergence criteria before 1999

Country	1991	1992	1993	1994	1995	1996	1997	1998
Luxembourg	5	5	4	5	5	5	5	5
Denmark	4	4	3	3	4	4	4	5
France	5	4	4	4	4	4	5	5
Germany	4	4	3	5	4	3	4	4
Ireland	4	4	3	3	4	4	4	5
Belgium	3	3	3	3	3	3	4	4
Netherlands	4	3	3	3	3	4	4	3
UK	3	2	2	3	3	2	4	5
Spain	1	1	1	1	1	1	4	3
Portugal	0	0	0	0	0	1	4	3
Italy	0	0	0	0	0	0	3	4
Greece	0	0	0	0	0	0	0	3
Number of countries meeting all criteria	2	1	0	2	1	1	2	4

Source: The World Bank (2006), "World Development Indicators"

As shown in the table above only Luxembourg was able to meet and sustain all the Maastricht convergence criteria. Even though France, Denmark and Ireland and UK were able to meet the convergence criteria in 1998, the

majority failed, thus the decision to adopt a single currency was not based on a solid foundation. Analysts suggest that the decision by the Council of Europe in 1998 not to include some countries⁴ especially those who failed to meet all the convergence criteria was a good move.

Even though in 2001 Greece was considered to join the union, its budget deficit figures had never been below the Maastricht criteria of 3 per cent since 2001.

Other researchers dispute the argument that EU's performance in 2009 is associated with failure to meet the convergence criteria. Instead, they argue that, the prevailing situation in the EU is attributed to poor coordination of monetary and fiscal policy. The following section provides a summary on coordination of fiscal and monetary policies in the EU.

8. Coordination of the fiscal and monetary policy in the EU

Monetary and fiscal policies are related to each other despite the fact that these two sets of policies are sometimes different in terms of scope, transmission mechanisms and time involved in influencing the macroeconomic variables. These policies have deep impact on the level and composition of savings, investment, output and employment as well as the viability of external account. Theory on monetary policy suggests that it is concerned with the changes in the supply of money and credit. This refers to policy measures undertaken by the government or the central bank to influence the availability, cost and use of money and credit with the help of monetary instruments to achieve set objectives. Fiscal policy is refers to government's programmes for public spending and its resource mobilization strategy for meeting these expenditures (Hallet, 2008).

The rationale for the monetary and fiscal policy coordination and operational arrangements is derived from the under-listed interrelated objectives:

- To facilitate effective implementation of policy decisions to achieve

⁴ Greece and Sweden

the set targets of monetary and fiscal policies competently through mutually supportive information sharing and purposeful discussions.

- To set internally consistent and mutually agreed targets of monetary and fiscal policies with an objective to achieve non-inflationary stable growth.
- To coerce both the central bank and government to adopt a sustainable policy.

In the EU, monetary policy is conducted by the ECB at the supranational level while fiscal policy is managed by national and subnational governments of the member states. Since the inception of the EMU there is no formal supranational fiscal authority at the European Union level, corresponding to the ECB. Lack of fiscal authority at the EU level presents challenges in coordinating fiscal and monetary policies.

The Maastricht Treaty does, however, impose fiscal policy constraints on member states. These constraints ensure that member states observe a ceiling of 3% of GDP on fiscal deficits and a safety limit of 60% of gross government debt-to-GDP ratio. The Stability and Growth Pact (SGP) also compels member states to maintain their budgets 'close to balance or surplus'. Also, member states are required to report twice a year to the Commission on deficits and debt levels. Updates on the convergence program are made once a year (Hallet, 2008). To date both the Maastricht Treaty and SGP measures have not yielded fruitful results for the EU.

Currently, for coordination the EU relies on the Economic and Financial (ECOFIN) Council that consists of all finance ministers of member states. ECOFIN meets only when issues of common interest are supposed to be addressed. In addition, member states sometimes meet informally one day before the ECOFIN Council meeting to discuss implications of the agenda items for the common currency (Hallet, 2008).

9. SADC status of macroeconomic convergence

9.1 SADC performance based on MEC Indicator Targets 2008 - 2011

In August 2004, SADC members launched the Regional Indicative Strategic Development Plan (RISDP) at the Summit held in Arusha, United Republic of Tanzania. Currently, member states are implementing a macroeconomic convergence programme with indicators set for 2008, 2012, 2015 and 2018. To date SADC countries have made substantial progress towards achieving macroeconomic convergence targets. Some SADC member countries have managed to reduce inflation to single digit levels. To some extent the current account, budget deficits and public debt have been reduced (Integrated Paper on Recent Economic Development in SADC, 2011). Nevertheless there remains a lot to be done and there is no room for complacency, as can be seen when reviewing the accompanying tables on the status of macroeconomic convergence in SADC.

9.1.1 SADC performance based on Primary MEC Indicator Targets for 2008

9.1.1.1 Annual Inflation Rate

Table 9.1.1: Annual Inflation Rate (average)

Country	Inflation (Period Average)			
	2008	2009	2010	2011
Angola	13.2	13.99	15.3	11.38
Botswana	12.6	8.2	6.9	8.5
DRC	17.9	46.1	23.5	15.5
Lesotho	10.8	7.3	3.6	5
Malawi	8.7	8.4	7.4	7.6
Mauritius	9.7	2.5	2.9	6.5
Mozambique	10.3	3.25	12.7	10.35
Namibia	10.3	8.8	4.5	5
Seychelles	37	31.7	-2.4	2.5
South Africa	9.9	7.2	4.3	4.6
Swaziland	12.6	7.5	4.5	6.1
Tanzania	10.3	12.1	5.5	12.7
Zambia	12.4	13.5	8.5	8.7
Zimbabwe	231.2m	6.5	3.1	3.5
SADC Average	13.52	12.64	7.16	7.71
2004 - 2008	Single digit inflation rate by 2008			
2009 - 2012	5% inflation rate by 2012			

Source: SADC RED Papers

In 2008, only 3 countries⁵ out of 15 managed to bring inflation below 10 per cent, but all countries missed the target for 2012. Two countries managed to attain the 2012 target in 2009⁶ and the number further increased to six in 2010. In 2011, the number dropped to five, only Botswana, Lesotho, Namibia, Seychelles, South Africa and Zimbabwe converged to the required target for 2012. SADC member states' inflation was induced by high commodity prices particularly for fuel and food. Going forward it is likely that more than half SADC member states will miss the 2012 target. Worth noting is that the DRC, Angola, and Mozambique, had a significant decline in inflation in the past 3 years.

9.1.1.2 Budget Balance

Table 9.1.2: Budget Balance as % of GDP

Country	Budget Balance as % of GDP			
	2008	2009	2010	2011
Angola	8.8	-4.9	6.8	8.9
Botswana	4.2	-10.9	-6.2	-3.3
DRC	-0.5	0.6	1.25	-1.1
Lesotho	4.7	-3.8	-5	-6.4
Malawi	-6.5	-5.7	1.9	0.4
Mauritius	-3.3	-3	-3.2	-3.2
Mozambique	-2.5	-5.5	-3.7	-3.5
Namibia	2	1.9	-7.1	-9.8
Seychelles	5.7	11.1	7.8	0.9
South Africa	0.9	-0.7	-5.5	-4.2
Swaziland	-1.5	-7.1	-11	-9.5
Tanzania	-1.7	-6.1	-6.5	-11.8
Zambia	-2.5	-2.6	-3.1	-2.9
Zimbabwe	-11	0	-2.9	0
SADC Average	-0.23	-3.68	-3.42	-3.57
2004 - 2008	Deficit smaller than 5% of GDP			
2009 - 2012	Deficit 3% as an anchor within a band of 1%			

Source: SADC RED Papers

In 2011, the target was significantly missed by Lesotho, Namibia, Swaziland Tanzania and South Africa. Lesotho and Swaziland's fiscal position was greatly affected by the decline in SACU revenue. In the case of Tanzania, the

⁵ Malawi, Mauritius and South Africa

⁶ Mauritius and Mozambique

government aggressively pursued its expansionary policy to finance infrastructure development. Namibia's performance was affected by the Targeted Intervention Program for Employment and Economic Growth (TIPEEG). South Africa registered a slower-than-expected revenue and stronger growth in expenditure. Angola recorded the highest budget surplus over the past two years in SADC.

9.1.1.3 Public Debt

Table 9.1.3: Public Debt to GDP (less than 60 %of GDP)

Country	Public debt as percentage of GDP			
	2008	2009	2010	2011
Angola	17.6	22.6	21.7	20.4
Botswana	4.5	16.1	17.8	18.5
DRC	91.8	113.5	28.3	33.1
Lesotho	55	40.1	36.8	34.8
Malawi	31.6	40.8	35	34.7
Mauritius	51.9	59.6	57.4	57.2
Mozambique	40.5	39.3	47.7	44.8
Namibia	18.9	17.8	15.9	26.8
Seychelles	223	117	84	81
South Africa	31.4	45.4	54.8	57.2
Swaziland	16	12	13.9	15.7
Tanzania	31.5	37.1	43.1	48.2
Zambia	26.7	26.4	21.3	20
Zimbabwe	147.7	109.8	94.3	90.3
SADC Average	56.29	49.82	40.86	41.63
2004 - 2008	Less than 60% of GDP			
2009 - 2012	Less than 60% of GDP			

Source: SADC RED Papers

In the period from 2009 - 2011 all SADC countries were able to attain the convergence target of less than 60% of GDP, except for Seychelles and Zimbabwe. In the case of Zimbabwe this may be attributed to the poor performance of the economy over these years. For Seychelles, this is associated with high government deficits before the IMF reform programme in 2008.

9.1.2 Secondary MEC Indicators 2008 - 2011

9.1.2.1 Months of Import Cover

Table 9.1.4: Months of Import Cover

Country	Months of Import Cover			
	2008	2009	2010	2011
Angola	5	3.8	6.6	7.8
Botswana	22	19	15	17
DRC	0.1	2	1.78	1.66
Lesotho	8.5	6.8	5.9	4.7
Malawi	2.4	1.9	3.1	2.3
Mauritius	5.2	7.1	7	6.3
Mozambique	4.3	5.4	5.8	5.8
Namibia	5.7	4	3	3.2
Seychelles	1.1	1.6	2.3	2.4
South Africa	3.7	4.7	4.5	4.4
Swaziland	4.6	4.1	2.9	2.3
Tanzania	4.3	5.7	5.3	4.9
Zambia	2.1	5.1	4.7	4.5
Zimbabwe	0.3	1.3	1.1	0.8
SADC Average	4.95	5.18	4.93	4.86
2004 - 2008	Not less than 3 months by 2008			
2009 - 2012	Not less than 6 months by 2012			

Source: SADC RED Papers

In the period 2009 - 2011, a majority of SADC member states experienced a decline on their International Reserves. As shown in Table 8.1.4 above, countries that performed badly in the period were: Democratic Republic of Congo, Malawi, Seychelles, Swaziland and Zimbabwe (with international foreign reserves below the threshold of 3 months of import cover).

Overall, SADC international foreign reserves significantly declined from 4.93 recorded in 2010 to 4.86 in 2011.

9.1.2.1 Real Growth Rate

Table 9.1.5: Real Growth Rate

Country	Real Growth Rate			
	2008	2009	2010	2011
Angola	13.8	2.4	3.4	3.4
Botswana	3.1	-4.9	7.2	5.1
DRC	6.2	2.8	7.2	6.9
Lesotho	3.4	2.4	5.6	4.3
Malawi	8.6	7.6	7.1	6
Mauritius	5.1	3.1	4.2	4.1
Mozambique	6.8	6.3	6.8	7.2
Namibia	4.3	-0.4	6.6	3.8
Seychelles	-0.9	0.7	6.2	5
South Africa	3.6	-1.5	2.9	3.1
Swaziland	2.4	1.2	2	1.3
Tanzania	7.4	6	7	6
Zambia	5.7	6.4	7.6	6.5
Zimbabwe	-14.7	5.7	8.1	9.3
SADC Average	3.91	2.70	5.85	5.14
2004 - 2008	Not less than 7%			
2009 - 2012	Not less than 7%			

Source: SADC RED Papers

The region recorded an average real GDP growth of 5.14 per cent in 2011; 0.45 percentage point lower than 2010 growth rate of 5.85 per cent. In 2011, economic slowdown was significant in Lesotho, Namibia, and Swaziland. Mozambique was the only country in SADC that was able to meet the target and it is likely to be sustained going forward.

9.1.2.3 Current Account to GDP (deficit less than 9 %of GDP by 2012)

In the past three years the region had been affected by a decline in merchandise trade and export as well as higher import bills. Thus, Mozambique, Seychelles, Lesotho, Malawi and Zimbabwe, failed to meet the convergence target of a deficit less than 9 per cent of GDP in 2011. Out of the fourteen countries, only Botswana and South Africa managed to attain a current account deficit within the target levels of less than 9 per cent of GDP. Other improvements were noted in Democratic Republic of Congo (from a deficit of 13.3 per cent to a deficit of 6 per cent) and Namibia (from below

zero in 2010 to 1 per cent in 2011) (SADC Recent Economic Development paper, February 2012).

9.2 Credibility and Data Standards

EU experience on data especially in 2001 indicates that SADC should be careful when assessing data submitted by member states to avoid massaging of data to qualify for membership. Therefore, data on MEC indicators should be thoroughly scrutinized by the Peer Review Panel (PRP) to address issues of false data and harmonization of standards throughout the region. Worth noting this requires time to assess whether indicators are truly converging and the PRP should have full mandate to execute its duties since this may become a sensitive issue among member states.

9.3 Review of SADC Related Empirical Studies

9.3.1 Evidence from an Augmented Gravity Model

Herman et al (2011) used the Gravity Model which integrates the monetary and fiscal variables namely: inflation, public deficit, public expenditure and public debt, based on the convergence criteria set up by African Regional Economic Communities including SADC. This approach was inspired by similar estimation methods used in Warin (2005) and Warin et al. (2009). Results of the Gravity Model are shown below:

Table 9.3.1.1: The Gravity Model Coefficient based on the Kmenta-Parks FGLS estimates

Dependent variable: $\ln(\text{trade}_{ij,t})$ mean: 2.29: SD:2.452

Independent variable:	Mean	SD	Coefficient	z
1. Traditional Gravity Model Variables				
• Economic size	23.66	1.15	0.4108***	2.7
• Distance	7.46	0.72	-0.488**	-2.14
• Adjacency	0.3	0.46	1.3753***	6.98
2. Integration variables				
• Trade Agreements	0.84	0.28	1.9028***	4.2
• Colonial link	0.042	0.49	-0.6837*	-1.8
• Difference in Standard of living	3987	3798	0.00006	3.15
3. Convergence variables				
• Deficit convergence	3.49	4	-0.0098**	-2.34
• Inflation convergence	43.04	283	0.0002***	3.09

• Foreign reserves position convergence	2.98	4.49	0.0508***	4.55
4. Constant			-8.94**	2.21
5. Country fixed effects:				
Angola			0.958	1.46
Kenya			2.73***	9.82
Lesotho			-0.9301**	-2.14
Madagascar			0.6972	1.55
Malawi			2.5549***	8.5
Mauritius			2.7097***	10.66
Mozambique			0.7415*	1.76
Namibia			0.2715	0.67
South Africa			4.7761***	7.86
Swaziland			2.5234***	7.12
Tanzania			1.8834***	7.21
Uganda			1.0698***	3.92
Zambia			1.7859***	8.8

Wald $X^2_{22} = 5395.51$ (p-value=000)

No.obs=303: No.groups=51

Source: Adapted from Herman et al (2011)

The results above provide evidence that SADC integration is not determined by convergence of fiscal and monetary variables. The results for convergence in public debt and government expenditure are also statistically insignificant. With regards to inflation and foreign-reserve rates the results suggest a negative impact on bilateral trade in the period investigated. However, the results also indicate that public-deficit convergence in SADC has a positive effect on trade.

To test for the endogenous OCA theory, Herman *et al* included dummy variables to capture the effects of existing trade blocs. The dummies were used as proxies for countries' participation as either sources of imports or destinations of exports. The results suggest that bilateral trade is cultivated by South Africa in the SADC region. The small economies such as Lesotho, Swaziland and Mauritius have soaring trade interactions. As noted in Table 9.2.1.1 above bilateral trade flows in SADC are highly dependent on the economic size, distance, and contiguity between nations. In addition, the existing trade agreements such as the EAC and SACU foster integration among member states especially through tariff reduction. Therefore, the proposed currency union will further promote intra-regional trade if the terms of the treaties are observed by member states.

So, if the proposed terms for SADC customs union of 2008 are fully implemented, trade stimulation for the whole region is likely.

9.3.2 SADC long run steady state in respect of MEC Indicators

The Bank of Zambia estimated the long run steady state and speed of convergence for inflation, fiscal balance, public debt and current account in respect of SADC MEC indicators, using the 2012 target of 5 per cent. The idea was to obtain an empirically determined target. The long run steady state and speed of convergence results are presented in Table 9.3.2.1 below.

Table 9.3.2.1: Long run steady state and speed of convergence for Inflation, Fiscal Balance, Public Debt and Current Account

Description	Inflation		Fiscal Balance		Public Debt		Current Account	
	Steady State (%)	Convergence speed	Steady State (%)	Convergence speed	Steady State (%)	Convergence speed	Steady State (%)	Convergence speed
Botswana	8.3	-0.907 (-90.7%)						
DRC			-0.7	-0.451 (-45.1%)	173.0	-0.418 (-41.8%)	-3.1	-0.746 (-74.6%)
Lesotho	7.4	-0.729335			73.2	-0.490 (49.0%)	-18.3	0.468 (46.8%)
Malawi	15.5	-0.616 (-61.6%)	-2.7	-0.760 (-76.0%)	92.7	-0.389 (-38.9%)	-14.9	-0.967 (-96.7%)
Mauritius	5.8	-0.689 (-68.9%)	-4.4	-0.751 (-75.1%)	52.4	-0.288 (-28.8%)	-4.8	-0.432 (43.2%)
Mozambique	15.0	-0.43 (-43.0%)	-2.2	-0.807 (-80.7%)	40.0	-0.165 (-16.5%)	-13.6	-0.516 (-51.6%)
Namibia	7.2	-0.493 (-49.3%)	-2.2	-0.631 (-63.1%)	21.4	-0.680 (-68.0%)		
Seychelles	2.4	-0.921 (-92.1%)	-0.1	-0.100 (-100%)	123.6	-0.541 (-54.1%)	-35.3	-0.267 (-26.7%)
South Africa	6.0	-0.635 (-63.5%)	-1.3	-0.306 (-30.6%)	35.1	-0.104 (-10.4%)	-0.2	-0.315 (-31.5%)
Swaziland	7.2	-0.585 (-58.5%)	-2.1	-0.743 (-74.3%)	17.2	-0.319 (-31.9%)	-5.6	-0.413 (-41.3%)
Tanzania	5.6	-0.264 (-26.4%)	-2.2	-0.387 (-38.7%)	35.5	-0.143 (-14.3%)	-5.5	-0.328 (-32.8%)
Zambia	15.9	-0.536 (-53.6%)	-2.5	-0.767 (-76.7%)			-14.5	-0.374 (-37.4%)
Zimbabwe			-6.1	-0.699 (-69.9%)	84.3	-0.518 (-51.8%)	-9.6	-0.502 (-50.2%)

2012 Target	5%	-3%	<60% of GDP	<-9% of GDP				

Source: Bank of Zambia (2011)

Notes: Data was obtained from SADC member states. Where there are gaps data was not provided to the source.

Inflation

The long run steady state for this indicator suggests that only Seychelles' long run steady state for inflation is below the MEC target of 5%. In the case of South Africa, Mauritius and Tanzania, the inflation steady state is slightly above the MEC target of 2012. Even though Botswana, Lesotho, Mauritius, Namibia, South Africa, Swaziland and Tanzania's steady state inflation is single digit they are unlikely to attain the 2012 target or unlikely to sustain it going forward.

Fiscal Balance

The estimation shows that all the countries have high speeds of convergence to their own steady states. Mauritius and Zimbabwe's steady states suggest that these two countries are likely to miss the target or unlikely to sustain the target if met. On average fiscal balance remains slightly outside (at 3.1%) the SADC target of negative 3.0%. Overall, the results suggest that SADC is likely to meet the target and sustain it.

Public Debt

The results show all countries are on track except Swaziland and Namibia. Swaziland and Namibia are unlikely to meet the target or they will struggle to sustain it if attained. Swaziland has the lowest long run steady state as well as a low speed of adjustment.

Current Account

Out of the 11 countries, Seychelles and Lesotho's speed of adjustments is statistically insignificant. The largest current account steady state deficit is for Seychelles while Swaziland has the lowest. Such results suggest that Seychelles should address its external imbalances problem to be consistent with the SADC MEC target.

Summary

Overall, the long run steady state and speeds of convergence results suggest that the above SADC MEC targets should be maintained except for the inflation indicator, because for some countries the 2012 target of 5 per cent require tighter inflation measure that may adversely affect member countries' economic growth especially those that are heavily affected by poverty.

10. Lessons for SADC

10.1 Fiscal sustainability

- Overall, the results generated from indicators that are used by the EC do not provide adequate information to track fiscal sustainability in the EU because they are based on a mechanical and partial equilibrium examination. Such projections are sensitive to the underlying assumptions and in some cases demonstrate highly accentuated profiles which do not give a true picture on what is happening on the ground.

10.2 Fiscal rules

EU fiscal rules suggest that SADC architects should take into consideration the following SGP limitations when designing rules:

- It does not deal with country-specific circumstances in a consistent manner.
- It's rigid adherence to annual deficit targets can impart a procyclical bias to fiscal policy through contractionary measures to buttress revenues in a downswing and a temptation to spend windfall tax receipts in an upswing"
- The present mechanism permitted pro-cyclical loosening of fiscal policy during the good times.
- It's process is complicated and not consistent, and it has been difficult to communicate effectively with the media, markets, and the public on how the SGP works.
- The measurements of potential output and budgetary elasticity have led to confusion.

- The early-warning mechanism remained ineffective for a long time; hence the Commission and Council could not act on time.

10.3 Optimal currency area condition

EU member states failed to meet the OCA condition before adopting a single currency. Therefore, it is important for SADC to observe all conditions required before introducing a single currency.

10.4 EMU Maastricht convergence criteria

The EMU Maastricht convergence criteria (MCC) are biased towards examining transitory cyclical movements in financial indicators, rather than concentrating upon fundamental convergence in real economy. Table 4.1 shows that, only Luxembourg appeared to be capable of meeting the 5 criteria before the introduction of the euro. This clearly demonstrates that the EMU starting base was fragile from the outset.

EMU is a political project with missing building blocks, not an “optimal currency area”. The EMU member states are too diverse to make the Euro work properly. Hence the region is subject to severe unemployment during recessions and more inflation during booms.

Some EMU member states failed to meet the Maastricht convergence criteria. This has recently increased imbalances and uncontrollable spill-overs in the Euro zone.

Pressure after adopting the euro suggests that some members were not ready to give up sovereignty.

10.5 EU experience in dealing with the crisis

At first European leaders rejected pressure from the G20 leaders and the International Monetary Fund to deliver quick measures to fight their debt crisis and insisted to press on with a longer-term plan for closer economic integration in the hope that the situation will calm down.

Recently, struggling member states have been pressured to adopt strict austerity measures. The major problem with austerity (higher taxes and lower spending) measures is that, reduced government spending significantly affected growth and increased the burden to pay bills because tax revenues declined. For this reason, smaller member states with high-debt are now struggling to service their debt. On the other hand, richer member states are consistently pressuring smaller nations to tighten their belts since they are facing pressure from their own citizens.

Bailout

Continuous bailout in the EU is not a lasting solution and would definitely lead the EU into more debt. The policy of bailouts has proved to be ineffective in the EU.

10.6 Fiscal and Monetary Policies' Coordination

The EU arrangement on fiscal and monetary policy coordination presents two significant weaknesses:

- The SGP is inefficient and damaging for essential structural reforms. Fiscal balance required by SGP seem to be too stringent, some countries require longer time span than others to attain it.
- Failure to apply sanctions to member states that fail to comply with the fiscal criteria (such as France and Germany), is also a clear indication that coordination is ineffective in the EU. This has demotivated member states to keep their fiscal affairs on track.
- In the absence of a fiscal union at EU level it is difficult if not impossible to coordinate fiscal and monetary policy.

11. Conclusion and Recommendations

11.1 European Union

The blame for the EU debt crisis that overwhelmed Greece, Ireland, Portugal, Italy and Spain can be directed to the architects of the Euro zone. It was clear from the very beginning that to put together heterogeneous⁷ countries and expect them to become homogeneous after joining the EU was wrong. The following are the major weaknesses of the EU arrangement:

- It does not allow ECB to operate as the lender of last resort to member states especially governments. The bank cannot buy bonds directly from member state treasuries - although the bank seeks to 'get around' this by buying government bonds from private bondholders on the open market.
- The architects failed to anticipate the spillover effects of the huge expansion of credit in 'peripheral economies'.
- The architects also failed to anticipate the consequences of a banking system so interconnected that when things start to unravel nobody can say stop.
- The ECB charter prohibits it from printing money so 'quantitative easing' used in the US and the UK is out for the Eurozone.
- The absence of the Eurostat at the inception of the EU crippled the union because for data they relied on member states submissions.

It is evident from our analyses that the EU member states went to the Union pre-maturely.

11.2 SADC

SADC has covered a lot in preparing for a monetary union but the following areas require special attention before adopting a single currency.

- SADC economies are still diverse and external shocks affect the region asymmetrically. As long as the member countries are affected by asymmetric shocks, imbalances on production, consumption, investment,

⁷ EU was not an OCA from the beginning.

government spending and trade are likely. Since the advantage of using exchange rate as a shock absorber is relinquished when adopting a single currency, it would be suicidal to rush for a monetary union without attaining a symmetric environment.

- The fact that SADC integration does not provide for fiscal union it means its inclination is more on monetary integration. SADC's debt crisis might even be worse than that of the EU if the region will not make this a priority.
- Cost of relocation and migration regulations remains a major challenge in meeting the requirement of factor mobility as articulated in the OCA theory.
- SADC member states are in process of ratifying the Finance and Investment Protocol. While this is a positive step towards creating an enabling investment regime in the region, the delay by some countries to ratify the Protocol poses a major threat to the integration programme.
- The pattern of trade in the region suggests that there is a need for coordinated measures to enhance productive capacity and competitiveness and to foster development and expansion of a balanced industrial base that optimally utilizes the region's resources.
- A sound mechanism is required for SADC to monitor and verify MEC programme and statistics submitted by Member States to determine whether they satisfy the agreed guidelines

With regards to the MEC Indicators it is evident that SADC member states are still struggling to meet both primary and secondary indicators. As noted above some SADC member states are likely to meet the MEC targets but some countries are unlikely to sustain them. This provides justification for our conclusion that the targeted year for the establishment of the SADC monetary union should be pushed further to allow for a period to assess countries if they are able to sustain their MEC indicators. The case of Greece provides a valid reason for SADC to scrutinize data from member countries to avoid the mistake that was made in the EU in 2001.

11.3 Recommendations for SADC

11.3.1 OCA

- SADC studies on integration should be structured in such a way that they provide information on convergence in terms of the OCA amongst other things.

11.3.2 Fiscal sustainability

A study on SADC fiscal sustainability before the establishment of monetary union is necessary before the establishment of the monetary union. Such a study will act as a guide in designing expenditure rules for ensuring sound public finances in the region.

11.3.3 Fiscal rules

The study on SADC fiscal sustainability will provide a guide on how to developing SADC fiscal rules. Generally fiscal rules should:

- allow for country-specific circumstances by redefining the medium-term budgetary objectives of “close to balance or in surplus”;
- allow for country-specific elements in the enforcement of the correction of excessive deficits.
- place more focus on debt and sustainability in the surveillance of budgetary positions;
- ensure earlier actions to correct inadequate developments to foster both prudent and symmetric-over-the-cycle behaviour, and surpluses in good times;
- provide for protracted slowdowns and ensuring consistency with the medium-term budget

At national level, the incentives for fiscal discipline can be strengthened by setting up fiscal policy councils that are independent from Governments with a clear separation of tasks from Ministries of Finance. Their role should be to monitor and evaluate employment and growth developments based on the specific traditions, institutional environment and economic problems of the country. Therefore, the Commission and the Council would track stability and convergence programmes at regional level.

The Council at regional level should also monitor national fiscal frameworks to ensure that they meet certain minimum standards.

A crisis resolution mechanism should permit for the possibility of systematic restructuring of government debt where private lenders might have to take a haircut on their claims.

11.3.4 Fiscal and Monetary Policies' Coordination

- SADC should also plan for a fiscal union to complement efforts of the SADC monetary union. In the absence of a fiscal union at regional level, efforts of the SADC monetary union are likely to be undermined. Fiscal union at regional level will work closely with Fiscal Policy Councils at national level.

11.3.5 MEC convergence criteria

- SADC should not consider loosening MEC indicators except for the inflation target, which seem to be too stringent and unrealistic (3 per cent target) but this should be done with caution.

11.3.6 Statistical Standards

- SADC should speed up the process of implementing the Peer Review Panel mechanism, to evaluate and monitor MEC programme and statistics submitted by Member States to determine whether they satisfy the agreed guidelines. Also, the PRP should advise on remedial actions from time to time.
- As noted by Belle (2009), it is crucial that collaboration with the suppliers of data like the CCBG should be strengthened to promote common programs and to ensure that data collection procedures are standardized at an early stage so that accuracy and comparability are entrenched.

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APPENDIX 1

Table 1: Main Indicators of the new EU members (2004)

Country	GDP	GDP growth	GNI per capita	Inflation	Unemployment	Agriculture	Industry	Trade balance	External Debt
	Current \$	Annual	Current \$	%	% of lab. force	% of GDP	% of GDP	Million \$	% of GNI
Cyprus	15.4	3.7	16510	2.3	4.1	n.a	n.a	-4.554	n.a
Czech Republic	107.0	4.4	9130	3.0	8.3	3.1	38.1	-493	44.9
Estonia	11.2	7.8	7080	3.1	10.0	4.3	66.9	-2.783	95.1
Hungary	100.7	4.6	8370	4.6	6.1	3.3	30.8	-4.475	66.8
Latvia	13.6	8.3	5580	7.2	10.6	4.1	22.5	-3.054	92.0
Lithuania	22.3	6.7	5740	3.3	12.4	6.2	33.6	-3.014	43.9
Malta	5.3	0.4	12050	2.0	7.9	n.a	n.a	-1.178	n.a
Poland	242.3	5.4	6100	2.9	19.0	3.4	32.5	-14.320	41.7
Slovakia	41.1	5.5	6480	4.6	18.1	3.6	29.7	-1.923	54.2
Slovenia	32.2	4.6	14770	3.0	6.0	2.7	36.8	-1.366	n.a

Source: The World Bank (2006), “World Development Indicators” and “Key Statistics”

APPENDIX 2: Eastern Caribbean Currency Union comprehensive and multipronged fiscal reform program

Fiscal adjustment: The cornerstone of the program included a new value-added tax, a drastic 80 percent increase in electricity tariffs, as well as measures to contain wages. Although the fiscal adjustment would reduce public debt to about 130 percent of GDP by 2016, that debt remains unsustainable and extremely susceptible to growth shocks.

Debt restructuring: In June 2011, the government publicly announced the start of a comprehensive debt restructuring seeking a significant debt reduction.

Guarantee: To support the government's debt restructuring, the Caribbean Development Bank agreed to provide a partial guarantee for the new exchange instruments, which should significantly improve the success of the debt exchange.

Debt-for-equity swap: To address the country's extraordinary debt levels, the government is also using a debt-for-equity/land swap.

Stabilization fund: To maintain the health of the financial system during the debt restructuring, the government established a special banking sector reserve fund at the Eastern Caribbean Central Bank to provide temporary liquidity to domestic financial institutions, if needed.

IMF loan. To accompany the government's economic reform program, the IMF approved a three-year Stand-By Arrangement in the amount of \$80.7 million.

Source: Adapted from Schipke's Snapshot of Another Monetary Union (2012).