

**A CRITICAL ANALYSIS OF SOUTH AFRICAN
ECONOMIC POLICY**

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October 2012

DECLARATION

I declare that:

A CRITICAL ANALYSIS OF SOUTH AFRICAN ECONOMIC POLICY

is my own work, that all the sources used or quoted have been identified and acknowledged by means of complete references, and that this dissertation has not previously been submitted by me for a degree at any other university.

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October 2012

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At last

SUMMARY

A CRITICAL ANALYSIS OF SOUTH AFRICAN ECONOMIC POLICY

by

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The challenge of the South African government and economic policy is to achieve sustainable growth. Sufficient jobs are not being created after the political change that occurred in 1994. To address these challenges economic policy of government are analyzed relative to theory, to lessons learned from East Asia (international best practice) and to recommendations of international economic organizations. This study is divided into 8 chapters. Chapter 1 comprises a general introduction to economic policy which addresses a particular economic phenomenon and explains the nature of the relationships between different economic variables, the research problem and the objectives of the study. Chapter 2 an overview of the theories of growth is described. The theories of economic policy are also described as well as a chronological outlay of all economic policies that influenced growth since the new political dispensation in 1994.

In chapter 3 the first article analyzes all the macroeconomic policies and reasons are sought why sufficient jobs are not being created after the 1994 political change that occurred. In chapter 4 the second article focuses on monetary policy. Against price stability as the primary objective of inflation targeting, the role of COSATU is analyzed regarding the relation between inflation and growth. In chapter 5 the third article analyses the reasons for volatility and the macroprudential measures available to monetary authorities. The consequence of the 2008 financial crisis was reduced growth in the world and currency volatility. In chapter 6 the fourth article analyses the limitations in applying existing instruments to achieve financial stability. A new perspective is debated to reduce inflation to counter the negative impact of a volatile exchange rate towards economic growth. In chapter 7 the fifth article analyses the

causes and challenges of high government debt created by counter cyclical fiscal policy. This high government debt neutralizes the sustainability of a stimulatory stance of fiscal policy which is needed in South Africa. In chapter 8 the conclusions and recommendations are presented about important policy aspects to ensure financial stability and sustained growth.

Unemployment has always been a concern in less developed countries and the concern increased after the USA financial crisis of 2008. Probable reasons for unemployment in less developed countries are a lack of resources, a lack of capital and a lack of skills. The peculiar economic scenario of South Africa is analyzed. South Africa possesses very high unemployment rates according to international standards. The probable solution is high sustainable growth.

Before 1994 South Africa could not attract foreign capital to finance growth because of the prevailing political dispensation. After 1994 South Africa attracted substantial foreign capital (however volatile in nature) which did not create sustainable growth. Regardless of this bigger volatile capital inflow, national saving as a percentage of GDP continued to deteriorate. There exist numerous structural problems in the South African economy. A new and fresh viewpoint regarding the application of policies is debated to address imbalances in the economy and to create sustainable growth.

The unacceptable low levels of growth and low levels of employment have to be addressed in a new manner to create long term solutions. The answer to these problems cannot be found in short term economic- and short term political activities of the authorities. The cornerstones for development are anchored in the new strategic plan of the Department of Planning. Elements of various theories, for example the Neoclassical growth model and elements of policy theories are addressed. The developments in East Asia are addressed as well as recommendations of international economic organizations. Answers are sought to create sustainable growth in South Africa.

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CHAPTER 1

INTRODUCTION AND BACKGROUND OF THE STUDY

1.1 INTRODUCTION

Various policies contribute towards the economic wellbeing of a country. Economic policies encompass a broad range of topics, for example fiscal policy, monetary policy, foreign exchange policy, industrial and trade policy, labour policy as well as the ideology of the ruling political party. According to Boulding (1959:1) policy refers to principles that govern certain actions directed towards ends. According to Acocella (2005:2) economic policy constitutes the actions of a government that influence the economic outcomes of a country. Examples of these outcomes are the level of interest rates in the country, the tax structure of individuals and corporate companies, government spending, the level of the exchange rate, subsidies to certain sectors in the economy, tariffs on specific products and customs taxes on specific products to name but a few. International institutions such as the International Monetary Fund (IFM), the World Bank and the Bank for International Settlements (BIS) also influence the policies applied in a particular country.

According to Mohr (2004:62), governments have five broad economic goals, namely high economic growth, low unemployment, low inflation, stable balance of payments and an equal distribution of income. All governments should employ a combination of policies to create higher growth and to achieve macroeconomic stabilization. Policy is about the outcome of political processes directed towards probable consequences. According to Boulding (1959:19) policy is about social choices and the sacrifice of some objectives in order to pursue other objectives. The simultaneous achievement of these broad economic goals is a difficult task that requires the synchronization of all economic policies within the country. Economic policy is a vast topic and in this research the focus will be on policies that influence growth.

1.2 THEORETICAL BACKGROUND

According to Tinbergen (1952:1), economic policy is the act of economic behaviour. This may be true with regard to individuals or individual organizations and organized groups such as trade unions or industrial organizations. Economic policy addresses a

particular economic problem or phenomenon and explains the nature of the relationships between different economic variables.

Tinbergen (1952:2), states further that economic policy may consist of two kinds of acts. Qualitative policy as the first act means the changing of qualitative aspects of economic structure, for example, monopoly behaviour where a competitive market previously existed, the creation of a customs union or the nationalization of industries. Quantitative policy as the second act, describes the changing of political parameters or instruments within the existing qualitative framework. The boundaries between these two kinds of acts are not always clear.

Growth is one of, if not the most important, outflow of economic policy application. Other outflows are for example the reduction of unemployment, the reduction of inflation, the reduction of inequality and a stable financial environment in which business can be done. In his book, *An Inquiry into Nature and Causes of the Wealth of Nations* published in 1776, Adam Smith moved away from the Physiocratic system, which concentrated on the natural equilibrium of circular flows and toward a supply-side model of growth. According to Smith (1904:27), output is related to labour, capital and land inputs. Output growth is driven by population, investment and land growth, as well as an increase in overall productivity.

Adam Smith's growth model remained the predominant model of Classical Growth. David Ricardo modified Smith's growth model by including diminishing returns to land (Ricardo, 1817:55). Output growth requires increased access to the factors of production but, unlike labour, land cannot be increased because it is variable in quality and fixed in supply. Ricardo highlighted two important effects for growth. Firstly, increasing landowner's rents over time due to the limited supply of land should cut into the profits of capitalists and secondly, wage goods from agriculture will cause a rise in price over time, which will then reduce the profits of companies as workers require higher wages.

Growth theory entered a new era after the 1930's depression. JM Keynes developed a new theory in his famous book *The General Theory of Employment, Interest and Money* published in 1936. Investment, according to Keynes (1936:62), is an independent factor contingent upon the finance of entrepreneurs. Keynes, however,

did not extend his theory of demand into a theory of growth. The Cambridge Keynesians explored this scenario and analyzed equilibrium growth (Domar, 1958:102). If the economy deviates from the natural growth path, the consequence is either an increase in unemployment or an increase in inflation.

Growth theory entered a new era after Keynes' contributions. The Neoclassical growth theory focuses on capital accumulation and links to other aspects such as saving and technology (Dornbusch *et al.*, 2004:56). Various empirical studies has proven that the higher the rate of investment, either in physical or human capital, the higher the gross domestic product (GDP) of a country. An exogenous increase in technology causes the production function to rise (Solow, 1956:124). As the economy moves to a higher steady state, the saving curve also rises. The result of this new higher steady state is a higher per capita output and also a higher capital-labour ratio.

Neoclassical growth theory attributes the long-term growth to technology but did not explain the economic determinants of the technological progress. The solution to the problems experienced with the Neoclassical theory was to modify the production function to allow for self-sustaining endogenous growth. The endogenous growth theory therefore studies the determinants of the technological progress (Truu *et al.*, 1996:198). The endogenous growth theory also considered the role of human capital and research and development. According to Fourie *et al.* (2009:334) investment in human capital is an important source of long run growth.

The Classical economists emphasized the role of labour, capital, productivity and labour specialization. The Neoclassical growth model emphasized the role of capital accumulation as well as saving and technology. The endogenous theory highlights the role of human capital. Empirical studies in the 1990s, based on the Neoclassical theory, tried to reconcile the Solow model with international convergence. These studies proved that the Solow model performs well in explaining cross-country differences in income levels and is even more successful when human capital is taken into account.

1.3 STATEMENT OF THE PROBLEM

The challenge of the South African government and economic policy is to achieve sustainable growth (measured against 6% goal of GEAR policy). The concept of

‘growth’ encompasses various elements, such as savings that finances investment in the country, the application of technology in industry, the application of various policies (monetary, fiscal, health, labour and trade), investment in human capital, etc. Government economic policies are analyzed against the theory of growth. Policies are also analyzed against international best practices, for example East Asian practices, IMF and World Bank guidelines.

The real growth rate in South Africa is not creating new jobs on a sustainable basis. The real growth rate on an annual basis never reached the target of 6% set by government according to several of their macroeconomic policies DNT (1996:1). The quarter-on-quarter growth rate has fluctuated greatly and has only reached the target rate three times since the 1994. Unemployment in South Africa therefore continues to be uncomfortably high.

Sufficient jobs are not being created after the political change that occurred in 1994 to reduce unemployment to lower international norm of five per cent. To address these challenges, economic policies of government are analyzed relative to theory, to lessons learned from East Asia (international best practice) and to recommendations of international economic organizations.

The unacceptable levels of growth, unemployment and poverty have to be addressed in a new and fresh manner to create long term solutions. The answer to these problems cannot be found in short term economic- and short term political activities of the authorities. There exist numerous structural problems in the South African economy, for example exports are not diversified, high labour cost and low productivity that make our exports uncompetitive, political interference of our labour unions which creates numerous detrimental long term effects, bad coordination amongst different policy applications of government departments and different ideological viewpoints in cabinet. A new and fresh viewpoint regarding the application of policies is necessary to improve some of these imbalances.

1.4 RESEARCH OBJECTIVES

The primary objective of the research is to critically analyse government policies against the backdrop of macroeconomic theories, international best practice, volatility

of capital flows and recommendations of international economic institutions to facilitate sustainable growth in South Africa.

The research methodology is explained in terms of a specific paradigm. A qualitative research approach, namely hermeneutics to explain social occurrences was followed. The principle of hermeneutics suggests that all human understanding is achieved by the recurrence between the interdependent meaning of parts and the whole that these parts form (Goede *et al.*, 2013:246). Iteration between the interdependent parts of policy and the whole policy phenomena that influences growth in South Africa was analyzed. The researcher intends to be emotionally attached to the different scenarios that prevail regarding economic growth and unemployment. Interviews were conducted in East Asia and South Africa and research documents provided by various international institutions were analyzed in order to explain policy occurrences. The emphasis of the research is on policy processes that influence growth and unemployment.

An interpretivistic research paradigm was followed in this research. Interpretivism is grounded in the ontological assumption of relativism (Goede *et al.*, 2013:245). The researcher intends to analyze the actions and events from within human life and not as the observation of any external realities. The aim of the research is to understand the policy phenomena which influence growth and unemployment. The research was conducted in the policies' environment and the method of interpretivism allows for personal interpretations. The researcher's interpretation of policy maker's behaviour was described. Empirical studies in different countries were referred to in the interpretive research practice in order to lend credibility to the interpretation of the different policy phenomena experienced in different countries.

In order to achieve the primary objective, the following theoretical objectives are formulated about chosen aspects of policies:

- To conduct a literature review regarding growth of a country;
- To conduct a literature review regarding inflation targeting regardless of the criticism of labour unions to scrap this monetary policy strategy;

- To conduct a review of monetary policy instruments and macro prudential strategies to reduce exchange rate volatility;
- To conduct a literature review of the new application of old theories to reduce inflation and capital volatility; and
- To conduct a literature review of the new application of old fiscal policy theories to improve counter-cyclical fiscal policy.

The primary objective is to analyze various policy aspects regarding sustainable growth and to make recommendations what should happen to improve growth in South Africa. The following secondary objectives are formulated regarding chosen aspects of growth:

- To compare macroeconomic policies of South Africa with international best practice with specific reference to East Asia;
- To analyze the impact of COSATU criticism on the formulation of monetary policy;
- To analyze the application of macro prudential strategies;
- To analyze the application of a new inflation strategy; and
- To analyze the application of a new counter-cyclical fiscal policy.

A hypothesis is formulated out of the objectives namely that a strong relation exists between the application of macroeconomic policies and sustainable economic growth.

1.5 DEMARCATION OF THE STUDY

Growth and unemployment are macro-phenomenon. The research does not target respondents from a specific region of South Africa, but incorporate national and different international phenomena. Firstly, macroeconomic policies are addressed and compared to best practices in the first article. East Asian countries are the pivot of growth in the world and the focus is moving rapidly from the old West countries to the emerging East Asian countries. Interviews were conducted with Asian academics, business men, government officials and research institutions to establish reasons for

the East Asian economic success. Secondly the criticism of labour towards monetary policy is analyzed with reference to literature and international best practice. Thirdly, macro prudential policy methods of the BRICS countries were analyzed to determine which application created less capital volatility. High volatility and especially appreciation of the South African currency has a negative impact on exports and therefore growth. Interviews were also conducted with policy authorities in South Africa regarding monetary policy and fiscal policy. The growth phenomenon is so vast that the researcher only focused on macro policies, monetary policy, exchange rate policy and fiscal policy. Other policies which also have an impact on growth phenomena for example industrial policy, labour policy and health policy are only referred to and not analyzed in this research.

1.6 SIGNIFICANCE OF THE RESEACRH

Unemployment has been a worldwide concern for many years and the concern increased after the USA financial crisis of 2008. Unemployment has always been a concern in less developed countries, mainly because of a lack of resources, a lack of capital and a lack of skills. South Africa experiences very high unemployment rates according to international standards. The probable solution is high sustainable growth. The IMF at various venues as well as the 2010 Davos world economic forum confirmed that low growth and high unemployment are the biggest challenges in the world.

Before 1994 South Africa could not attract foreign capital to finance growth because of the prevailing political dispensation. After 1994 South Africa attracted substantial foreign capital (however volatile in nature) which did not create sustainable growth. Regardless of this bigger volatile capital inflow, the national saving as a percentage of GDP continued to deteriorate. These cornerstones for development are anchored in the new strategic plan of the new Department of Planning which was released in 2011 (DNP, 2011:16). Elements of the Neoclassical growth model and the developments in East Asia give probable answers to create a sustainable growth rate in South Africa.

According to Tinbergen (1952:3), the object of the theory of economic policy is to determine an optimum policy mix given preferences of society. The link in the various articles is the discussion, comparison and suggestions regarding different

economic policies to facilitate a better mix which should improve economic growth. The object may be broad, but the optimal link amongst economic policies is sought. Different economic and political agendas must be avoided at all cost.

1.7 CHAPTER CLASSIFICATION

Chapter 1: Introduction and Background of Study

This chapter describes the research problem, the objectives of the study and the significance of the research. A chapter summary is also provided.

Chapter 2: Growth Theories and Economic Policies

In this chapter an overview of the theories of growth is firstly described. Reference is made about classical theories, Keynesian theories, Neoclassical theories and modern theories for example the rational expectations theory. Secondly, the theories of economic policy are described. These theories seek to explain a certain social phenomenon in which an optimum macroeconomic policy is determined given the preferences of the citizens that elected the government. Thirdly, a chronological outlay of all economic policies that influence growth since the new political dispensation in 1994 is summarized.

An explanation of all the growth and policy theories, as well as a chronological outlay of all economic policies that influence the macroeconomic environment in South Africa, is important to reflect upon. This description of the economic environment is a necessary foundation for the critical analysis of literature regarding policy that is described in the different articles that follows.

Chapter 3: Article 1: The Challenge of South Africa to Reduce its High Unemployment

The first article was published in the Journal of Global Economy, Volume 7, No 1, Jan. – March, 2011. The content is based on the speech that the researcher delivered at the East meets West Conference held in Osaka, Japan in 2010.

The first article analyzes macroeconomic policies and reasons are sought why sufficient jobs are not being created after the political change that occurred in 1994.

The South African scenario should be compared to the fast growing economies of East Asia to find common ground for the implementation of new measures to accelerate growth in South Africa. Probable answers regarding the creation of employment opportunities were sought with the visit of the researcher to East Asia in June 2010. Economically successful countries embrace certain economic pillars in the application of their policies to reduce unemployment. Reference of the success stories of East Asian countries is included, for example to embrace free market principles, to apply scientific and technological elements in production and an education system of a high standard which is science based and market focused.

Studies were also done by foreign institutions, namely the World Bank in 2007 and the Harvard group of economists in 2008 about the inability of the South African dispensation to create new jobs to find solutions. Possible solutions must be sought. The informal sector provides a safety net for the formally unemployed workers at subsistence income levels which is not a long term solution. The new labour laws implemented after 1994 protects the rights of workers but makes the market place rigid. The ability of workers to rise out of poverty is being constrained by the policies designed to create a better labour dispensation. Various lessons can be learned and implemented to reduce the unacceptable unemployment and poverty levels in South Africa.

This article states the problem of weak sustainable economic growth and high unemployment that prevails in South Africa. This article analyzed macroeconomic policies and sought reasons from international best practice and foreign institutions to increase economic growth.

Chapter 4: Article 2: Labour Union Voices in South Africa and Arguments to Scrap Inflation Targets - a Historical and 21st Century Debate

This article was published in *New Contree: A Journal of Historical and Human Sciences for Southern Africa*, No 61, May 2011. The economic content was adjusted to an historical line of thought on request of the editor of the journal.

In the second article the focus is on monetary policy. South Africa became the 15th country in the world to formally adopt inflation targeting as a monetary policy framework. Price stability is the primary objective of inflation targeting. The role of

Congress of South African Trade Unions (COSATU) and labour unions are analyzed regarding the relation between inflation and growth. COSATU argues against this IT policy of SARB since inception for failure to increase economic growth and employment. In their view, monetary policy has to account for fundamental problems in South Africa of unemployment and poverty reduction (COSATU, 2010). In this research a broader view is analyzed than just inflation management of SARB according to the request received of the editor of the specific journal.

COSATU, as the biggest labour union in South Africa, has a history of being critical against government policies and was involved over time with various activities outside the associated sphere of labour unions. COSATU was since inception critical about various economic policies of government. Examples are their role to establish the transformation Reconstruction and Development Policy (RDP) in 1994 and their fierce criticism against the Growth Employment and Reconstruction Policy (GEAR) in the middle 1990s to create a sound economic strategic path for South Africa. Further examples are their leading role in the promulgation of the labour legislation of the 1990s in favour of the workers and their membership of the tripartite alliance with the African National Congress (ANC) and South African Communist Party (SACP) to govern South Africa.

This article states the need for monetary stability. Regardless of the continued criticism of COSATU against monetary policy (and government policies in general), the need of a stable financial environment is a necessary foundation for economic growth.

Chapter 5: Article 3: BRICS Currency Volatility: Confusion or Indecision?

The third article was published in *OEconomica*, Vol. 56(3), Dec 2011. The content is based on the speech that the researcher delivered at the Business and Information Conference held in Bangkok, Thailand in 2011.

In the third article the reasons for volatility and the macroprudential measures available to monetary authorities are analysed. The consequence of the 2008 financial crisis was reduced growth in the world and currency volatility. International investors adjusted their risk profiles regarding emerging countries since the crisis and these countries received billions of new investments. The abundant liquidity poses various

challenges for the policy makers of emerging countries. These capital flows may increase financial integration in the world, but it challenges policy makers to address the impact of these inflows. Various emerging countries' exchange rates appreciated accordingly relative to the USA \$ which was to their detriment.

The G20 finance ministers stated after their meeting beginning of February 2011 the need to combat exchange rate volatility and misalignment of exchange rates amongst countries. The G20 countries are dedicated towards greater exchange rate flexibility and reiterated the importance of improvements in the international monetary system to be implemented in order to avert unexpected shifts in capital flows and exchange rate fluctuations. The question arises what these countries can do to stop the appreciation of their exchange rates which influences their exports and therefore their recovery negatively. Central Banks in the world reacted differently to mitigate the risks in emerging markets. China for example manages their exchange rate, Brazil levies tax on capital inflows and South Africa relaxes foreign exchange controls.

This article analyses various policy measures available to authorities in BRICS countries to reduce exchange rate volatility and therefore the negative impact of the 2008 financial crisis on growth. It also analyses protectionist measures by exchange rate authorities relative to the artificial management of exchange rates. A new reserve currency is proposed.

Chapter 6: Article 4: To Reduce Inflation: New Application of Old Theories

The fourth article was submitted for publication to the Journal of Economic and Financial Sciences, University of Johannesburg.

The primary goals of monetary policy are to create stability in the financial markets and to foster an environment where the economy can facilitate growth and development. In the aftermath of the 2008/2009 Global Financial Crisis, monetary policy has experienced evermore limitations in applying existing instruments to achieve financial stability. The crisis has highlighted the need to go beyond micro-approaches to financial regulation, supervision and traditional policy application. Capital flows to emerging markets displayed dramatic shifts over the crisis period, collapsing at the start of the crisis and rebounding again during 2009 (Mohan, 2009:4).

During 2011, emerging countries experienced large capital outflows again due to the European debt crisis. These fluctuations in capital flows should be controlled in order to ensure financial stability in emerging markets. Traditional measures of monetary policy cannot assist in this. A new policy mix is required in order to reduce capital surges to and from the BRICS nations.

The International Monetary Fund (IMF) stated that improved multilateral surveillance is necessary in order to reduce the impact of negative spillovers (Strauss-Kahn, 2011). These negative spillovers include the policy actions made by one country that affects countries in other parts of the world. The rethinking of economic theories and policy advice in the wake of the global crisis is debated regarding monetary policy. Whilst inflation is ticking up in the BRICS countries, a new perspective is debated to reduce inflation in South Africa. If the inflation rate declines because of a new application of monetary policy, interest rates should decline accordingly and the big interest gap relative to developed countries should decline. This reduced interest rate gap should reduce exchange rate volatility and thus the negative impact of a volatile exchange rate towards economic growth and stability.

In this article, the need to rethink traditional economic theory and policy advice in the wake of the global crisis is debated. Against the background of the statement made by the IMF, the symptoms and causes of international capital flows will be discussed by means of a comparison of interest rates and inflation differentials amongst the United States of America (USA), Europe, Japan and the BRICS countries. The solution to reduce international capital volatility is addressed. A revised index for inflation targeting is proposed.

Chapter 7: Article 5: The Counter-cyclical Challenges of Fiscal Policy in South Africa

The fifth article was submitted for publication to the Journal of Public Policy.

The world experienced a global financial crisis in 2008. The negative effects of the global crisis could not be resolved through the application of monetary policy, exchange rate policy and macro prudential policy alone. A stable exchange rate, a stable inflation rate and financial stability are all needed in the application of the macro tool kit of policy makers. Counter-cyclical fiscal policy was also needed to

coordinate with abovementioned policies in order to create economic stability and growth. The application of all these policies influences each other and contributes to the success of economic stability in any economy.

Each policy has its own challenges however. Debate prevails in the international markets regarding the degree of policy instruments applied and the mix of these instruments to create the maximum financial stability. In this article, the causes and challenges of high government debt created by counter cyclical fiscal policy is highlighted. This high government debt neutralizes the sustainability of a stimulatory stance of fiscal policy which is needed in South Africa and the world.

The soaring government debt is a new challenge that developed and caused other problems for policy makers to address. The high debt levels of the United States of America and European countries are a prime example. Fiscal policy should aim to reduce debt in good times to the international 2 – 3% GDP norm (Mohr, 2004:404). The debt levels also soared in South Africa, but there is another reason for concern. The main cause for the increase in South African government debt is a soaring wage bill and escalating social grants. This soaring debt caused by incorrect spending policies, is analyzed which neutralizes the desired effect of a sound counter-cyclical policy. This soaring debt increases the financial instability and reduces the creditworthiness of South Africa.

The background of the high government debt problem in the world is firstly debated. This article analyses the specific scenario of South Africa against the background of the proposals of the G20 countries to counter the negative consequences of the international financial crisis. The rethinking of economic theories and policy advice for South Africa in the wake of the global crisis is debated to reduce the negative consequences of soaring debt. A new approach is required with counter cyclical fiscal policy to prevent future generations to suffer from fiscal mistakes of the government under the third president since the new political dispensation in 1994.

Chapter 8: Summary, Conclusions and Recommendations

The aim of this study is to explore the application of policies to create sustainable growth with the simultaneous reduction in unemployment and inequality. A final review of the entire study is presented. Conclusions and recommendations are

presented about important policy aspects that can ensure financial stability, reduce exchange rate volatility and improve sustained growth. This is done to address the research questions and objective of this research.

Questions can be asked about the probability of millions of South African inhabitants to rise out of poverty? Questions can be asked about the probability that the Gini coefficient (which is one of the highest in the world at 0,7%) will decline? Questions can be asked about the political motives of the ANC government. Questions can be asked about the success rate of the economic policies of the ANC government. Questions can be asked about the success rate of the BEE policy? Questions can be asked about the motives of the labour unions of South Africa to create sustainable growth?

Probable answers regarding the application of exchange rate policy, monetary policy and fiscal policy to the vast number of questions regarding sustainable growth are addressed. Recommendations regarding policies follow how to improve sustainable growth with a simultaneous reduction in unemployment against theory, international best practices and suggestions of international institutions.

Various other questions can be asked and studies can be done to address the low growth rate, high unemployment and high inequality of South Africa. Examples are the impact of industrial policy (trade policy is only referred to), the impact of the educational system (only referred to as a structural problem), the impact of the proposed new health system and the proposed new pension system.

A research visit occurred in June 2010 to East Asia and again in July 2011. The candidate attended the Asian Conference on Social Sciences from 18 - 21 June 2010 in Osaka. The theme of the ACSS was: East Meets West in Pursuit of a Sustainable World. The candidate also attended the Business and Information Asian Conference from 4 - 6 July 2011 in Bangkok. Two articles based on the topics delivered in Osaka and Bangkok is already published in international journals. The Asian countries experience sustainable growth and all of them grow faster than the USA and European countries. The candidate visited China, Japan, Thailand and Malaysia as well as all the Asian Tiger countries during 2010/11 to experience economic lessons and political lessons.

CHAPTER 2

GROWTH THEORIES AND ECONOMIC POLICIES

2.1 INTRODUCTION

Firstly, this chapter provides an overview of the theories of growth. The main outflow of economic policy application prescribed by these models is a sustained high growth rate. Other outflows include new employment opportunities, poverty reduction and the improvement of living standards of the inhabitants of a country. Secondly, theories relating to economic policy are described. These theories seek to explain a certain social phenomenon in which an optimum macroeconomic policy is determined, given the preferences of the citizens that elected the government. In order to adequately describe the relationship between economic growth and economic policy one must revisit the theoretical underpinnings of modern economic thought. Thirdly, all economic policies that influenced growth since the new political dispensation in 1994 are summarized.

An overview of the growth and policy theories, as well as a chronological analysis of all economic policies that influence the macroeconomic environment is essential, as it provides the foundation on which the articles in this study are based. This foundation explains the economic environment which is necessary for a better macroeconomic policy dispensation.

2.2 GROWTH THEORIES

The challenge of the South African government and economic policy is to achieve sustainable growth (measured against a 6% goal of macroeconomic policies). The concept of 'growth' encompasses various elements, such as savings that finance investment in the country, the application of technology in industry, the application of various policies (monetary, fiscal, foreign exchange, health, labour and trade) and investment in human capital.

The real growth rate in South Africa does not create new jobs on a sustainable basis. The real growth rate on an annual basis never reached the target of 6% set by government according to several of their macroeconomic policies (Department

National Treasury, 1996:1). The quarter on quarter growth rate has fluctuated greatly and has only reached the target rate three times since the 1994. Unemployment in South Africa, therefore, continues to be uncomfortably high. An overview of the different growth theories applicable to the South African situation will follow and must be reflected upon to show how economic policies should be adjusted in order to increase economic growth.

2.2.1 Classical Growth Theories

Adam Smith authored his famous book entitled *An Inquiry into Nature and Causes of the Wealth of Nations* in 1776. Smith moved away from the Physiocratic system, which concentrated on natural equilibrium of circular flows. Smith described a supply-side model of growth. Growth via the simple production function can be written as follows (Smith, 1904):

$$Y = f(L, K, T)$$

Where Y is output, L is labour, K is capital and T is land. According to Smith (1904:69), output is related to labour, capital and land inputs. Furthermore, output growth was driven by population, investment and land growth, as well as increases in overall productivity. Population growth was endogenous because it was dependent on how the increasing workforce was accommodated. Investment was also endogenous because it was determined by the rate of savings as well as land growth, which was dependent on the colonization of new lands or increased fertility due to technological improvements of old lands. Technological progress could, therefore, increase growth and Smith also saw improvements in machinery and international trade as engines of growth as they facilitated further specialization. Adam Smith's fundamental argument was that the division of labour or specialization improves growth.

Smith also argued that growth was self-reinforcing as it created increasing returns to scale (Truu & Contagion, 1996:187). Increasing returns to scale occurs when inputs are doubled, resulting in output in the economy being more than double. Another important contribution made by Smith was his reasoning with regard to savings of the capitalists which facilitated investment and thus growth. He reasoned that income distribution was an important determinant of how fast or slow a nation can grow.

Savings, according to Smith, is that portion of profit that is employed as capital to be used by others for reproduction (Smith, 1904:432).

Adam Smith's growth model remained the predominant model of Classical Growth. In another classical work authored by David Ricardo he modified Smith's growth model by including diminishing returns to land (Ricardo, 1815). Output growth requires growth of factors of production, but unlike labour, land cannot be increased because it is variable in quality and fixed in supply. Ricardo's argument was that as growth increases, more land must be cultivated, however land cannot be created.

Ricardo highlighted two important effects for growth (Ricardo, 1815). Firstly, increasing landowner's rents over time due to the limited supply of land should cut into the profits of capitalists and secondly, wage goods from agriculture would cause a rise in price over time which would then reduce the profits of companies as workers require higher wages. According to Ricardo, this development would reduce the growth explained by Adam Smith. Ricardo, however, claimed that this decline in growth can be checked by technological improvements in machinery and the specialization brought by trade (Truu *et al.*, 1996:188). Ricardo also argued that machinery displaces labour and that this free labour might not be reabsorbed elsewhere. This surplus labour creates downward pressure on wages and therefore should lower labour income.

2.2.2 Keynesian Growth Theory

John Maynard Keynes wrote his theory in his famous book *The General Theory of Employment, Interest and Money* (1973). Investment, in the Keynesian system, is an independent factor contingent upon the finance of entrepreneurs. It is, however, important to note that Keynes did not extend his theory of demand-determined equilibrium into a theory of growth. The Cambridge Keynesians explored this scenario. This extension was developed by Sir Roy F. Harrod who, together with Evsey Domar, introduced the 'Harrod-Domar' Model of growth between 1939 and 1946 (Domar, 1946).

Keynes' argument was that investment is one of the determinants of aggregate demand and that aggregate demand is linked to aggregate supply via the multiplier. In a goods market equilibrium the following equation can be written:

$$Y = (1/s)I$$

Where Y is income, I investment and s the marginal propensity to save and 1/s is the multiplier. The difference in investment, according to Harrod and Domar, is that it increases the productive capacity of an economy and should change the goods market equilibrium (Domar, 1946).

For 'steady-state' growth aggregate demand must grow at the same rate as the economy's output capacity. The investment-output ratio, I/Y, can also be expressed as (I/K)(K/Y). I/K is the rate of capital accumulation which is, thus, the rate of capacity growth (called 'g') and K/Y is the capital-output ratio (called 'v'). Thus, for steady-state growth $I/K = (dY/dt)/Y = g$. The rate of capital accumulation or capacity growth and the real rate of output growth $(dY/dt)/Y$, must be at the same rate, g. Thus, the equation can now be written as (Domar, 1946):

$$I/Y = (I/K)(K/Y) = gv$$

If arguments are recalled from the goods market equilibrium and from the multiplier, i.e. $Y = (1/s)I$ which can be rewritten $I/Y = s$, the condition for full employment steady-state growth is $gv = s$, or simply:

$$g = s/v$$

Thus, s/v is the 'warranted growth rate' of output. However, Harrod and Domar originally held s and v as constants, which are determined by institutional structures. This gave rise to the Harrodian 'knife-edge': if actual growth is slower than the warranted rate then, effectively, excess capacity is being generated. This means that the growth of an economy's productive capacity is outstripping aggregate demand growth. This excess capacity will, itself, induce firms to invest less. This decline in investment will reduce demand growth further and, in the next period, create even greater excess capacity.

Similarly, if actual growth is faster than the warranted growth rate, then demand growth is outstripping the economy's productive capacity. Insufficient capacity implies that entrepreneurs will increase their production capacity through investment. This increase in demand will make the shortage even more acute. With demand

always one step ahead of supply, the Harrod-Domar model guarantees that demand growth should be at exactly the same rate as output growth for an economy to grow. If not, then an economy will collapse indefinitely (Domar, 1982).

Joan Robinson (1962), a Keynesian economist, recommended a modification in order to better understand the properties of this model. The full employment relationship, i.e. $I/Y = gv$, or the steady-state growth must be qualified regarding what determines investment. In a Keynesian world, an independent investment function should remain independent! Therefore, Robinson posited a relationship, $I/Y = f(P/Y)$ or $g = f(r)$, where investment decisions by firms were functions of (expected) profit. Robinson attempted to answer the question of stability, namely what is there that guarantees that the profits generated by the above relationship will generate the amount of investment needed to sustain them?

2.2.3 Neoclassical Growth Theories

In the Harrod-Domar growth model, steady-state growth was unstable. It was a ‘knife-edge’ scenario in the sense that any deviation from the path would result in a further move away from that path. However, Robert M. Solow (1956), Trevor Swan (1956) and later, James E. Meade (1962) contested this conclusion. They claimed that the capital-output ratio of the Harrod-Domar model should not be regarded as exogenous. Solow also criticised the ‘knife edge property’ of the Harrod-Domar model due to inconsistency between the warranted and natural rate of growth (Boianovsky *et al.*, 2009:7). Solow and Swan developed a new growth model where the capital-output ratio, v , was the adjusting variable that would lead a system back to its steady-state growth path. This means that v would move to bring s/v into equality with the natural rate of growth (n). Their resulting model became known as the Solow-Swan or Neoclassical growth model (Truu *et al.*, 1996:191).

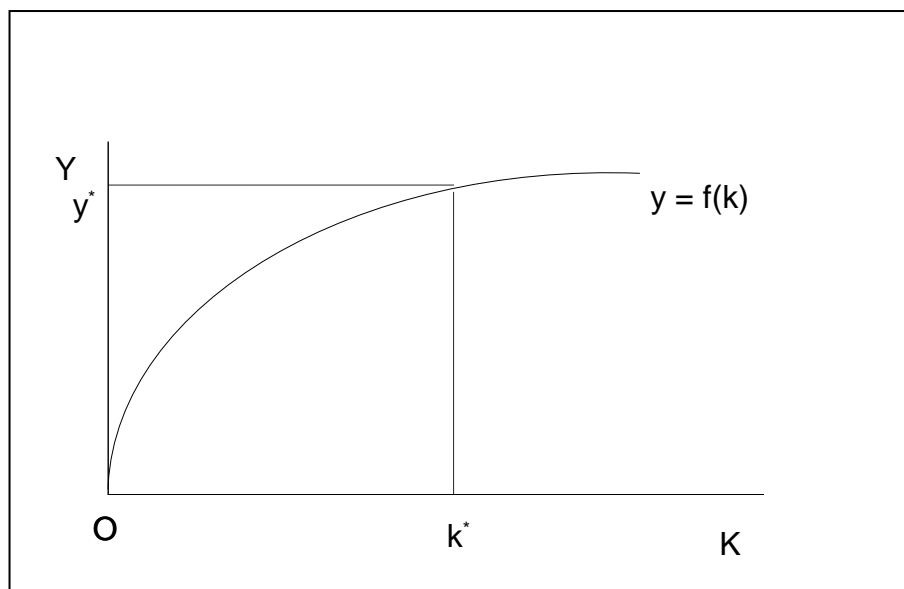
The Neoclassical growth model focuses on capital accumulation and links to other aspects such as saving and technology. This theory begins at a point where the economy reaches a long-run level of output and capital which is called the steady-state equilibrium (Michael, 2011). Figure 2.1 represents the production function in terms of GDP per capita relative to the capital-labour ratio. It is important to note that the capital-output ratio, $v = K/Y = k/y$, is captured as the slope of a ray from the origin

to production function. Thus, changing k will change the ray and, as a result, v . Therefore, unlike the Harrod-Domar model, v is not exogenously fixed. The shape of this function can also be explained by means of the existence of diminishing marginal product of capital. It means that as capital rises, output rises as new machines are employed, but each additional machine creates less output than the previous machine. The equation for the production function is written as follows (Bucci *et al.*, 2008):

$$y = f(k)$$

An economy is in steady-state equilibrium where per capita income and capital are constant, which is denoted as y^* and k^* (Sorensen *et al.*, 2010:162). These two values indicate the position where the investment required to provide capital for new workers and to replace old machines is equal to the savings that are generated in the economy. If savings is greater than the investment requirement, then the capital per worker will rise over time and the output will rise accordingly. These two values indicate the position where saving and investment are in balance.

Figure 2.1: Per Capita Production Function



Source: Dornbusch *et al.* (1998:49)

The investment required to maintain a given level of k , depends on the population growth and the depreciation rate of the capital employed in the production process. It is assumed that if an economy grows at a constant rate, n , the economy requires

investment nk to provide the necessary capital for any new workers. If a constant depreciation is assumed, then dk can be written as the requirement for new machinery and equipment. The equation for the investment that is required to maintain a constant level of capital per capita can thus be written as follows (Truu *et al.*, 1996:194):

$$(n + d)k$$

The next step is to incorporate saving. If one assumes that there is no government sector or foreign sector, and if saving is a constant fraction of income, then per capita saving is expressed as sy . Since income equals production, the following equation can be deduced:

$$sy = sf(k)$$

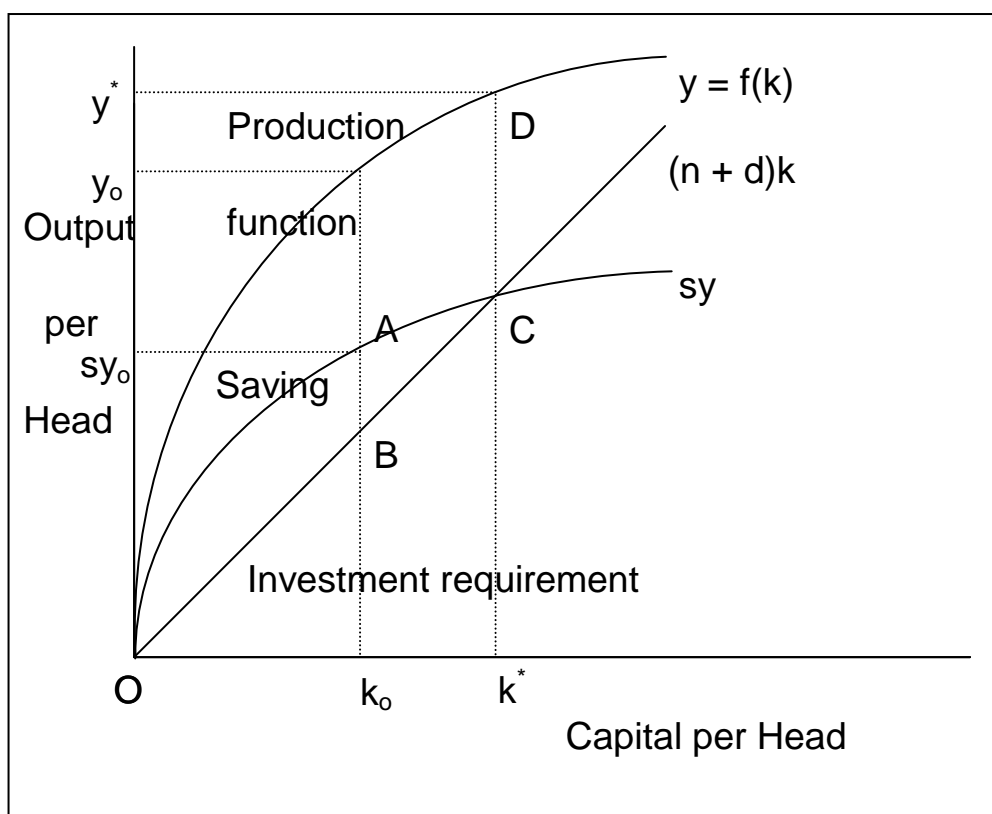
The steady-state of growth is defined where the change in capital is zero and it occurs at the values of y^* and k^* . The steady-state equation is therefore:

$$sy^* = sf(k^*) = (n + d)k^*$$

Figure 2.2 illustrates the steady-state position (Dornbusch *et al.*, 1998:66). The steady-state k^* can be depicted by superimposing the required investment function on top of the old diagram. At point C, saving and the required investment balance with the steady-state k^* . The steady-state income is read on the vertical axis according to the production function at point D.

The crux of the Neoclassical growth model is when saving sy exceeds the required investment then k should increase. This is seen in Figure 2.2 at the capital output ratio k_0 or at point A, where the saving exceeds the investment needed to hold k constant at the actual investment point B. If the economy exits at k_0 then the adjustment process will take place and the economy will move to k^* or point C. The exact matching of actual and required investment is the steady-state and the capital labour ratio neither rises nor declines (Fourie *et al.*, 2009:318).

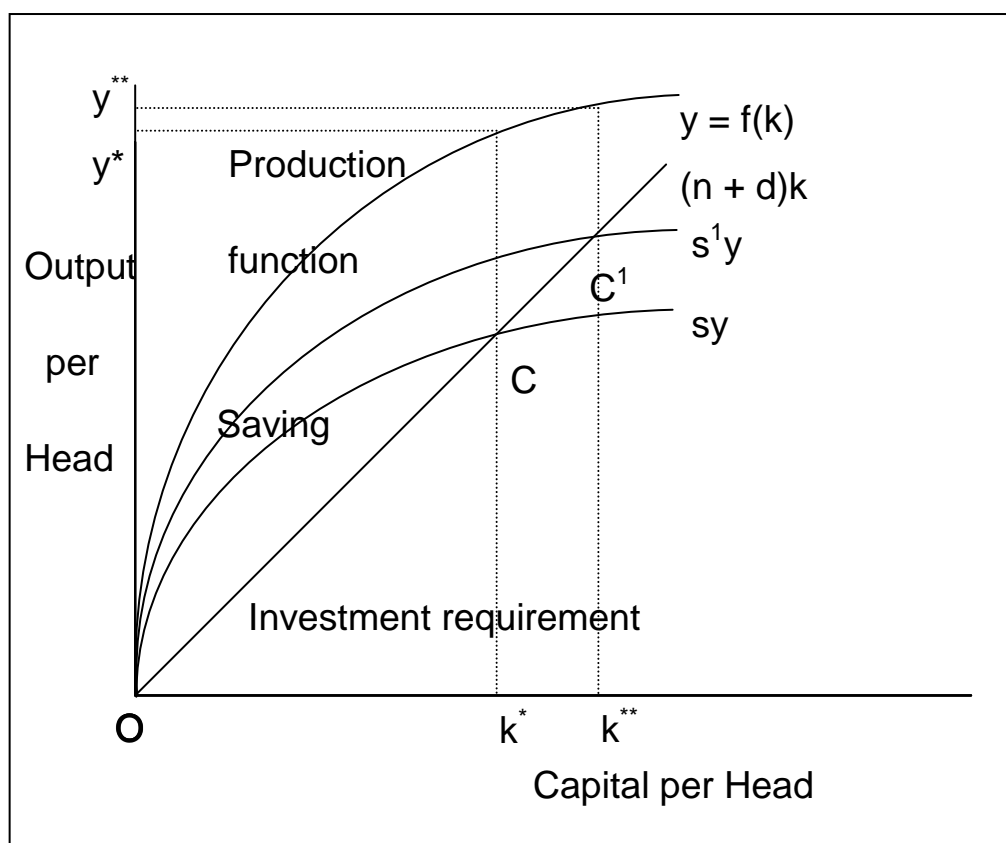
Figure 2.2: Steady-state output



Source: Dornbusch *et al.* (1998:51)

In Figure 2.3, the impact of a change in the saving rate is illustrated and how it affects growth (Dornbusch *et al.*, 1998:52). The Neoclassical growth model illustrates how an increase in the saving rate raises the growth rate of output in the short run. It does not affect the long run growth rate of output, but it raises the long run level of capital and output per head. If the inhabitants of a country save a larger portion of their income, namely, s^1 rather than s , the initial saving schedule will move upward to s^1y . This higher saving is more than what is required to maintain capital per head. The economy will move to a new steady-state position where k^* moves to k^{**} and therefore C to C^1 . At this higher point, saving is again enough to maintain the higher stock of capital.

Figure 2.3: Increase in saving

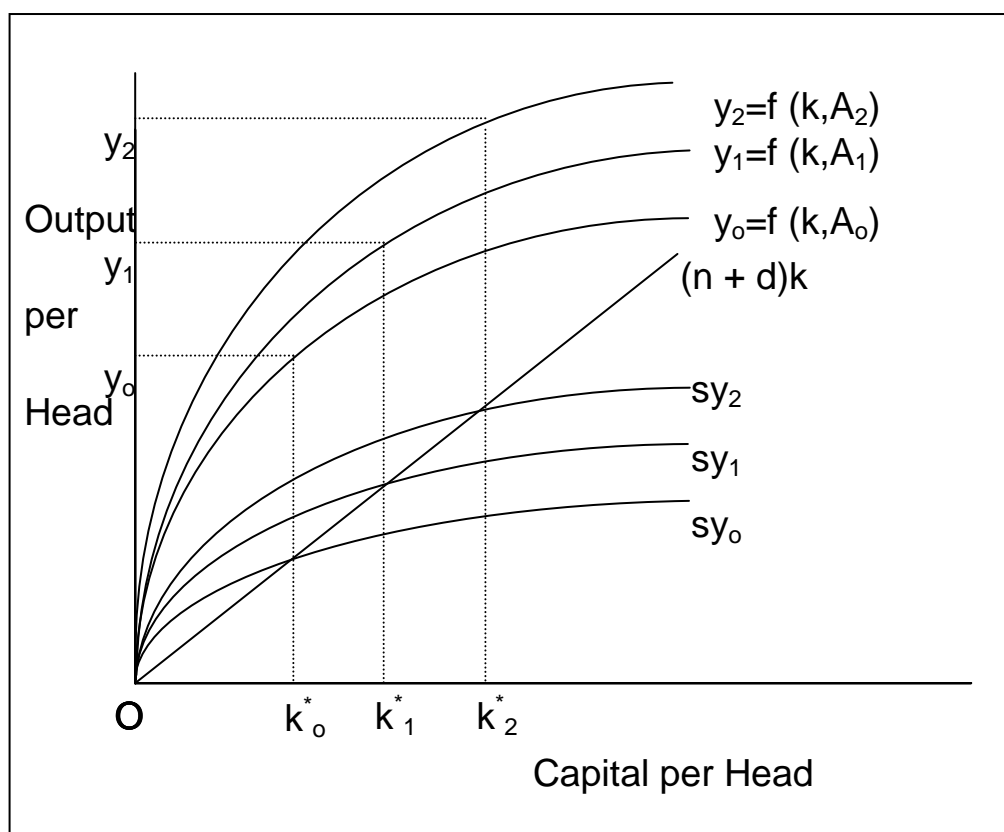


Source: Dornbusch *et al.* (1998:52)

The GDP of a country will increase as the rate of investment, either in physical or human capital, increases. The production function illustrated in Figure 2.1 can be thought of as a snapshot of a typical economy at a specific point in time. According to Boianovsky *et al.* (2009) the steady-state rate of growth of income per capita is influenced by the exogenous variable technology, which was an important contribution made by the Neoclassical growth model. If technology is incorporated in the model then y will move from y_0 to y_1 to y_2 over time as is indicated in Figure 2.4.

An exogenous increase in technology causes the production function to rise (Fourie *et al.*, 2009:331). As the economy moves to a higher steady-state the saving curve also rises. The result of this new higher steady-state is a higher per capita output and a higher capital-labour ratio as illustrated in Figure 2.4. Therefore, increases in technology over time result in sustained growth of output over time (Sorensen *et al.*, 2010:127).

Figure 2.4: Exogenous technological change



Source: Dornbusch *et al.* (1998:55)

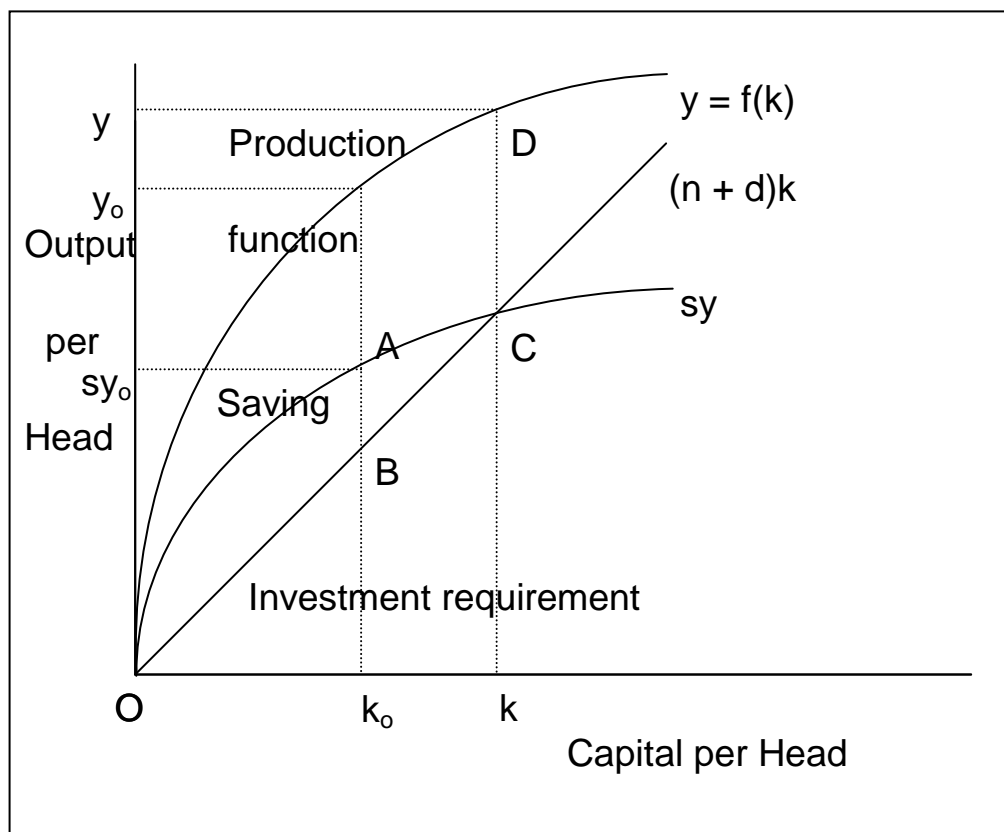
2.2.4 Endogenous Growth Theory

The Neoclassical growth theory dominated economic thought for three decades because it explained much of what was observed in the world. However, by the late 1980s economists were not satisfied with this theory any more. Neoclassical growth theory attributes the long-term growth to technology but did not explain the economic determinants of the technological progress. The solution to the problems experienced with the Neoclassical growth theory was to modify the production function to allow for self-sustaining endogenous growth. The endogenous growth theory therefore studies the determinants of the technological progress (Truu *et al.*, 1996:198).

Figure 2.5 illustrates the Solow growth scenario. Recall from the previous section that point C is the steady-state, which indicates that saving and investment is in balance. Any point where the saving line is above the investment requirement line indicates that the economy is growing due to the capital that is invested in the economy. The

following question can be asked: How does this process eventually enter a steady-state position of no change. The answer is threefold: as a result of the diminishing marginal product characteristics of capital, the characteristics of the production function and the parallel saving curve that eventually flattens out. The investment requirement line has a constant positive slope and therefore, the investment requirement line and the saving curve have to intersect eventually.

Figure 2.5: Steady-state output



Source: Sorensen *et al.* (2010:133)

Figure 2.6 illustrates the endogenous growth scenario (Dornbusch *et al.*, 1998:80). The shape of the production function has changed and now shows a constant marginal product of capital. The production function is now a straight line, like the parallel saving curve. The saving curve no longer flattens out; therefore saving is continuously greater than required investment. Figure 2.6 indicates that the higher the growth in saving, the larger the gap between saving and required investment and the faster the growth should be. The following equations summarize this theory (Dornbusch *et al.*, 1998:65):

$$Y = aK$$

Where the marginal product of capital is the constant, a , output is proportional to the capital stock.

If it is assumed that the saving rate is constant at s and there is no population growth and no depreciation of capital, then the following equation can be written:

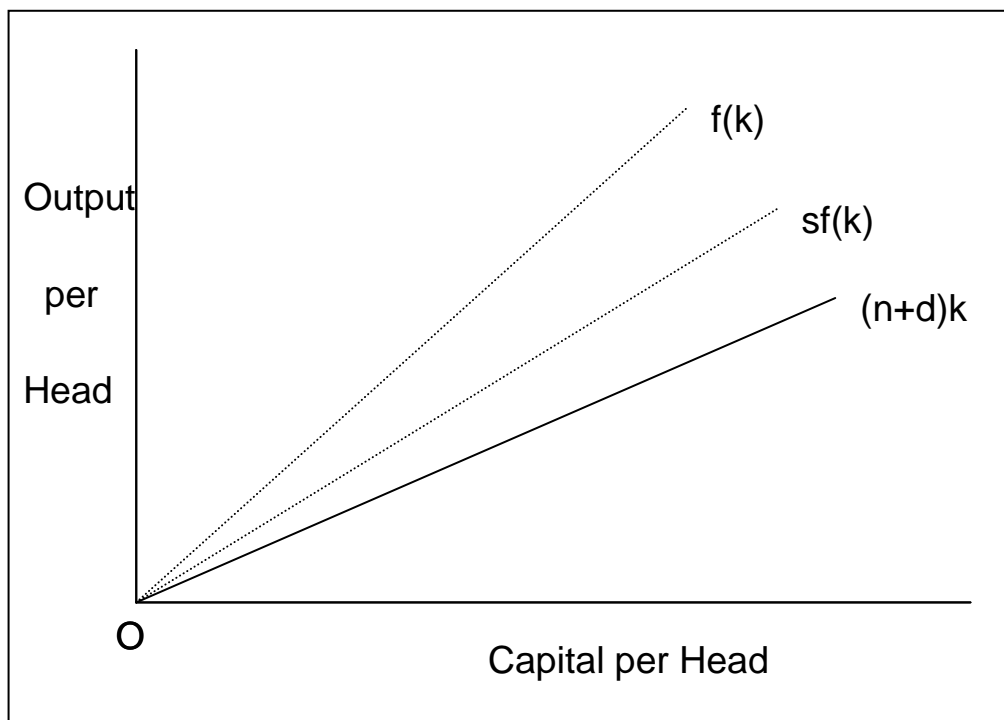
$$\Delta K = sY = saK \quad \text{or} \quad \Delta K/K = sa$$

This means that the growth rate of capital is proportional to the saving rate and since output is proportional to capital, the growth rate of output is therefore:

$$\Delta Y/Y = sa$$

This means the higher the saving rate, the higher the growth rate of output (Sorensen *et al.*, 2010:227). The implication for economic policy is clear, namely to stimulate savings to create a sustainable boost to growth.

Figure 2.6: Endogenous growth



Source: Dornbusch *et al.* (1998:64)

To summarize the endogenous theory, it can be concluded that this theory relies on constant returns to scale to accumulate factors of production to generate ongoing growth. This means that a company with twice as much machinery and equipment will produce twice as much output. If the production factor capital is doubled, it means thus that output will also double, but if all the factors of production double, it means that a bigger output will be doubled. If there are constant returns to scale to capital alone, there will be increasing returns to scale to all factors taken together. This suggests that larger companies are more efficient (Dornbusch *et al.*, 1998:81).

Furthermore, the microeconomics that support this theory emphasizes the difference between social and private returns when companies are unable to capture some of the benefits of investment. Investment produces not only new machines, but also new methods of production. This may occur as a result of investment in research and occasionally due to spin-offs. If a company invests in a new machine or technique, management will capture the benefits of this, however, it is more challenging to capture the benefits of new ideas and methods because they are easy to copy. This theory, therefore considers the role of human capital and research and development. Investment in human capital is an important source of long run growth (Fourie *et al.*, 2009:334).

2.2.5 Multisector Growth Theory

Two-sector extensions of the Solow growth model were introduced by Hirofumi Uzawa (1963), James E. Meade (1962) and Mordecai Kurz (1963). This line of research, however, ceased as suddenly as it began.

2.2.6 Optimal Growth Theory

As far back as 1889, Eugen von Bohm-Bawerk discussed the idea that people tend to underestimate their future needs and desires and, therefore, discount their future utilities (Von Bohm-Bawerk, 1959). This discounting of future utilities was seen as irrationality, a result of a deficient cognitive process.

The Cambridge economist, Arthur C. Pigou (1920) posed an interesting conundrum: he argued that if people tend to underestimate their future utility, they will not make proper provision for their future wants and thus personally save less than they would

have wished had they made the calculation correctly. Pigou, therefore, argued that because of this lack of provision for future needs, savings, as a whole, are less than what is optimal.

"Generally speaking, everybody prefers present pleasures or satisfactions of given magnitude to future pleasures or satisfactions of equal magnitude, even when the latter are perfectly certain to occur. But this preference for present pleasures does not - the idea is self-contradictory - imply that a present pleasure of given magnitude is any greater than a future pleasure of the same magnitude. It implies only that our telescopic faculty is defective and that we, therefore, see future pleasures, as it were, on a diminished scale....This reveals a far-reaching economic disharmony. For it implies that people distribute their resources between the present, the near future, and the remote future on the basis of a wholly irrational preference" (Pigou, 1920:24).

In order to define the rate of savings needed it is important to first determine what the optimal savings rate might be. The Cambridge philosopher, Frank Ramsey (1928) proposed an inter-temporal social welfare function and then tried to obtain the optimal rate of savings as the rate which maximized social utility subject to some underlying economic constraints. Ramsey, however, deliberately excluded discounting of future utility from this social welfare function (because people are individually short-sighted, it does not mean that society should be similarly short-sighted). This was a normative exercise. Ramsey's conclusion confirmed Pigou's idea that the optimal rate of savings is higher than the rate that agents in a market economy would choose.

Numerous researchers independently examined the question of optimal savings for the Neoclassical model. The answer was quiet simple: the optimal rate of savings will be that which makes the rate of return on capital equal to the natural rate of population growth. This 'golden rule' for efficient growth, as it has been called, was analyzed by, among others, Edmund S. Phelps (1961), Joan Robinson (1962) and Trevor Swan (1964).

According to Uzawa (1964), optimal growth theory began to recede in the 1970s for various reasons. Economists realized that the 'social planner' did not really exist. Another strong argument was the saddle point dynamics of optimal growth models which made them inherently inapplicable. There was no good economic reason to

suppose that an economy would grow the utopian way of an optimal growth path and consequently, optimal growth models were discarded as ultimately inapplicable constructions.

The rational expectations revolution in the 1980s changed the optimal growth line argument. Rational expectations were the mechanism by which an economy would use the stable arm of a saddle point. Saddle points were necessary if one were to obtain a precise solution to a model with rational expectations. The rational expectations theory is based on assumptions that people behave to maximise their profits or utility (Lucas, 1972). It is about a collection of assumptions and economic choices of people based on previous experiences and the rational expectations of probable results of those expectations. The rational expectations theory was developed to be used not only in the monetary sphere, but also in macroeconomic policy (Sargent & Wallace, 1975).

2.2.7 Monetary Growth Theory

James Tobin (1965) presented a simple model of monetary growth which follows the Solow model in all respects plus one: the existence of net outside wealth. It is assumed there is only one type of outside wealth, namely money. The yield on the broad aggregate money is then a certain rate of return which can be indicated as i .

In the original Solow model savings, as a constant proportion of income, translated immediately into the accumulation of investment. This by implication means that physical capital was the only form of wealth that existed. However, money is also an important alternative store of wealth. Tobin proceeded to place his portfolio propositions in a growth context and tried to reason how behaviour changes under these circumstances.

The Tobin proposition is based on the equation of exchange, namely $MV = PY$. If constant velocity is assumed this equation can be rewritten as (Tobin, 1965):

$$(dM/dt)/M = (dP/dt)/P + (dY/dt)/Y \text{ or}$$

$$g(M) = g(P) + g(Y)$$

Where $g(x)$ represents the proportional growth rate of a variable x . To get the rate of inflation, this equation can be rewritten again as

$$g(P) = g(M) - g(Y)$$

This means that the rate of inflation, $g(P)$, is merely the difference between the rate of money growth and the rate of output growth. A higher inflation rate results from a greater difference between the two variables.

It can be concluded that Tobin (1965), constructed this model in order to address a particular problem originally contained in the Harrod-Domar model. If the warranted rate of growth is greater than the natural rate of growth, then capital accumulation will occur and the marginal product of capital will fall continuously, possibly even become negative. However, if the marginal product of capital declines below the rate of interest, it implies that investment will lie below savings. In such a scenario stagnation is obtained, but if a floor is placed on fK , continual stagnation may be averted. This floor, adequately enough, could very well be the rate of return on money.

According to Tobin's (1965) argument, when fK hits r , then accumulation of assets will tend to halt as people will switch from accumulating assets into accumulating money. If, however, there is a surge of inflation, then r will fall and, in essence, the 'floor' to fK will be lower, so further capital accumulation can occur (f represents the production function and K represents capital stock). However, if inflation is very high, then the value of money (M/p) approaches zero. Thus, there is little point of switching into low value money. Thus, the lesson from Tobin is that a little inflation can avert stagnation but too much will be self-defeating.

If the different growth models are analyzed, numerous important determinants for growth arise. Since the first classical growth models, specialization of labour, investment of some kind, savings and technology were highlighted. Since the Neoclassical growth model, various researchers have analysed savings and emphasised the important role savings plays in sustaining growth. The role of productivity, the application of technology as well as research and development has also been highlighted as means to sustain growth. It is therefore important for government to address imbalances or structural problems in the South African

economy that arises from the lack of these determinants in the development and application of policies.

In the next section theories that explain the social phenomena of economic policy are described. Conditions that influence the effectiveness of policies, as well as the interactions of policymakers are highlighted.

2.3 THEORY OF ECONOMIC POLICY

Various policies contribute towards the economic wellbeing of a country. Economic policies encompass a broad range of topics, for example fiscal policy, monetary policy, foreign exchange policy, industrial and trade policy, labour policy as well as the ideology of the ruling political party. Economic policy constitutes the actions of a government that influence the economic outcomes of a country (Acocella, 2005:2). Examples of these outcomes are the level of interest rates in the country, the tax structure of individuals and corporate companies, government spending, the level of the exchange rate, subsidies to certain sectors in the economy, tariffs on specific products and customs taxes on specific products to name but a few. Policies can be classified as discretionary or automatic measures (Acocella, 2005:101). Discretionary measures are applied at the policymaker's discretion as economic situations are assessed. Automatic measures are applied without the need of policymaker's observation. Examples are automatic stabilisers that reduce income inequality but also reduce cyclical fluctuations like payment of unemployment benefits and progressive taxation.

According to Tinbergen (1952:1), economic policy is the act of economic behaviour. This may be true with regard to individuals or individual organizations and organized groups such as trade unions or industrial organizations. Economic policy addresses a particular economic problem or phenomenon and explains the nature of the relationships between different economic variables. According to De Vroey (2010), Tinbergen was a pioneer that transformed qualitative models into empirical models.

Tinbergen (1952:2) stated that economic policy may consist of two kinds of acts. Qualitative policy as the first act means the changing of qualitative aspects of economic structure, for example, monopoly behaviour where a competitive market previously existed, the creation of a customs union or the nationalization of industries.

Quantitative policy as the second act, describes the changing of political parameters or instruments within the existing qualitative framework. The boundaries between these two kinds of acts are not always clear. An example of an act that can be classified as both qualitative and quantitative is a change of an education system that is free of charge if rates were previously due. Such an education policy change may also be quantitative because the past price changed to zero (Tinbergen, 1952:2). The South African education system is a perfect example where qualitative and quantitative acts overlap because for certain culture groups the quantitative price became zero.

Tinbergen's research was addressed at the macro environment and focussed at policy analysis. The practicalities of policy making and the political concerns were the priorities in his research (Hallett, 1989:1). The research was conducted after World War II, when many countries faced unemployment, inadequate demand and lack of investment. Tinbergen recognised the existence of domestic and international policy makers. He designed economic models to ensure the internal coordination of different policies. Tinbergen did not research efficient policy selections, but focussed on propositions that were controllable (Hallett, 1989:197).

During the post war period, conflicting desires existed. The destruction of resources which needed repair had to be balanced with the ability to import and export and the payment of equipment needed to repair and built economies again. The principle idea of Tinbergen's policy theory is the insight of policy makers about consistency as policies are developed (Theil, 1956:360). Situations may occur where politicians may formulate policies based on inconsistent desires, for example to lower the work hours per week or to reduce the dependence of foreign aid. In the formulation of policies, it is important to strike a compromise between short term conflicting priorities and a long term suitable framework which a country needs.

To achieve consistency, Tinbergen proposed an econometric equation system with endogenous or exogenous variables (Theil, 1956:361). Examples of exogenous variables are international prices of raw materials and government expenditure. Examples of endogenous variables are the level of employment and the aggregate expenditure in a country. According to Hallett (1989:189) instruments and targets are necessary to address the macroeconomic environment and to reach specific policy

targets. Tinbergen in his theory of policy making used fixed targets for which he was criticised in later years.

Theil extended the initial research done by Tinbergen and addressed the criticism on policy theory. Theil introduced a criterion function for policy selection (Hallett, 1989:201). Policy choices and flexible policy targets were the distinction that made his research different than those of Tinbergen. Theil introduced an objective function that obtained the best choice in policy making. This objective function can be related to a preference function in demand theory. This preference function creates utility for the government policy makers if the choices they implemented ultimately achieved their initial policy aims. Such a preference function also generates any tradeoffs between unattainable and conflicting policy targets. This preference function in policy making can be related to indifference curve theory of consumer demand. These preferences of policy makers are related to the consequences of new policies, but not to the desirability of any policy outcomes (Hallett, 1989:202).

Theil completed Tinbergen's initial research regarding theory of policy. The introduction of flexible targets and the criterion function paved the road for further developments in the theory of policy application. Aspects that developed in years that followed the classical policy theory included decisions in dynamic systems, decentralised decision making, risk sensitive decision making, and the accommodation of information uncertainties (Hallett, 1989:203).

A third viewpoint about economic policy developed also in the 1950s. According to Boulding (1959:1) policy refers to principles that govern certain actions directed towards ends. These actions are directed to 'what we want', 'how we get it' and 'who we are'. The 'what we want' consist of actions in social sciences and ethics. Social sciences study what people think they want and what people say they want. The right or wrong of what people want is an answer to be addressed in the field of philosophy and theology, but a social scientist can contribute towards reaching objectives.

The social scientist can address the second action 'how we get it' because the answer can be formulated regarding certain actions that should create known consequences (Boulding, 1959:2). The validity is found in the ability to predict certain consequences. Social sciences study the regularities in the universe. Individual

behaviour and social behaviour is not always regular, but the study of social behaviour is about aggregate quantities which is the summation of different numbers of individual characteristics or events. Certain regularities can be observed and ultimately described as identities. Identities are relationships amongst various quantities that are true by definition which the social scientist can use in decisions and predictions.

The third action 'who we are' is equally different to answer than the first action. According to Boulding (1959:11) against the development of democratic institutions the 'we' are regarded as a general welfare state that should promote the general welfare of all its inhabitants. Economic policy should be a deliberate distortion of society towards the objectives of policymakers, for example to raise artisans instead of robbers, to develop productive enterprises instead of monopolies and milk instead of whiskey.

Policy is about the outcome of political processes directed towards probable consequences. Policy is about social choices and the sacrifice of some objectives in order to pursue other objectives. Complex relations exist amongst policy objectives, but any economic policy should pursue progress, stabilisation, justice and freedom which are interrelated (Boulding, 1959:19). As identities separate the possible from the impossible, so does quantitative empirical research separate the probable from the improbable. Empirical research should be part and parcel of any policymaker's tool kit.

The classical theory of control over time developed into a theory of conflict. The introduction of rational expectations changed the classical line of thought. Rational expectations changed the nature of the policymakers. According to this theory of conflict the private sector operators have conflicting objectives relative to those of policymakers and these operators may react to applied policies (Acocella *et al.*, 2011:6). Policymakers may experience loss of control. This loss of control depends on whether policymakers accommodate the reactions of private sector or whether the reactions of private sector are strong enough to offset any policy applications. This theory of conflict highlighted the issue of the effectiveness of policy instruments.

During the 1980s another approach in policy theory developed, namely policy games. The effectiveness or not of applied policies could be examined in a strategic context and policy games became the appropriate way to deal with the analysis of applied policies (Hallett *et al.*, 2010:2). The assumption of some kind of private sector reaction towards a new policy measure is built into the context. The underlying conflict between the private sector and policymakers is also build into the context. The private sector behaviour and interaction towards proposed instruments of policymakers is modelled into the context from the private sector preferences viewpoint. This development in applied policy stated the conditions of consistency of strategies of all the players. The effectiveness of policy instruments is also analysed and this two propositions are therefore implemented in model building.

International institutions such as the International Monetary Fund (IMF), the World Bank and the Bank for International Settlements (BIS) also influence the policies applied in a particular country.

In the section that follows all the macro policies applied by government, since the new political dispensation in 1994, which influences growth, are described.

2.4 ECONOMIC POLICIES SINCE 1994

According to Mohr (2004:62), governments have five broad economic goals, namely high economic growth, low unemployment, low inflation, stable balance of payments and an equal distribution of income. All governments should employ a combination of policies to create higher growth and to achieve macroeconomic stabilisation. The simultaneous achievement of these broad economic goals is a difficult task that requires the synchronisation of all economic policies within the country. Economic policy is a vast topic and in this research the focus will be on monetary policy, exchange rate policy and fiscal policy that influence growth.

In this last section of the chapter government policies that have any influence on growth and the broad economic goals are referred to. Government economic policies are analysed against the theories of growth and the theory of economic policy in the different articles. Economic policies are also analysed against international best practices, for example East Asian practices, International Monetary Fund and World Bank guidelines in article one.

2.4.1 Reconstruction and Development Program

The Reconstruction and Development Program (RDP) is an integrated, coherent socio-economic policy framework (RDP, 1994). It seeks to mobilize all our people and our country's resources towards the final eradication of the results of Apartheid and the building of a democratic, non-racial and non-sexist future. It represents a vision for the fundamental transformation of SA by (RDP, 1994):

- Developing strong and stable democratic institutions;
- Ensuring representivity and participation;
- Ensuring that our country becomes a fully democratic, non-racial and non-sexist society; and
- Creating a sustainable and environmentally friendly growth and development path.

The challenge facing the Government is to facilitate and give content to the six basic principles of the RDP. It is the combination of these principles that ensures a coherent program (RDP, 1994):

- Integration and sustainability

The RDP was implemented on a holistic basis through wide consultation and co-operation. All levels of government, parastatals and organisations within civil society all will be encouraged to work within this framework.

- People-driven

The RDP is focused on people's immediate as well as long-term needs. Development is not about the delivery of goods to a passive citizenry. It is about involvement and growing empowerment. The Government commits itself to maximum transparency and inclusivity.

- Peace and security

Promoting peace and security will involve all people. The Government will establish security forces that reflect the national and gender character of our country. Decisive action will be taken to eradicate lawlessness, drug trafficking, gun running, fraud, crime and especially the abuse of women and children.

- Nation building

The country's diversity and the rights of the various minority groups are taken into consideration with the process of nation building. We are a single country according to the RDP document, with a single economy, functioning within a constitutional framework that establishes provincial and local powers, respect and protection for minorities and a process to accommodate those wishing to retain their cultural identity. It is on the basis of our unity in diversity that we will consolidate our national sovereignty.

- Building infrastructure

The RDP integrates growth, development, reconstruction, redistribution and reconciliation into a unified program. The key to this link is an infrastructural program that will provide access to modern and effective services for all the people. Attention will be given to those economic factors inhibiting growth and investment and placing obstacles in the way of private sector expansion.

- Democratisation

The ANC regarded the 'minority control and privilege' in the economy as a major obstacle. The people most affected by previous policies should participate in future decisions. The government should be restructured to meet the priorities of the RDP policy.

Democracy is not confined to periodic elections, but is a process to enable everyone to contribute to the reconstruction and development of South Africa. The RDP policy document refers to programs to meet basic needs, namely to develop human resources, to build the economy, to democratize society and to implement the RDP. These programs establish the long-term social objectives of the RDP. The following objectives provide the framework for participation in the programs (RDP, 1994):

- Meet basic needs

This represents a very broad aim that include aspects such as job creation, housing, supplying water and sanitation, transport, health care, social welfare and security.

- Developing human resources

This aim is about education and training to achieve maximum capacity. Discrimination on grounds of race, class and gender will be abolished.

- Building the economy

The economy was in a bad condition in 1994 according to the ANC (RDP, 1994). The benefits of its strengths in mining, manufacturing and agriculture were delivered to a small wealthy sector. The intention of the RDP was to reverse the distortions that existed in the economy. The economy also suffered from other barriers to growth and investment, such as government dissaving and a comparatively high proportion of the GDP that was absorbed in government consumption expenditure. Other barriers included declining rates of return, capital outflows, low exports, high import propensity and stagnating productivity.

Another critical issue to build the economy was the question of worker rights. Past policies of labour exploitation and repression will be addressed and the imbalances of power between employers and workers corrected. The basic rights to organise and to strike will be entrenched.

In the world economy, the demand for raw materials, including minerals, had not grown rapidly and there was intense competition in the production of manufactured goods. The South African economy had to adjust to these pressures and the manufacturing sector had to make greater use of own raw materials and minerals.

A central proponent of RDP was that the SA economy cannot be built in isolation from its Southern African neighbours. It must seek mutual cooperation and develop a large and stable market offering stable employment and common labour standards in all areas. The pressures of the world economy and the operations of the international organisations affect the South African neighbours in different ways. They were pressured into implementing programs which had adverse effects on employment and

standards of living. It was essential that the government develop an effective growth and development strategy for all Southern African countries.

A reduction in the size of the civil service and increased efficiency, productivity and enhanced accountability were essential preconditions for the success of the RDP. The central government was the co-ordinator and the facilitator of the RDP. The RDP fund, established in terms of the RDP Fund Act of 1994 and administered by the Ministry of Finance, was vital for the reform of Government and the implementation of the RDP. The following sources were available for the financing of RDP programs (RDP, 1994):

- Government funds allocated in the budget;
- International and domestic grants;
- Interest earned on the credit balance of the fund;
- Proceeds from the sale of state assets; and
- Revenue from lotteries and gambling.

The RDP policy did not lead the economy to sustained higher growth according to the vision. It did succeed in a bigger representation and participation of the previous excluded groups of the nation as well as to become a non-racial and non-sexist society. The political goals of the vision were met, but the growth goal lagged ever since the policy was tabled in parliament. A strategy of redistribution that created a move towards equitable income distribution amongst the different groups of the nation developed. RDP followed a strategy to increase local demand. A competitive strategy also focussed on macroeconomic stability and higher exports to improve the local economy.

The government as managers of RDP believed that an equitable income distribution amongst the population would cause balanced growth (O'Malley, 1994). The government, as the new political democracy, proposed to attack poverty as their first priority. Government's second priority was to improve the standard of living and the quality of life for all South Africans within a stable society. The equitable income distribution however did not materialise.

2.4.2 Growth Employment and Redistribution

The challenge facing all South Africans is the reconstruction and development of SA. To attain higher growth and significant job creation without undermining macroeconomic stability is recognized as the key challenge facing economic policy. The goals of GEAR (DNT, 1996) were:

- To attain growth of 6% per year; and
- To attain 400 000 jobs per annum.

Against the background of the volatile international financial environment, growth of the SA economy was subdued. Investor uncertainty and weak global trade conditions have a profound impact on growth prospects. The adjusted real growth rate of government over the medium term was between 3 and 4 percent a year. The government employed a strategy to rebuild and to restructure the economy through (DNT, 1996):

- A competitive platform for export growth;
- A stable environment for a surge in private investment;
- Restructured public services and government capital expenditure;
- New emphasis in industrial and infrastructural development;
- Greater labour market flexibility; and
- Enhanced human resource development.

The government addressed the challenge of slow economic growth and high unemployment through this economic strategy. The vision of this development strategy was to improve job creation, to increase economic growth and to redistribute. The strategy envisaged (DNT, 1996):

- To strengthen economic growth while containing inflationary pressure in the economy. This should be done through a tighter fiscal stance, appropriate

monetary policy able, the stabilisation of the real exchange rate, continued tariff reductions and commitment to moderate wage demands;

- To increase the labour absorption through economic expansion of non-traditional exports as well as improvements in the functioning of the labour market;
- To improve income distribution through a change in the composition of government spending, a change of its tax and investment incentives and to speed up the delivery of social services; and
- To lower the burden on monetary policy to reduce inflation in the economy by financial discipline across other policies, including a tighter fiscal stance.

The elements of the package were (DNT, 1996):

- A reduced fiscal deficit program to contain debt service obligations, counter inflation and to free resources for investment;
- A focus on budget reform to strengthen the redistribution in the expenditure programmes;
- To reduce tariffs to contain input prices and to facilitate industrial restructuring;
- A commitment towards moderate wage demands and the support of operational tactics towards structured flexibility within the collective bargaining system;
- An exchange rate policy to manage a competitive and stable real effective rate;
- A consistent monetary policy to prevent high inflation;
- To relax exchange controls;
- To restructure state assets;
- Tax incentives to stimulate investment in competitive and labour absorbing projects;
- To expand the infrastructure program to address backlogs and service deficiencies; and

- To employ a levy system to fund the training of required needs.

The long-term vision for a democratic SA according to this strategy document was (DNT, 1996):

- A competitive and fast growing economy which created sufficient jobs for all workseekers;
- A redistribution of income in favour of the poor;
- A society in which health, education and other services are available to all inhabitants; and
- An economic environment where places of work are productive.

The government has an important policy coordination role. There are trade-offs amongst policy options and competing claims by different interest groups which need to be nationally resolved. The government called for a commitment, from both business and labour, to the broad principles set out in the policy document. Within government, especially in the fields of monetary, fiscal, trade, industrial and labour policies, there was a critical need for improved coordination to make all policies successful.

Inconsistent approaches in any of the policies destabilised the credibility of the overall macroeconomic framework. Effective coordination of economic policy was a priority on Cabinet level. The GEAR strategy sought to remove uncertainty, to give proper economic direction and to invite government's social partners to build a competitive and fast growing economy.

According to COSATU, the GEAR strategy was not an act and demonstrated the failure of economic policies (Vavi, 1997). According to COSATU this strategy of government should not deliver economic growth and job creation. GEAR should be abandoned and replaced by development strategies. COSATU also opposed this strategy due to the restructuring of state assets. COSATU believed that the restructuring of state assets would cause unemployment, but stated that the government was successful in the reduction of inflation, the reduction of the government deficit and the reduction of tariffs.

The government introduced GEAR and set macroeconomic targets that history proved was difficult to meet. The growth rate of 6% was never met and unemployment continued to be uncomfortably high relative to international standards. The actual budget deficit targets declined to such low levels that the targets translated into real budget cuts.

The GEAR strategy liberalised trade and focused on the increase of exports. In terms of the industrial policy of government, the competitiveness of exports was highlighted. The redirection of government expenditure, implementation of tax incentives and establishment of new labour laws to support labour intensive industry, did not reduce poverty, sustained higher growth or a decline in unemployment.

2.4.3 Accelerated and Shared Growth Initiative for South Africa

The ANC made a commitment, in its 2004 election manifesto, to halve unemployment and poverty by 2014. To accomplish the objective set out by AsgiSA, for 2004 – 2009, it was necessary to create an average growth rate of 4,5% per year (Mlambo-Ngcuka, 2006a). To accomplish the objective by 2014 a real growth rate of 6% must be achieved and sustained from 2010 (Mlambo-Ngcuka, 2006a).

The AsgiSA team identified six binding constraints that mitigate against the achievement of these growth rates (Mlambo-Ngcuka, 2006a). It is necessary to refer to these constraints regarding technology and growth, because if these issues are not addressed and solved by government, the required growth rate would not be achieved and poverty levels will not improve. It is clear that one of the constraints is a lack of capacity of logistics in SA which is crucial for the smooth development and growth of SA. Two questions originate, namely whether the government has the infrastructure and manpower to effectively address all these issues and secondly whether government is serious in its efforts to tackle all these obstacles and facilitate development in South Africa. The constraints highlighted in the first annual report of AsgiSA were as follows (Mlambo-Ngcuka, 2006b):

- The relative volatility of the currency;
- The cost, efficiency and capacity of the national logistics system;

- Shortages of suitably skilled labour and the spatial distortions of apartheid affecting low-skilled labour costs;
- Barriers to entry, limits to competition and limited new investment opportunities;
- The regulatory environment and the burden on small and medium enterprises; and
- Deficiencies in state organization, capacity and leadership.

At the time of writing, 2014 is merely 2 years away. It is safe to assume that the 2014 targets for unemployment and poverty will not be met. AsgiSA is a continuation of the GEAR strategy regarding growth targets, and as its predecessor, is another example of a failed economic policy. No other economic policy has since been developed. Be it due to the constraints which government did not manage to overcome that impeded growth or the management of the AsgiSA policy.

2.4.4 Labour

Before the different acts since the election of a democratic government in SA are analyzed, the role of labour in society must be defined. According to Boulding (1959:342) the function of labour and the function of management are united in a single person in the case of independent craftsmen or independent artisans. These functions however become separated in any business society. This separation of functions leads to an industrial relationship between employee and employer. This relationship must be governed.

Although labour is sold by a worker to the disposal of an employer, labour is more than a commodity. Labour incorporates a complex relationship of personal and social aspects that are not embodied in ordinary demand and supply scenarios in the market place. According to Boulding (1959:342) such a complex relationship must be governed. Proper institutions must be in place to govern the complexity of the industrial relationship, the workers' status and security as well as the communication process. Labour policies developed to govern these different relationships. Labour policy can be divided into two principal components: to encourage or discourage particular forms of organisation and policy regulations regarding the industrial relationship itself (Boulding, 1959:362).

Since the election of a democratic government in SA there has been vigorous debate regarding the development of the economy in order to increase employment and redistribute wealth. Much of this debate has focused on industrial relations and its role in improving our international performance. The nature of industrial relations determines whether an industry or enterprise is productive or not. In an economic environment where industries are exposed to competition from international markets, the state of these relationships determines economic survival.

South Africa's re-emergence into the global market place coincides with a watershed in industrial relations. Like many highly protected economies South African employers and unions have lived in a bargaining environment where co-operation was an unpopular option in a largely conflict driven system. The additional burden of a political system that forced a racial division of labour has left a legacy of distrust and demands for redress of wage and skill inequities. It is into this volatile world that government has introduced various labour acts under the auspices of the GEAR strategy. Labour relationships, which describe the labour rights of South African citizens, are also acknowledged in the Constitution (Venter *et al.*, 2011:180). Trade unions, organisational and individual rights are protected and acknowledged as basic human rights in the Constitution. The following acts were tabled (Mellet, 2008):

- Labour Relations Act (66 of 1995);
- Basic Conditions of Employment Act (75 of 1997);
- Employment Equity Act (55 of 1998);
- Skills Development Act (97 of 1998); and
- Broad Based Black Economic Empowerment (53 of 2003).

The philosophy behind the Labour Relations Act is to create a spirit of industrial democracy and to encourage production and labour peace by means of greater understanding and joint decision making. Grogan (2009:11) states that the Minister of Labour may issue 'codes of good practise' that provides guidelines to employers and the courts. The Minister may also issue regulations in terms of specific Acts which

complicate matters further to find the applicable rules for specific cases. The following are the main features of the new Act (Bendix, 2010:125):

- It recognises collective bargaining as the most acceptable means of resolving disputes of mutual interest and encourages and provides the means to reach agreement;
- It recognises that strikes and lockouts are an intrinsic part of the process of collective bargaining and therefore simplifies the procedure to be followed before embarking on such action;
- The Act imposes an obligation on employers to disclose information which may be required for bargaining and negotiations;
- It simplifies the dispute resolving procedures by replacing the Industrial Court with the new Commission for Conciliation, Mediation and Arbitration (CCMA) to process disputes;
- The most radical innovation of the Act is the introduction of the workplace forum. Elected employees have the right to consult with management and to reach joint agreement with management over matters defined in the Act; and
- The Act has been extended in its scope and now includes employees who were previously excluded from the existing Act, like farm workers, domestic workers and teachers.

The philosophy behind the Basic Conditions of Employment Act is to improve the basic working conditions of workers. Various aspects are covered, such as 40 hour working weeks, overtime work, meal intervals, rest periods, work on Sundays, night work, annual leave, sick leave, maternity leave, termination of employment, prohibition of employment of children, written particulars of employment deductions from employee's remuneration, work on public holidays and emergency work (Venter *et al.*, 2011:226).

The purpose of the Employment Equity Act is to achieve equity in the workplace. Equity in the workplace should be achieved by promoting equal opportunity and fair treatment in employment through the elimination of unfair discrimination.

Affirmative action measures should be implemented to redress the disadvantages in employment experienced by designated groups to ensure their equitable representation in all occupational categories and levels in the workforce. According to Grogan (2009:121) affirmative action permits discrimination in favour of employees that were disadvantaged by discrimination before 1994. Various conflicts arise in the application of the Employment Equity Act, for example how efficiency of an employee is reconciled with equity in the workplace and which designated groups deserve the most affirmative treatment. Grogan (2009:105) states that in such cases black candidates are preferred for employment.

According to Venter *et al.* (2011:238) affirmative action measures include measures to diversify employment in the workplace based on accommodation for people from designated groups, equitable representation of people from designated groups and the elimination of employment barriers against people of designated groups. This act requires designated employers to take positive action to (Bendix, 2010:145):

- Eliminate any employment barriers negatively affecting members of designated groups;
- Promote diversity in the workplace creating a climate of dignity and mutual respect for all people;
- Accommodate people from designated groups, ensuring that they enjoy representation and are equitably represented in the workplace;
- Ensure equitable representation of suitably qualified people from designated groups in all occupational categories and levels in the workplace; and
- Prepare an employment equity plan, according to Section 20, which must include objectives of the plan, numerical goals to achieve equitable representation, duration of the plan, procedures for monitoring and evaluation and also persons responsible for the plan.

The intention of the Skills Act is to complement the South African Qualifications Authority (SAQA) by providing the means to manage skills development on a national basis. According to Flower (2006) this act deals with employees and not with

the unemployed workforce. The aim of the act is to develop the skills of the workforce and to encourage skills training. This act also provided Sector Education and Training Authorities (SETAs). SETAs provide opportunities for employees to get training and education through learnerships as well as the allocation of grants to employers to provide appropriate training. Every employer who is registered with the South African Revenue Service (SARS) for pay-as-you-earn (PAYE) tax, or has an annual payroll in excess of R250 000 had to pay SARS an initial skills levy of 1% since April 2001 (Bendix, 2010:156). The Skills Act and the Employment Act work in tandem. The aim is to expand the knowledge and competencies of the labour force resulting in improvements in employability and productivity.

The philosophy behind the BEE legislative framework is the promotion of black economic empowerment. South Africa's economy performs below its potential according to the ANC because of the low level of income earned and generated by the majority of its people. According to Venter *et al.* (2011:242) this act promotes economic transformation of black people in the economy. This act promotes equality of all people and increases the participation of black people in all spheres of the economy and equal access to government services. This act changed the racial composition of management and ownership of enterprises. It also promotes the role of black woman.

The following quotes are from the inaugural meeting of the Broad-Based Black Economic Empowerment Advisory Council by president Zuma (Zuma, 2010):

“The legislation that has given birth to this Council places it at the centre of our efforts to bring about the economic transformation of our society. There are more CEOs of companies who are black and female than was the case at the dawn of our democracy. And yet we have to acknowledge that there have been pitfalls along the way. The speed of economic transformation, we have to admit, has been frustratingly slow”.

“We also have to admit that the ‘broad-based’ part of BEE has seemed elusive. In the main, the story of black economic empowerment in the last 15 years has been a story dominated by a few individuals benefiting a lot. The vast majority of those who are truly marginalised: women, rural poor, workers, the unemployed, and the youth have

often stood have often stood at the sidelines. Only a few benefit again and again from the bounty of black economic empowerment. If we broaden the meaning of black economic empowerment the measure of success will also have to change. It can no longer be satisfactory to only count the number of black millionaires and billionaires, important as that is”.

BEE began as a defensive policy to address problems resulting from the previous political dispensation. It, however, escalated to an ANC ideology which enriches the black political elite. An attitude developed in the ANC that the previous disadvantaged people can use the state to improve their circumstances, rather than to use the state and its assets to serve the needs of the people. Therefore the saying amongst the black population developed: “*the system owes me*”. The role of the state became distributive, rather than developmental. This ideology has disastrous consequences for the South African economy relative to the ideology in East Asia, namely the cultivation of virtue and the development of moral perfection (Hofstede & Bond, 1988:12)

According to Bendix (2010:157): “*South Africa has a comprehensive body of labour law. It can be argued that the provisions are too comprehensive and in certain instances too prescriptive, to the detriment of the labour market*”. Acts are amended from time to time and the Minister of Labour published four bills in December 2010 to reform the legislative labour framework in South Africa (Venter *et al.*, 2011:262). These changes presented major challenges for employers, for example further employment taxes, ban on labour broking and employment that changed to permanent without sufficient justification. According to Venter *et al.* (2011:264): “*From an employee’s perspective these Acts, while potentially leading to greater unemployment, do provide for greater employment certainty and security*”.

Since 1994 the exposure of South Africa escalated in the global competitive environment. The international competitiveness of South Africa however slipped in post 1994 years largely because of a highly inflexible labour market (Venter *et al.*, 2011:576). Relationships in the labour market are governed by various legislative provisions. The labour market since 1994 became inflexible because of all these institutional interferences (Flower, 2006:90). This perceived inflexible labour market has major implications for South Africa. Firstly, the lack of industry to compete

internationally reduce employment opportunities and secondly, the inability of socialist labour agendas (protection and security of workers) to adjust to the global competitive conditions. The opportunity for South Africa to become globally competitive and to create sustainable employment is severely hampered by addressing social imbalances through increased rigidities in labour laws.

2.4.5 National Planning Commission

The Presidency released a Green Paper that deals with a national planning system (Department National Planning, 2009). This Green Paper defines the country's development goals. It describes the processes and structures that are necessary to meet the strategic objectives for South Africa for which The Presidency will take responsibility. It describes the essential requirements such as institutions, a capable government and relationships amongst social forces. It describes matters of principle rather than the details of structures amongst different ministries.

The planning function will consist of four different outputs (DNP, 2009):

- The appointment of external commissioners who are experts in different fields to assist in the development of the plan;
- The development of a five year Medium Term Strategic Framework and annual Programs of Action;
- Research will be done on different topics that have an impact on the development of South Africa, for example demographic trends, global climate change, human resource development, future energy needs and food security; and
- Spatial planning will be done to undo the damage of apartheid's development patterns, for example the development of frameworks to guide national planning and infrastructure investment.

According to the strategic plan, the 39% of the population in 2011 which lives below the R418 poverty line (real 2009 prices) per person per month must be reduced to zero. The national development plan envisages the creation of 11 million jobs by 2030 and a reduction in the Gini coefficient (inequality) from 0,7 in 2011 to 0,6 by 2030 (DNP, 2011).

The challenges, according to the DNP (2011) are as follows:

- Too few people work;
- The poor quality of education for black learners;
- Poorly located and under-maintained infrastructure;
- Spatial patterns exclude the poor from the fruits of development;
- An economy that is resource intensive;
- Widespread disease burden supported by a failing public health system;
- Poor quality and uneven public services;
- Widespread corruption; and
- A divided society in South Africa.

The proposals to increase employment as well as growth include the following activities (DNP, 2011):

- To raise exports in areas where South Africa has endowments and comparative advantage, for example mining, construction, agriculture, tourism and business services;
- To increase the size and effectiveness of the South African innovation system through alignment with companies that operate in sectors consistent with growth;
- To improve the functioning of the labour market to absorb more labour through proposals that concerns dispute resolution and discipline;
- To support small businesses through improved coordination of activities for example the development of institutions to render finance and the development of incubators;
- To improve the skills base in South Africa;

- To increase investment in economic infrastructure to increase productivity and to reduce costs;
- To reduce regulations the in private sector to create greater capacity and to decrease costs; and
- To improve the capacity of the state to implement economic policy effectively.

2.4.6 New Growth Path

The new growth plan of the government states that the growth rate is too low and that the economy is the most inequitable in the world (Department Economic Development, 2010). The main goal of the New Growth Path (NGP) is the creation of more and better jobs to fight poverty, to reduce inequalities and to address rural underdevelopment. According to this growth plan, in addition to high unemployment, fundamental bottlenecks and imbalances exist. These bottlenecks are the result of dependence on the minerals value chain which uses huge amounts of electricity; weaknesses in the state's use of commodity based revenue for economic diversification and skills development; a persistent balance of trade deficit funded with short-term capital inflows attracted by interest rates that are high by international standards; backlogs in logistics and energy infrastructure and skills which raises costs and economic concentration in key sectors that permits rent-seeking at the expense of consumers and industrial development.

The NGP has identified five key job drivers (DED, 2010). These are infrastructure; main economic sectors; new economies; investment in social capital and public services and spatial development. The government plans to accelerate employment in three time frames. In the short term, direct employment schemes are planned, subsidies are proposed and expansionary macroeconomic policies are envisaged. In the medium term labour absorbing activities are envisaged in the agriculture -, light manufacturing - and services sector. Government also plans the inducement of investment in targeted private sectors to absorb labour through improvement in infrastructure that address market and state failures as well as the improvement of skills in South Africa. In the long term the government plans to support knowledge and capital intensive sectors to sustain competitiveness.

The latest government initiatives will be analysed simultaneously. A good place to begin such an analysis is to compare the challenges and imbalances that exist in the economy. The National Development Plan identified nine challenges (refer section 2.4.5) and the New Growth Path identified another three imbalances (refer section 2.4.6). Regardless of the good intentions of the NGP, various market analysts reported different reasons for the South African economy's inability to reduce unemployment (Odendaal, 2012).

According to Van Aardt (2011) growth in the South African economy is not labour absorptive. The research conducted proved that growth in employment was negative in five of the ten years between 2001 and 2010, whilst the South African economy experienced only one year of negative growth. During this period the agricultural and mining sectors experienced seven years of negative employment. Factors other than economic growth impact negative on job creation and job destruction.

If numerous reports are summarised the general bottlenecks in the South African economy are high input costs in manufacturing, high labour costs, high electricity costs, poor productivity, a strong currency, high real interest rates, competition law and competition from foreign countries regarding low priced imports in South Africa (Ackerman; Mashaba; Mokgosi-Mwantembe & Cohen, 2012). According to the political perspective of the latter sources, the general bottlenecks can be eliminated through improvement in political management. Other aspects that must be addressed are the lack of political leadership, inconsistency in political decisions, low standard of competency of bureaucracy, lack of service delivery and different agendas. Low standards of education which ensures an unskilled labour force, is also a constraint referred to in various reports

If the challenges and bottlenecks referred to in the two government initiatives and private sector reports are not addressed, then the goals and targets to increase growth and to reduce unemployment will never be met. The management of the South African economy and political dispensation need serious attention. If not, then the cancer of corruption, poor quality of education, a divided society and poor quality of public services will decimate all documented targets and goals.

2.4.7 Trade and Industry Policy

The Department of Trade and Industry (DTI) reviewed all programmes and policies after 1994. The DTI restructured in three areas, namely supply-side measures to improve competitiveness, assistance towards export marketing and the promotion of industrial development (Rustomjee & Hanival, 2008). Key changes were incentive schemes to increase the competitiveness of industry, the introduction of export marketing and investment assistance (EMIA), assistance for increased small and medium enterprises (SME), the termination of the general export incentive scheme (GEIS) whose costs exceeded benefits, the phasing out of the regional industrial development programme (RIDP) and its replacement by the manufacturing development programme (MDP), and the introduction of spatial development initiatives (SDI).

The DTI restructured (Rustomjee & Hanival, 2008) in three areas, namely supply-side measures to improve competitiveness, assistance towards export marketing and the promotion of industrial development. During the implementation of these new programmes, the DTI also introduced tax-based incentives. Various incentives were introduced in different industries, for example the development programme (MIDP) for the motor industry and the duty credit certificate scheme (DCCS) for the clothing and textile industry (Rustomjee & Hanival, 2008). During 2006, the DTI embarked on another review of its incentive programmes that ran parallel with the development of the industrial policy action plan (IPAP).

An industrial policy action plan (IPAP) was released in July 2007 (DTI, 2007a). The government implemented numerous industrial policy initiatives since 1994, but did not produce an umbrella document regarding industrialisation policies. The cabinet approved a National Industrial Policy Framework (NIPF) in January 2007 which defined government's total industrialisation policy for the first time.

According to the DTI (2007a), the major weakness at that stage was the decline of employment in the traditional tradable sectors, namely mining and agriculture. This decline was not offset by a large enough increase of labour in the non-tradable goods and services sector, mainly in manufacturing. The challenge for industry was, therefore, to diversify the manufactured exports and tradable services. The

profitability of the manufacturing sector was, however, low which resulted in low investment, low output, low exports and low employment opportunities.

A number of constraints were identified by the DTI (DTI, 2007a). Firstly, the level and volatility of the exchange rate. Secondly, the small market size coupled with costly and unreliable infrastructure. Thirdly, monopolistic pricing of inputs in the manufacturing sector. Fourthly, inadequate skills development and training. Lastly, a very competitive global environment and lastly, inadequate state support regarding upgrading and innovation of technology.

The main objectives of the updated industrial policy (NIPF) were as follows (DTI, 2007a):

- To facilitate diversification beyond the traditional commodities and non-tradable sectors;
- To intensify the industrialisation process and the movement towards a knowledge economy;
- The promotion of labour absorbing industrialisation with emphasis on tradable labour-absorbing goods and services;
- The promotion of a broader industrialisation path characterised by increased participation of disadvantaged people and marginalised regions; and
- To contribute towards industrial development on the African continent.

Another industrial policy action plan, the IPAP 2, was released in February 2011 (DTI, 2011b). This plan builds upon the IPAP 1 policy document of 2007. Since the release of the first IPAP 1 policy document the growth in South Africa was driven by growth in consumption based on credit extension. This growth path created imbalances in the South African economy, for example a large current account deficit and continued high unemployment. These weaknesses have been exaggerated by the global financial crisis.

The government estimated that IPAP 2 will create 2 477 000 direct and indirect jobs over the next ten years. It is also envisaged that this policy will diversify and grow

exports, improve the trade balance, build long term industrial capability, improve domestic technology and develop skills. The main cornerstones of the updated industrial policy (NIPF) were as follows (DTI, 2011b):

- To enhance industrial financing for investment in IPAP priorities; this higher investment will lower the current account deficit, assist to moderate inflation and contribute to diversify the structure of the economy;
- To revise procurement legislation, regulations and practices; this policy adjustment will increase competitive procurement and supplier opportunities and support BEE empowerment;
- To change trade policies; this policy adjustment will reduce customs fraud, under invoicing, illegal imports that undermine productive capacity and employment; and
- To target anti-competitive practices; this policy change will focus on intermediate inputs in the labour absorbing production processes.

The trade policy and industry policy focussed on export promotion. A wide variety of concessions were introduced, for example tariff concessions and credit facilities to promote exports. The DTI employed policies to enhance the international competitiveness of South Africa. The roots of the trade policy are found in the World Trade Organisation (WTO) obligations. According to Kalima-Phiri (2005) policy reforms include reduction of tariffs, the rationalisation of the number of tariff lines, the conversion from quantitative restrictions to ad valorem tariffs and the termination of export subsidies in the middle 1990s.

Whilst DTI reduced and changed tariffs, a shift in policy occurred towards supply-side measures to facilitate industrial restructuring. Examples are efforts to upgrade technology, the promotion of investments, the development of SMEs, as well as bilateral and multilateral negotiations with trading partners. Regardless of all these activities, the unemployment rate stays at uncomfortably high levels and the deficit on the current account continuous (South African Reserve Bank, 2011).

The targets and sectors influenced by industrial policy continued to broaden, which have various implications. The DTI had to consult with numerous other ministries to get the NIPF endorsed. It took also extensive time to get such endorsements. The NIPF developed into a complex and large model which cause doubts if this model can be efficiently managed by government officials of various ministries (Rustomjee & Hanival, 2008). The economy, for example, continues to experience high transport and logistical costs, as well as service quality constraints, which impede the industrial competitiveness of exporters. Transnet's pricing policy, which favours bulk commodities, is a perfect example. Another example is the Telkom monopoly, which causes high telecommunication costs for manufacturers and exporters (Rustomjee & Hanival, 2008:77).

The IPAP 3 was released in 2012 (DTI, 2012c). The Minister of Trade and Industry stated with the launch of IPAP 3 that South Africa faces severe headwinds on the local and international fronts. South Africa experiences on the local front currency overvaluation, large electricity price increases and high port charges – amongst the highest in the world. South Africa also experiences on the international front slow demand from Europe and the United States since the outbreak of the international financial crisis of 2008.

The main objectives of the updated industrial policy (NIPF) to strengthen the productive side of the economy are as follows (DTI, 2012c):

- Stronger articulation between macro and micro economic policies;
- Deployment of aligned and integrated incentive programmes;
- Procurement of domestic production;
- Deployment of trade measures to prevent illegal imports and customs fraud;
- Regulation and competition policies to reduce costs for investments;
- Industrial financing channelled to the real sector;
- Skills policies that are aligned to sectoral priorities;

- Interventions to stimulate regional economic development;
- Interventions to stimulate regional growth; and
- Deployment of policies towards sector strategies.

According to the Minister of Trade and Industry (DTI, 2012c) the success of the new IPAP depends on a competitive and stable exchange rate as well as a competitive interest rate structure. Further structural challenges highlighted are low levels of profitability of entrepreneurs, low investment in productivity enhancement, poor product innovation and inadequate provision of financial instruments by the private financial sector.

Various structural challenges exist on the local and international fronts to create sustainable growth. The lack of industrial policy coordination is another challenge that appears to be a major impediment to create higher growth and lower unemployment. Numerous ministries are responsible to develop programs on ground level. Officials of different departments take ownership of the programs and want to shape industrial policy according to their own preferences. The lack of a comprehensive industrial policy amongst various ministries weakens the possible outcomes of programs. This constraint was also highlighted when the DTI launched IPAP 2. The coordination of different policies according to the Minister of DTI is critical to achieve the expected outcomes of the different programs (DTI, 2012b).

2.5 CONCLUSION

Output, according to the classical economist Adam Smith, relates to labour, capital and land inputs. Output growth was also driven by population growth, investment growth, and land growth, as well as increases in overall productivity. Investment was endogenous because it was determined by the rate of savings (Smith, 1904).

David Ricardo claimed that a decline in growth can be checked by technological improvements in machinery and the specialization brought by trade. He modified Smith's growth model by including diminishing returns to land. These two classical contributions state that the division of labour and technology play an important role in the growth of an economy. Specialisation of labour (skills development) and the

improvement of the technology in the South African production processes can, therefore, not be emphasised enough to improve the growth rate.

Keynes added that, after the depression years, investment is an independent factor in the output process. Keynes stated that investment as one of the determinants of aggregate demand is linked to aggregate supply via the multiplier. The important role of an independent investment function and a strong demand is stressed as necessary conditions for an economy to grow. The history of investment in South Africa reflects that the percentage of capital formation varied between 15% and 22% from 1994 to 2011 which is too low to for the economy to sustain a high growth rate (SARB, 2011). Consumer demand during this period also reflects great volatility and sustained demand does not exist to pull the economic activity to a higher plateau on a continuous basis.

Early Neoclassical growth models emphasized the role of capital accumulation. In the Solow model, output is explained as the production by capital and labour. Neoclassical growth models, therefore, focused on the role of savings, investment (either in physical or human capital) and technology. Economic growth is compatible with a labour augmenting technical progress, which acts as if it were increasing the available amount of labour. In the long-term, output per capita and labour productivity grow at an exogenously given rate of technical progress. Gross savings varied around 15% of GDP since 1994, whilst savings as percentage of disposable became negative since 2006 (SARB, 2011). This low savings relative to capital formation is a distinct structural problem in South Africa. South Africa is also known as country that imports technological products and products that require high level of skills development. Much can be done and should be done to rectify these structural problems that inhibit growth in South Africa.

Empirical studies in the 1990s, based on the Neoclassical tradition, set out to reconcile the Solow model with, among other issues, international empirical evidence on convergence. Studies proved that the Solow model performs well in explaining cross-country differences in income levels and is even more successful when human capital is taken into account. Studies further concluded that the model is consistent with the international evidence, if one acknowledges the importance of human, as well as physical, capital (Fourie *et al.*, 2009).

Studies that emerged in the course of the 1980s explain long-term economic growth endogenously, by relaxing the assumption of diminishing returns to capital and by rendering technological progress endogenous to the model. According to these studies output and productivity growth do not rely on exogenous technical progress. In a pioneering paper Romer (1986) analysed that research and development (R&D) activities are associated with externalities, which affect the stock of knowledge available to all firms.

A firm's production function is defined by specific variables (capital services, labour and R&D inputs) and a shift term (index of technology), which is a function of the stock of knowledge available to all firms. This fact reflects the public-good characteristics of knowledge, which generates activities such as R&D. According to this viewpoint, it is possible to view the shift term as reflecting a 'learning by doing' process, or the influence of the stock of human capital. It is evident that the endogenous growth theory has the potential to take into account a variety of factors enabling innovation. The endogenous theory and empirical studies elaborated on the Solow model and considered the investment in human capital and research and development as cornerstones to sustain long term growth. Much can be done and should be done to improve the investment in human capital to rectify this structural problem that inhibits growth in South Africa.

R&D based endogenous growth models identify and explicitly model innovation (the accumulation of technological knowledge) as the driving force of long-term economic growth. In these models, new products or new processes are generated by investment in R&D. Thus, these models treat R&D as an entrepreneurial activity performed by profit-maximizing firms. 'Ideas' generated by R&D lead to new processes and products that are used as inputs in the production of final goods. As input goods of superior quality, or as more specialized intermediate or capital goods, these products raise productivity. It is widely recognized that while R&D-based innovation is a crucial determinant of the competitiveness of firms, it does not exclusively affect the performance of those actually undertaking these activities but gives rise to important external effects. An important element of these external effects is 'knowledge spillovers', which take place if new knowledge generated by the R&D activities of

one agent stimulates the development of new knowledge by others, or enhances their technological capabilities.

The commercial outcome of ideas, for example new processes and products, is very often characterized by initial high fixed costs and low marginal costs. It can for example be very costly to produce the first copy of a computer program, whereas reproducing it can subsequently be done at virtually zero cost. This implies that the economics of ideas is typically associated with increasing returns and imperfect competition (Dornbusch *et al.*, 1998).

Another argument to refer to is the impact of international technology diffusion on productivity growth which takes place through three channels (Harding & Rattso, 2005). Firstly, access to a larger pool of knowledge that increases the productivity of R&D activities in the countries involved, thereby enhancing future productivity growth. As a consequence, a country's productivity growth is positively correlated with the degree of its openness to flows of information and to its capability to absorb and utilize knowledge generated abroad. Secondly, international trade provides opportunities to use the input goods developed abroad that differ qualitatively from domestic input goods, and thus to increase productivity. Lastly, both international trade and foreign direct investment are vehicles for cross-border learning about products, production processes and market conditions and may lead to a reduction in the costs of innovating and contribute to increases in TFP.

Sufficient jobs are not being created after the political change that occurred in 1994. To address these challenges, the economic policy of government was analysed relative to growth theories and theories of economic policy. The important building blocks of the growth theories were analysed. Since the early classical growth models up to the well-known Neoclassical growth model, the importance of labour specialization, investment, savings and technology were highlighted. Since the launch of the neo-classical growth model productivity, the application of technology and research and development were highlighted to improve growth and to reduce unemployment. Government in the application of policies has to address these imbalances and structural problems in the South African economy to increase growth.

The first two government policies, namely the RDP and GEAR, served as the foundation for other policies to follow. The RDP was about fundamental transformation of the South African dispensation that integrated growth, development, reconstruction, redistribution and reconciliation according to the government. The GEAR strategy concerned higher growth, job creation and redistribution. History is a true science and reflected that government policies were biased towards redistribution and affirmative action and not growth. The good intentions of higher growth were impeded by political agendas.

The National Research Foundation (NRF) published a policy document regarding economic growth and international competitiveness based on the State of the Nation Address (6 February 2004), of President Mbeki. The following paragraphs are an extract of this document (NRF, 2004):

“South Africa must continue to focus on the growth, development and modernization of the First Economy, to generate the resources without which it will not be possible to confront the challenges of the Second Economy. This is going to require further and significant infrastructure investments, skills development, scientific and technological research, development and expansion of the knowledge economy.

South Africa must develop a competitive, sustainable, fast-growing economy that creates national prosperity. The extent to which this challenge is addressed will depend on a dynamic and multi-disciplinary knowledge base capable of integrating technology, management and labour. The keys to building a competitive industrial base are knowledge, innovation and productivity.

The economy remains largely dependent on natural resources, primary processing and manufacturing and, for the most part, on imported technologies. A sound scientific and technological base, from which wealth-creating technological innovations and applications can develop, is essential to economic growth in a competitive international environment. This knowledge base should address the full spectrum of economic accumulation, from mobilizing resources, to effective production to knowledge-based marketing, sales, services and distribution of manufactured products. This is particularly important in the knowledge era, as boundaries disappear between knowledge and its various applications.

South Africa needs to improve its international competitiveness. With the increasing impact of globalization on business, the scope for competition is no longer limited by national boundaries or by the definition of a particular industrial sector. This implies, among other things, that it has become imperative to develop and maintain knowledge and skills as assets that can lead to the development and successful commercialization of a wide variety of products and services that meet the demands of international markets”.

According to this NRF policy document the unacceptable levels of growth, unemployment and poverty have to be addressed in a new and fresh manner to create long term solutions. The answer to these problems cannot be found in short term economic- and short term political activities of the authorities. There exist numerous structural problems in the South African economy, for example exports are not diversified, high labour cost and low productivity that make our exports not competitive, political interference of our labour unions which creates numerous long term detrimental effects, bad coordination amongst different policy applications of government departments and different ideological viewpoints in cabinet. Some of these imbalances are addressed in the articles. A new and fresh viewpoint regarding the application of policies is necessary to improve these imbalances of the South African economy.

AsgiSA followed in 2006 as well as IPAP 1 in 2007, IPAP 2 in 2011 and IPAP 3 in 2012, but the progress to enhance growth and to reduce unemployment did not materialise. The New Growth Path was released which is essentially AsgiSA in different wrapping. The National development Plan is a breath of fresh air. Only time will tell if this vision of the National Planning Ministry will materialize to improve the living standards of all South Africans. It is however doubtful if successes will be achieved if previous policies and strategies are reviewed.

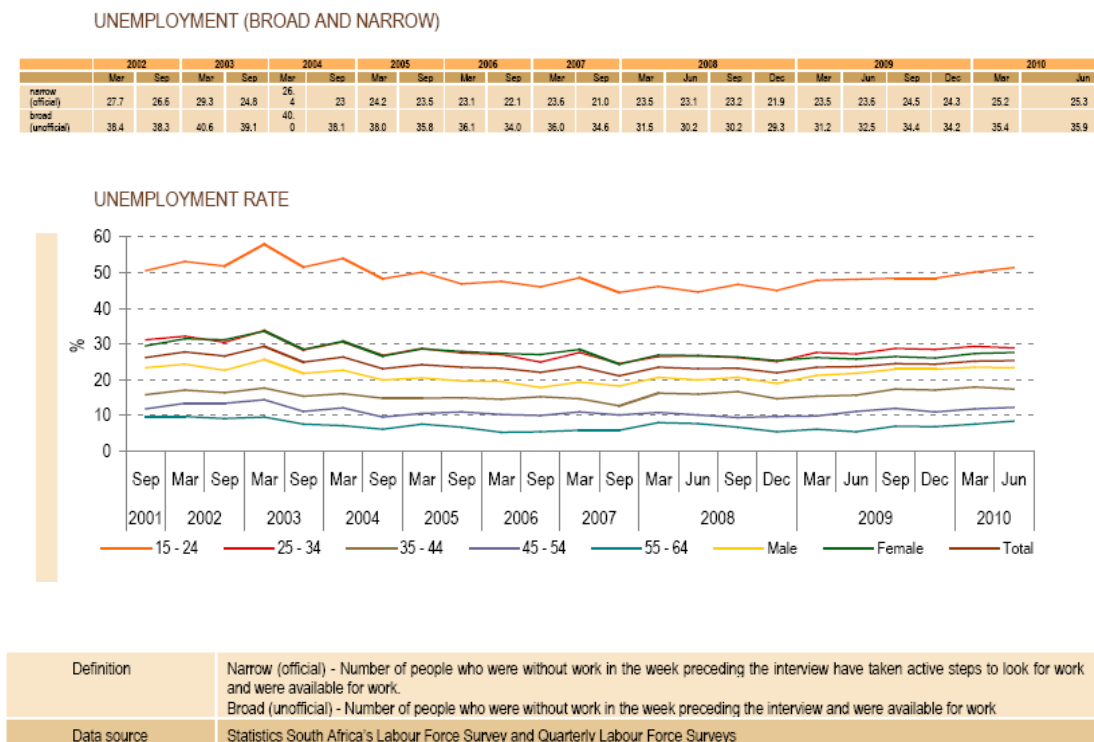
CHAPTER 3

THE CHALLENGE OF SOUTH AFRICA TO REDUCE ITS HIGH UNEMPLOYMENT

3.1 INTRODUCTION

The unemployment rate in South Africa has been in excess of 20% for many years. Various questions can be asked about policies and probable solutions to reduce unemployment. What is wrong with South African macroeconomic policies or is it rather what is wrong with economic and political coordination of policies? What is the probability of millions of South African inhabitants to rise out of poverty?

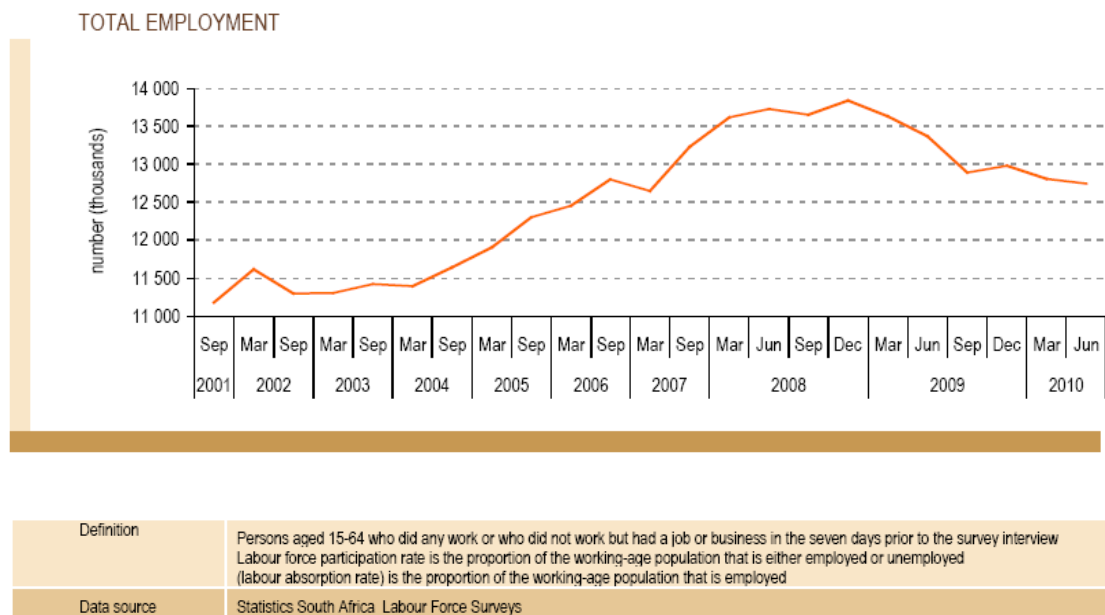
Figure 3.1: South African Unemployment 2001 - 2010



February 2010 was the commemoration of the speech of the previous president, Mr F W de Klerk, twenty years ago to legitimize the ANC as a political party. Sufficient jobs are not being created after the political change in 1994 when the black ANC government took over from the white minority NP government. The new government employed two new policies after 1994 with a strong focus on job creation. In the

Growth, Employment and Redistribution strategy (GEAR) and the Accelerated and Shared Growth Initiative for South Africa (ASGISA) the assumption is made that higher economic growth will ultimately create new job opportunities. This assumption is flawed because the unemployment rate stays uncomfortably high. President Zuma said in the State of the Nation Address in February 2009 that 500,000 jobs will be created for the year, but the country lost about 900,000 job in 2009.

Figure 3.2: South African Employment 2001 - 2010



Possible solutions must be sought. The previous Minister of Treasury (Manuel) was frustrated that, in spite of pouring money into education, the system was not delivering results. The Minister stated (Green, 2008): *“The reality is that we have an education system that is highly deficient and we have a highly unequal society with a large number of comparatively unskilled people needing work”*. Regardless of billions of rand being allocated to education, it continues to be a whirlpool of low standards and weak outcomes.

Economically successful countries embrace certain economic pillars in the application of their policies to reduce unemployment. The previous Minister of Treasury commented according to (Green, 2008): *“SA could not afford to go the way of the soaring East Asian economies which pay slave wages and compete successfully internationally on the strength of that”*. Regardless of his viewpoint, the South African scenario should be compared to the fast growing economies of East Asia to

find common ground for the implementation of new measures to accelerate growth in South Africa.

Studies were done by the World Bank in 2007 and the Harvard group of economists in 2008 to find solutions. In the mean time, the informal sector provides a safety net for the formally unemployed workers at subsistence income levels which is not a long term solution. The new labour laws implemented after 1994 protects the rights of workers but makes the market place rigid. The ability of workers to rise out of poverty is being constrained by the policies designed to create a better labour dispensation.

This paper firstly states the problem of weak sustainable economic growth and high unemployment in South Africa. Secondly, the inability of the South African dispensation to create new jobs will be analyzed relative to theory. Thirdly, reference is made to various government policies to see if it supports real growth or if political agendas cast a shadow on theoretical principles. Fourthly, the South African labour scenario is analyzed according to studies done by various international organizations as well as a few similar emerging countries in East Asia to find common ground to improve employment creation. In conclusion, recommendations are made to improve growth in South Africa.

3.2 WHAT CAN SOUTH AFRICA LEARN FROM THEORY?

The well-known Neoclassical growth theory describes a steady-state equilibrium where the economy reaches a long-run level of output. According to Dornbush (1998) an increase in the savings rate, firstly raises the long-term level of capital and output per head. Secondly, an increase in the population growth rate reduces the steady-state rate of growth of aggregate output. Thirdly, an increase in technology causes the steady-state to move to a higher per capita output.

The Neoclassical growth theory dominated economic thought for a long time but did not explain the details of the technological progress. According to Dornbush (1998) the endogenous growth theory developed to explain the theoretical and empirical problems associated with the Neoclassical theory by modifying the production function. This theory explains the role of human capital as well as research and development to increase long-run growth. These foundational economic elements

should be incorporated in macro economic policies to create sustained economic growth and will be referred to later.

3.3 WHAT POLICIES INFLUENCE EMPLOYMENT AND GROWTH IN SOUTH AFRICA?

Various policies were implemented after 1994 by the new ANC government. Firstly, it is important to analyze these policies to see if these policies support real growth and secondly to analyze the broader political agenda of government.

3.3.1 Reconstruction and Development Policy

The first policy which must be referred to is the transformation policy of 1994. The goal of this policy was to build a democratic, non-racial and non-sexist future (RDP, 1994). The vision is a fundamental transformation of South Africa by means of:

- The development of strong and stable democratic institutions;
- To ensure representation and participation of all;
- To ensure that the country become fully democratic, non-racial and non-sexist; and
- To create sustainable growth and development.

This policy had two goals, namely reconstruction and development on the one hand and growth on the other hand. It is stated clearly that government supports macro economic policies which promote RDP principles. This transformation incorporates every level of government, every department and every public institution. This policy is not a new set of projects, but a comprehensive redesign and reconstruction of all government activities. It also facilitates labour market reform and establishes collective bargaining rights for all (RDP, 1994).

3.3.2 Growth Employment and Redistribution Strategy

The second policy is the GEAR policy of 1996 (Department of National Treasury, 1996). Soon after taking power in 1994, government realized that the country needed new initiatives to create sustainable growth of greater than 3%. Objectives of

government to reduce poverty, to redistribute income and to provide social services were not fulfilled. Government launched the GEAR strategy about rebuilding and restructuring the economy to reach the goals of the RDP. The RDP role in this economic strategy is reflected as follows: *“to successfully confront the challenges of meeting basic needs, developing human resources, increasing participation in democratic institutions of society and implementing the RDP in all its facets”* (Department of National Treasury, 1996).

The GEAR strategy identified structural weaknesses in the economy and focused on policy measures to address these imbalances. A reprioritization of the budget towards social spending was the first element focused on growth. All the other elements focused on poverty and inequality, for example acceleration of the fiscal reform process, consolidation of trade and industrial reforms and public sector restructuring (Department of National Treasury, 1996).

3.3.3 Accelerated and Shared Growth Initiative for South Africa

The third economic policy came into being in 2006 to reduce unemployment to below 15% and to halve poverty by 2014 according to (ASGISA, 2006). The government was not happy with the realized growth rate of the GEAR policy. Two important aspects had to be addressed, namely the relatively strong rand because of positive capital flows from abroad and the social grant program that did not reduce poverty enough. The government identified binding constraints that hampered sustained growth, namely (ASGISA, 2006):

- A volatile currency;
- Efficiency and capacity of the national logistics system;
- Shortage of suitably skilled labour;
- Entry barriers and limited investment opportunities;
- A regulatory environment that hampers the establishment of small businesses; and
- Deficiencies in state organizations, as well as capacity and leadership.

Analyzing these constraints, it is clear that sustainable high growth is hampered because of structural problems in the economy. The last constraint is however a perfect example of an imperfection created by the RDP policy.

3.3.4 Labour Policies

Since the 1994 election of a democratic government in SA, a continuous debate exists in the economy regarding unemployment and the redistribution of wealth. During this period from 1994 to 2006 when the government tabled new policies with various degrees of economic elements (minimal with RDP to a relative big percentage in GEAR and ASGISA), numerous new labour laws were also tabled. In an economic environment where industries are exposed to competition from international markets, the nature of industrial relations determines whether an industry is productive which eventually determines economic survival or not.

These labour laws over protect the employee, which allows a situation to develop where employers reluctantly employ new workers. The new proposals of government during November 2010 to improve the protection of workers will only worsen the existing regulated market, for example that all employees should be permanently employed. Such measures will take all flexibility away from companies. For South Africa to compete internationally such measures will make South Africa less competitive and will increase unemployment.

South Africa's re-emergence into the global market place coincided with a watershed in industrial relations. Like many highly protected economies South African employers and unions have lived in a bargaining environment where cooperation was an unpopular option in a largely conflict driven system. The additional burden of a political system that forced a racial division of labour has left a legacy of distrust which demanded a new dispensation regarding labour relationships. It is into this volatile world that the Government has introduced the following acts (Mellet, 2008):

- Labour Relations Act (66 of 1995);
- Basic Conditions of Employment Act (75 of 1997);
- Employment Equity Act (55 of 1998);

- Skills Development Act (97 of 1998); and
- Broad-Based Black Economic Empowerment (53 of 2003).

The philosophy behind the Labour Relations Act is to create a spirit of industrial democracy and to encourage production and labour peace by means of joint decision making. The main features of this act are the recognition of collective bargaining as the most acceptable means of resolving disputes of mutual interest. It also recognizes that strikes and lockouts are an intrinsic part of the process of collective bargaining. It simplifies the dispute resolution procedures by replacing the Industrial Court with the Commission for Conciliation, Mediation and Arbitration to process disputes. Lastly, the most radical innovation of the Act is the introduction of the workplace forum. Elected employees have the right to consult with management and to reach joint agreement over matters defined in the Act.

The philosophy behind the Basic Conditions Act is to improve the basic working conditions of workers. Various aspects are covered, like 40 hours working week, overtime work, meal intervals, rest periods, work on Sundays, night work, annual leave, sick leave, maternity leave, termination of employment, prohibition of employment of children and written particulars of employment deductions from employee's remuneration.

The purpose of the Employment Equity Act is to achieve equity in the workplace. Equity is achieved by promoting equal opportunity and fair treatment in employment through the elimination of unfair discrimination. Affirmative action measures are implemented to redress the disadvantages in employment experienced by designated groups to ensure their equitable representation in all occupational categories and levels in the workplace. This act requires employers to take positive action regarding the accommodation of people from designated groups, ensuring that black people enjoy representation and are equitably represented in the workplace.

The intention of the Skills Act is to provide the means to manage skills development on a national basis. Every employer who is registered with SARS for PAYE or has an annual payroll in excess of R250 000 has to pay a skills levy of 1% since April 2001. The Skills Act and the Employment Act work in tandem. The aim is to expand the

knowledge and competencies of the labour force resulting in improvements in employability and productivity.

The philosophy behind the BEE legislative framework is the promotion of black economic empowerment (Broad-Based Black Economic Empowerment Act, 53/2003). South Africa's economy performs below its potential according to the ANC because of the low level of income earned and generated by the majority of its people. It therefore promotes equality of all people and increases the participation of black people in all spheres of the economy and equal access to government services. It also promotes the role of black women, namely to own and manage existing and new enterprises and to increase their access in economic activities.

BEE began as a defensive policy to address problems of the previous political dispensation. It however escalated to the core ideology of the ANC which enriches the black political elite. An attitude developed in the ANC that the previous disadvantaged people can use the state to improve their circumstances, rather than to use the state and its assets to serve the needs of the people. Therefore the saying amongst the black population developed: *'the system owes me'*. The role of the state became distributive, rather than developmental. This ideology became disastrous for the South African economy, relative to the ideology in East Asia, namely the cultivation of virtue and the development of moral perfection.

3.3.5 New Economic Growth Path of 2010

The government announced a new economic plan at the end of November 2010 to address the high unemployment rate (Department of Economic Development, 2010). The goal was to create five million jobs over the next 10 years. Five job drivers were identified by government, namely increased public investment in infrastructure, targeting labour absorbing activities in main economic sectors, seeking advantages in the knowledge and green economies, to increase social capital and to foster rural development.

3.4 WHAT DO INTERNATIONAL RESEARCH GROUPS TELL US ?

3.4.1 Harvard International Panel

The Department of National Treasury, as representative of the government, engaged with an international team of experts to do research about the slow growth of the South African economy. This group of experts, known as the Harvard international panel, visited South Africa various times in 2006 and 2007 (Department of National Treasury, 2008). The panel stated firstly that South Africa has a structural unemployment problem and that the binding constraints, as referred to in the ASGISA strategy, must be eliminated by government. Secondly, they recommended that the export sector, mainly because of declining trends in the mining-, agriculture- and manufacturing sectors, must be developed. Thirdly, they stated that growth in South Africa is driven by three sectors only, namely construction, transport and communication as well as the financial, real estate and business services.

3.4.2 World Bank

The Department of National Treasury, as representative of the government, also engaged with the World Bank in a Country Partnership Strategy (CPS) in 2007. The focus of this research was the reduction of poverty and inequality in Southern Africa (World Bank, 2007). According to this research, sound economic macroeconomic policies and sound fiscal discipline contributed to an average three percent annual growth during the first decade after 1994. Van Aardt (2009) argues that a positive relationship exists between formal-sector employment and household income per capita growth in South Africa. The problem however is that the low growth rate did not improve the social conditions of the majority of the population. The poverty levels did not reduce significantly, whilst the burden of the HIV disease remains high which increases the cost of production and decreases productivity.

3.4.3 Other Structural Constraints

According to Banerjee *et al.* (2007) the increase in unemployment is due to structural changes in the economy and not to temporary negative shocks. These researchers found that the supply of labour increased after the fall of apartheid. These new entrants into the labor market tended to be relatively unskilled. Secondly, they found

a low level of labor market participation and employment in rural areas. If employment rates are compared by age group and region between South Africa and Latin America and the Caribbean, it is observed that the differences are large mainly in the rural areas of South Africa.

3.5 WHAT IS THE SUCCESS STORY OF EAST ASIA?

In the following table the unemployment rate of a few East Asian countries are compared. It is clear if these countries are compared to South Africa (refer table in introduction) that the general level of unemployment are within the international norm of 5% whilst the South African level is about five times more than the international norm. It is a clear indication that these countries' macro economic policies are effective, whilst something is seriously wrong regarding the application of policies in South Africa.

Table 3.1: East Asian Unemployment Rate 2002 - 2008

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008
China	3.1	3.6	4.0	4.3	4.2	4.2	4.1	4.0	4.2
Japan	4.7	5.0	5.4	5.3	4.7	4.4	4.1	3.9	4.0
Malaysia	3.0	3.5	3.5	3.6	3.5	3.5	3.3	3.2	3.3
RepKorea	4.4	4.0	3.3	3.6	3.7	3.7	3.5	3.2	3.2
Taiwan	3.0	4.6	5.2	5.0	4.4	4.1	3.9	3.9	4.1
Thailand	2.4	2.6	1.8	1.5	1.5	1.4	1.2	1.2	1.2

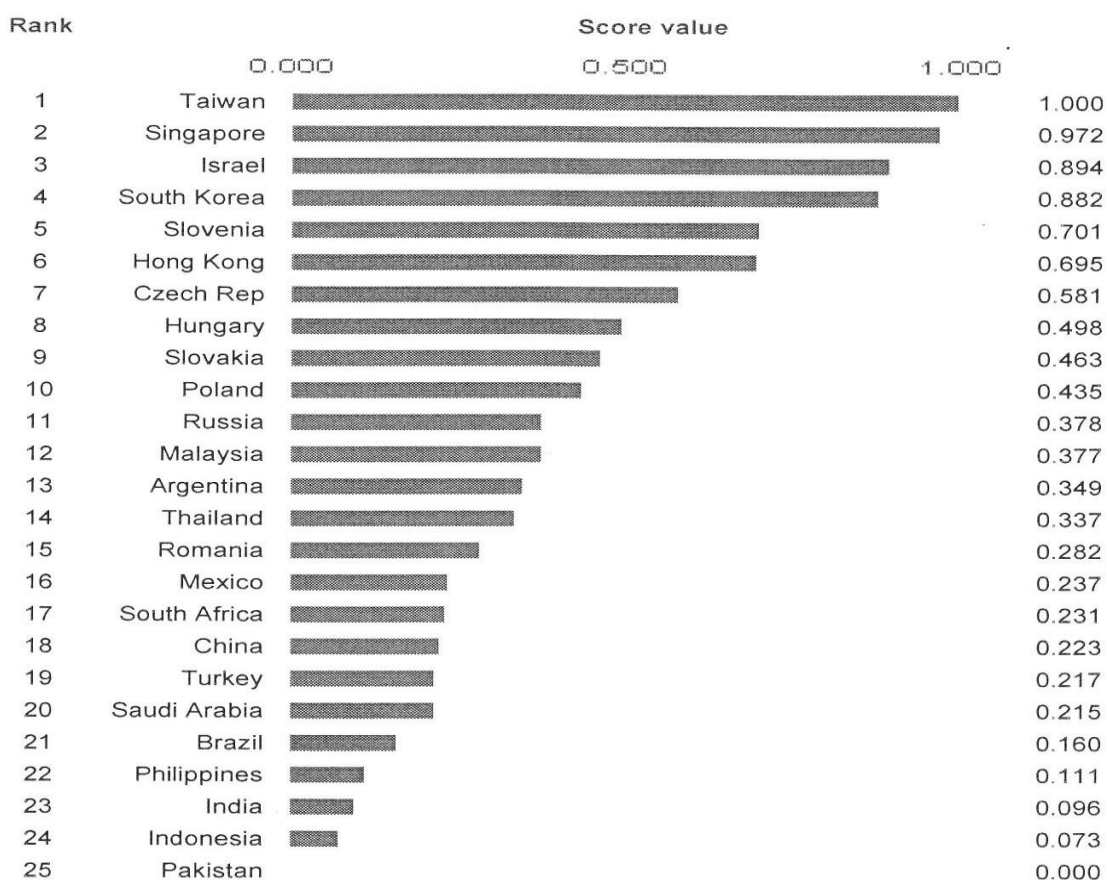
Source: International Labor Organization

In the following figures various indicators of a spectrum of emerging countries are compared according to a business economics consultancy, Global-production (2008), which specializes in emerging markets research, based in Switzerland. If this information for East Asia is compared to the rest of the world, it is clear that East Asian countries are the leaders regarding various economic indicators. For every indicator, an Asian country ranks the best although it may be a different country. If these various indicators are compared to other emerging countries, it is without a doubt clear why East Asian countries are the pivot of growth in the world. China for

example compares poorly regarding industrial capacity and skill base. China however, ranks highly with regards to labour cost. The low labour cost in China and other East Asian countries is therefore a crucial factor in their phenomenal growth performance.

Metric is based using the following indicators; skill base, research and development capacity, infrastructure and government. It is calculated as the arithmetic mean of indicator values converted to score values from 0.0 to 1.0.

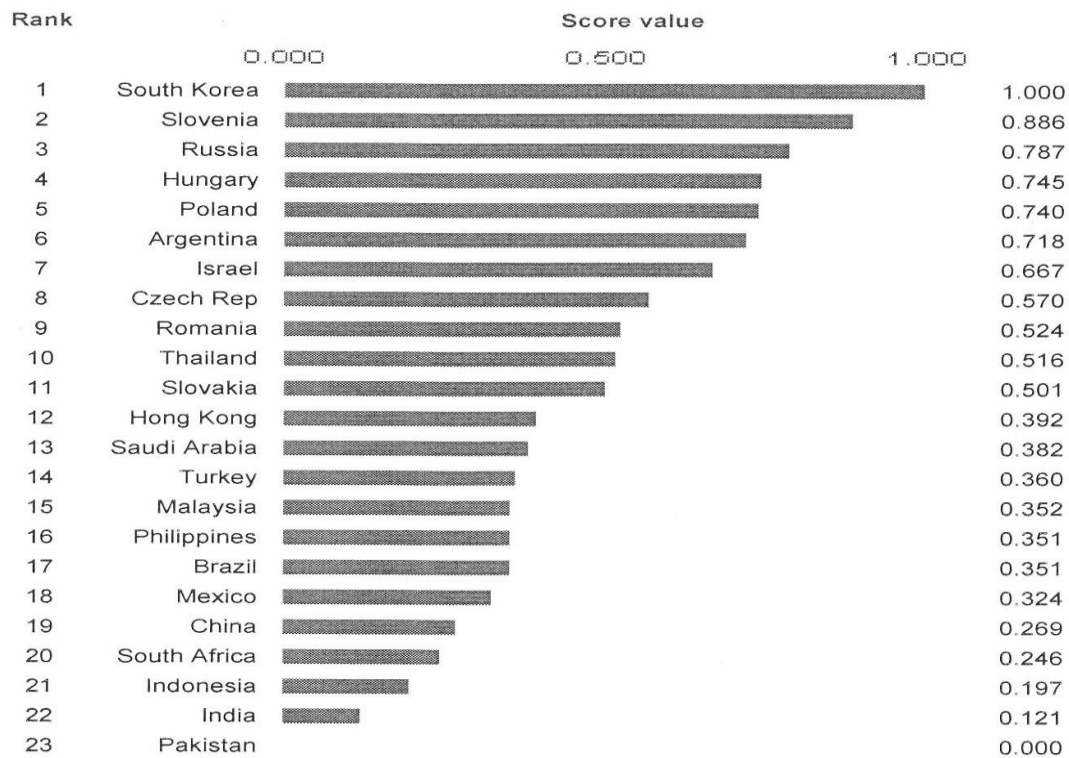
Figure 3.3: Industrial Capability



Source: Global-production (2008)

The following figure is about the availability of skilled manpower in the labour force. Metric is based on the Harbinson-Meyers Index values for enrolment in secondary and tertiary education. The index values are converted to score values ranging from 0.0 to 1.0.

Figure 3.4: Skill Base



Source: Global-production (2008)

The following figure is about an index of hourly wage cost. The wage index is based on labour cost data for 14 widespread professions in major agglomerations. The index values are weighted by the share of each occupation in overall employment. Labour cost is defined to include holiday and vacation pay as well as taxes and social security contributions by the employer.

Figure 3.5: Labour Cost



Source: Global-production (2008)

South Africa is for all the indicators in the wrong half of the spectrum and compares very poor to East Asian countries. South Africa ranks 0.231 out of a possible 1.0 regarding industrial capability; whilst the ranking for skill base is 0.246 out of a possible 1.0. The ranking for labour cost in South Africa is 74.6 and very high relative to East Asian countries. Various other emerging countries also compare better than South Africa regarding these indicators. It can be concluded that the application and policy mix of South Africa is badly structured and managed.

3.6 ADJUSTMENTS NEEDED IN SOUTH AFRICA

Various binding constraints exist in South Africa that hampers sustained growth and the reduction of unemployment. Various policy adjustments are needed to rectify this major problem. Firstly, recommendations of the various institutions and groups of researchers, as referred to in section four, will be addressed and secondly, lessons learned from East Asia will be addressed. These recommendations will summarize the

required policy changes needed to improve growth and the creation of job opportunities in South Africa.

3.6.1 Harvard International Panel

The Harvard economist group refers to a non-tradable sector which employs relatively few unskilled people and a tradable sector like mining, agriculture and manufacturing that employs greater numbers of unskilled people (Green, 2009). The problem in SA is that the people are mainly unskilled and that there is a big supply of unskilled labour whilst there is a small supply of skilled labour. The panel made five policy recommendations to improve the growth and unemployment problem in South Africa (Department of National Treasury, 2008):

- Macroeconomic policy: to reduce constraints on growth, fiscal policy must be counter-cyclical and must make a bigger contribution to national savings, existing restrictions on capital outflows must be eliminated, the current inflation targeting regime must be maintained and the level as well as the stability of the exchange rate must be addressed;
- Trade and competition policy: a radical simplification of the tariff system with low or no tariffs on inputs, a review of the SACU arrangements, SA to lead African economic integration without unrealistic custom union agreements and changing to a pro-active approach regarding competition policy;
- Labour market policies: to implement a wage subsidy for 18 year olds, the relaxation of SETA (skills education training authorities) regulations and the implementation of a high-skilled immigration approach of government;
- Industrial policy: a shift in focus of the Industrial Development Corporation (IDC) from asset management to the financing of new activities, that the existing Customised Sector Programmes be substituted with an approach of self organization of the different actors, to create a special central budget for structural transformation, to change the Motor Industry Development Program (MIDP) policy with a supplier based promotion scheme and lastly, that beneficiation should not be used as the basis for selective intervention and industrial promotion; and

- Public administration and Black Economic Empowerment: recommendations regarding public administration are two fold, namely a certification system for government entities which provides economic services and municipalities with poor capacity to use central bodies to procure municipal services. Regarding BEE three recommendations are stated, namely a review of the current BEE scorecard system to include elements to facilitate employment creation, learnerships and training, the development of a system to collect information regarding BEE and a mechanism to evaluate the progress of this policy. The panel also stated in a separate paper that the negative impact of crime discourages growth of small and emerging businesses in poorer areas.

3.6.2 World Bank

The Country Partnership Strategy (CPS) developed between the World Bank and the Department of National Treasury focused on the eradication of poverty and the reduction of inequality in the Southern African region. This joint strategy proposed a theme consisting of two pillars to reduce the poverty and inequality problems (World Bank, 2007):

- The first pillar of the CPS is about measures to improve urban and rural development. This pillar support key areas of ASGISA, for example urban and municipal development, land reform and agriculture, private sector development, environment and infrastructure; and
- The second pillar of the CPS is about measures to improve regional integration. This pillar proposes activities to support Africa, for example facilitation of South African companies' investments in Africa, building of regional communities in cooperation with the SADC countries and the sharing of knowledge to support Africa.

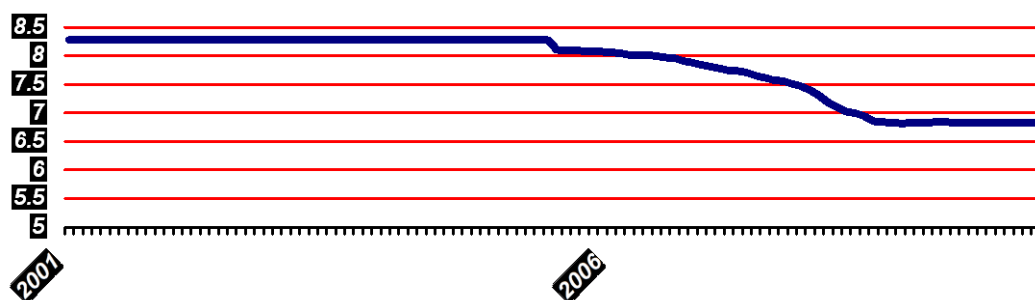
3.6.3 East Asia Success Stories

Lessons to be learned from East Asia, after a study tour in 2010 by the author, are numerous. Firstly, specific lessons of China will be referred to and secondly, general principles of other East Asian countries will be referred to. Various specific reasons are applicable to China. Firstly, the government of China made a decision to break

with the communist ideology and to apply capitalistic principles which proved to be a huge success. Secondly, the sheer size of China growing from a very low base and which opened various domestic markets, created vast opportunities. Against the background of these foundational issues and regardless of a fairly weak ranking in industrial capability and skill base (refer section 5), the following specific factors are also driving high growth in China:

- The liberalization of trade policies;
- Very cheap labour cost in comparison to other countries;
- Offshoring where sections of production processes of other countries are transferred to China; and
- The monetary authority which manages the Yuan not to appreciate.

Figure 3.6: Yuan versus USA \$



Source: Peoples Bank of China (2010)

It is very clear in the graph above that the monetary authority did not allow the Yuan to appreciate in the last decade regardless of the phenomenal growth in exports and the creation of the biggest national reserves in the world in excess of \$2 trillion at time of writing. The monetary authority only allowed a few minor ad hoc adjustments during 2006 – 2008 and 2010. The low labour cost and the authorities that do not allow the currency to appreciate in relation to the USA \$ has been the major cause of the phenomenal growth in their exports, massive current account surpluses and the highest national reserves in the world.

This managed float policy of the Chinese monetary authority was attacked during the World Economic Forum in Davos beginning of 2010 by political leaders, central bankers and international investors, including George Soros. According to Hui (2010), the international officials questioned the Chinese policies to keep the Yuan weak against the USA \$. This policy was also attacked in the G20 meetings of 2010 and the Korean meeting in November 2010 ended in a disagreement between China and the USA about the road forward. The general consensus was that a weak Chinese currency does not create fair trade in the world. It also creates imbalances in international trade which harms the recovery of other countries in the world after the international crises of 2008.

Growth plans in South Africa did not bear the expected results since inception and the latest new growth path was also severely criticized from various sources since the announcement late in 2010. General factors applicable to other East Asian countries from which South Africa can learn are firstly to shift from labour intensive (mainly agriculture) production to small- and medium manufacturing. Secondly, to boost export manufacturing rather than to employ import substitution tactics. Thirdly, employment of low labour cost and fourthly to increase FDI to upgrade infrastructure. Fifthly, to stimulate local demand and supply that changed current account deficits into surpluses. Lastly, to liberate trade and other economic policies.

3.6.4 Other Recommendations

The Harvard group of economists and the World Bank made certain recommendations in recent years to address the lack of growth in South Africa. Despite these recommendations, theoretical principles must also be employed in policies. Examples are to increase saving, to control the population growth, to employ technology in manufacturing, to improve productivity, to improve skills and to allocate more capital to research and development. Many of these aspects do not feature in the South African economy.

The saving rate in South Africa is stable at a relative low 15% of GDP but the contribution from government fluctuates a lot and the contribution of consumers has been negative since 2006 (SARB, 2009). The population growth does not stabilize and the South African authorities opened the northern borders beginning of 2009

allowing people of northern African countries to pour into South Africa. This change of policy caused the unemployed pool to escalate in South Africa. South Africa is an exporting country of mainly minerals according to absolute advantage principles. Comparative advantage and competitive advantage principles of international trade theory should be encouraged rather than to stick to the old theoretical principle of absolute advantage.

The investment in human capital is another case in point. According to the 2010 national budget Department of National Treasury (2010), R165 billion or 18% is budgeted for education (the biggest item in the budget) for the fiscal year 2010/11. The government pours billions of rands into the coffers of education, but the standard of education does not improve. The government began a few years ago to pay out social grants to children of poor families. In the 2010 national budget Department of National Treasury (2010), R89 billion rand is allocated to this portfolio and the grant was extended from 16 years to 18 years. These grants send the wrong signal to communities, because more children are born simply for these families to qualify for grants. It also casts a shadow over the development of any entrepreneurial skills and creativity to find a job because government looks after the people. A wage subsidy for youthful workers that target the unemployed group that is in transition between school and work, should be the only grant to the youth. This grant was implemented in the 2010/11 national budget, according to advice of the Harvard group of economists.

BEE policies should be scrapped. This philosophy of government discourages new investment, it causes the acceleration of the skills flight of white people to other countries and only benefit very few black people. Regardless of the economic failure, a BEE Council was inaugurated on the 4th of February 2010. The president stated in his speech (Zuma, 2010): “.....*the story of black economic empowerment in the last 15 years has been a story dominated by a few individuals benefiting a lot. The vast majority of those who are truly marginalized: women, rural poor, workers, the unemployed, and the youth have often stood at the sidelines.*”

Lastly, government should allow the rand to depreciate to support exports which are not competitively priced in the international community because of high labour costs. The ruling policy of government until the beginning of 2010 was not to intervene in the financial markets. This policy creates volatility because the rand is expressed in

USA \$ and the South African economy is influenced by the policies and activities of the USA. In the national budget speech of 2010 Department of National Treasury (2010) the Minister employed a new policy, namely that government will not allow the rand to appreciate further (there is however a lack of details of this policy).

3.7 CONCLUSION

The political dispensation before 1994 was characterized by sanctions, global isolation, strikes, violence in the townships against the apartheid system, lack of foreign capital, a low growth rate, high inflation and capitalism. February 2010 was the commemoration of the speech of the previous president, Mr F W de Klerk, twenty years ago to release Mr Nelson Mandela and to legitimize the ANC political party. This historical speech paved the way to the first democratic elections in 1994.

In 2010, twenty years after this historical speech, the picture is vastly different. The South African economy is now characterized by violence in the townships against poor service delivery by municipalities, strikes organized by politically inclined labour unions to improve workers benefits, volatile foreign capital, a volatile growth rate, high unemployment, numerous structural problems in the macro economic environment, a sick educational system absorbing the biggest percentage of national budget funds, bad management and corruption in all three levels of government and a socialistic ideology in government.

These problems are summarized by a leading academic in South Africa and the brother of the previous ANC president who resigned from the ANC. Dr Eloff, vice chancellor of North West University, stated during the Afrikaans language deliberation in January 2010 that white Afrikaans people are bullied by a transformation ideology which is not written in the South African constitution. He stated according to Malan (2010) that tension exists between the constitution and transformation policy of the ANC.

According to Mbeki (2009) the solution to the crisis caused by the ANC government: *“can only come from the emergence of a leadership with meaningful policies for building a more inclusive society in South Africa. BEE, which benefit the black elite and the social welfare programs which benefit the poor, do not lead to such inclusiveness; if anything, they entrench the inequalities inherited from the past and*

exacerbate new inequalities amongst the black population". To achieve the real growth rate goal of 6% as stated in the ASGISA policy and to reduce the high unemployment in South Africa, various crucial policy changes must occur.

Theoretical principles must be employed in policies, for example to increase the savings rate and to address the population growth, the various structural problems identified in ASGISA and the New Growth Path must be addressed by government and principles of Asian success stories must be incorporated in the South African economy. Certain policies for example ASGISA have good foundations, but the main problem in South Africa is two-fold. Firstly, sustained high growth of 6% will not be achieved as long as economic principles are overshadowed by the political agenda of transformation in South Africa. Secondly, fundamental changes are needed in the South African economy and need urgent attention, but the lack of management at all levels in government to address the structural problems, handicap such changes. As long as there is no strong political opposition in parliament to control and stop wrong activities of the ruling political party, sustainable growth and the reduction of poverty will remain a dream.

CHAPTER 4

LABOUR UNION VOICES IN SOUTH AFRICA AND ARGUMENTS TO SCRAP INFLATION TARGETS – A HISTORICAL AND 21ST CENTURY DEBATE

4.1 INTRODUCTION

Labour unions in South Africa have a history which goes back as far as 1917 when black workers began to organize themselves and established the Industrial and Commercial Workers' Union of Africa (Yudelman, 1983). The government passed the first labour union legislation, namely the Industrial Conciliation Act in 1924. This act recognized trade unions, but the weakness of this legislation was that only white workers were recognized. During the 1930s the South African Trades and Labour Council (SATLC) came into being which was based on non-racial foundations (Lewis:1984). This council advocated for legal rights of black trade unionists in South Africa.

The stature of labour unions gained momentum from the nineteen seventies when the Wiehahn Commission¹ tabled a report about the collective bargaining system regarding African workers. The gradual mobilization of black workers forced the government to address labour concerns and needs. Unity talks between competing labour unions followed during the nineteen eighties. These competing groups established the Congress of South African Trade Unions (COSATU) in 1985.

COSATU, as the biggest labour union in South Africa, has a history of being critical against government policies and was involved over time with various activities outside the associated sphere of labour unions. COSATU has been since inception critical about various economic policies of government. Examples are the leading role of COSATU in the struggle against apartheid which displaced the National Party government in the 1994 political elections, their role to establish the transformation

¹ The Wiehahn Commission tabled their first report on 1 May 1979 which gave legal recognition to black labour unions. This change in attitude of Parliament increased political rights and participation of black South Africans.

Reconstruction and Development Policy (RDP) in 1994 and their fierce criticism against the Growth Employment and Reconstruction Policy (GEAR) in the middle nineteen nineties to create a sound economic strategic path for South Africa. Further examples are their leading role in the promulgation of the labour legislation of the nineteen nineties in favour of the workers and their membership of the tripartite alliance with the African National Congress (ANC) and South African Communist Party (SACP) to govern South Africa.

Against the primary goal of labour unions to improve the conditions of work of their members and their various activities outside the associated sphere of labour unions, the continued criticism of COSATU against government policies, specifically monetary policy, is analyzed in this article. The South African government introduced formal inflation targeting as a new monetary policy in February 2000 (Van der Merwe, 2004). Inflation targeting (IT) surfaced as a common approach world wide in the conduct of monetary policy in the 1990's (Mishkin *et al.*, 2001). Inflation targeting puts price stability as the primary objective of monetary policy and the inflation target provides what is known as the nominal anchor for monetary policy. COSATU opposed this policy of the South African Reserve Bank since inception for failure to increase economic growth and employment.

Against the primary goal of SARB to create price stability and to anchor inflation expectations, the criticism of COSATU to scrap IT as a policy is analyzed in this article. Firstly, a historical overview explains the development and role of labour unions in the South African context. Secondly a short literature analysis describes IT as monetary policy strategy. Thirdly, criticisms of labour and COSATU in particular are discussed amidst inflation expectations, foundational theoretical issues and the role that SARB plays to create a stable economic environment. Lastly, alternatives to IT explains the complexity of alternatives to prove that the IT monetary policy is indeed the best policy for South Africa and thus also for labour unions and employment in the long term.

4.2 A CONCEPTUAL UNDERSTANDING OF LABOUR UNIONS AND INFLATION TARGETING

Various studies were done by British and American contributors to analyze the nature, the organization of labour unions and the functions of labour unions. Collective bargaining is an important element of labour unions and the work of Dunlop (1958) established a general theory of industrial relation systems. This theory addressed the rules governing the industrial relations amongst managers, workers and government agencies. Ideology plays an important role, because the ideas and beliefs of all the role players must be compatible to create a stable labour environment.

Labour unions are social units which are purposefully created (Poole, 1981). Secondly, unions have continuity over time despite changes in membership and official personnel and lastly, unions should have a defined administrative structure. Labour unions are thus a source of power which became a central defining characteristic of the organization itself. Two main functions of labour unions are their economic activities and their role as agents of social change (Child *et al.*, 1973). Since the very early days there existed disunity in the clarification of the role of labour in labour unions. Various issues were analyzed for example discipline, methodology, ethics and political conviction. Two schools of thought developed, namely the approach based on ethical values that determined labour union growth and character and the structuralist approach which emphasized the conditioning effects of their organizational and external environment.

Monetary policy and fiscal policy on the other hand are two important policies of any country in the conduct of general government policies to manage and to influence the economic behaviour of the inhabitants of a country. Fiscal policy, which is not described in this research, is about the spending behaviour of a government and the taxation practices to influence the economy of a country. Monetary policy refers to the control of the government's bank, also called the central bank, of the liquidity in the economy. Central banks manage the liquidity in an economy to ultimately influence the inflation rate of an economy.

Central banks can stimulate economic activity by means of a decrease in the interest rate pattern of a country. Central banks can also buy securities from the private sector

to increase the money supply. Central banks can also apply a contractionary policy. In such a case central banks increase the interest rate pattern of a country or sell securities to the private sector to decrease the money supply. The ultimate goal of these monetary actions is to maintain financial stability.

The application of policy measures by monetary policy authorities in the world changed because of two major developments in the international economic scenario. Firstly, monetary policy authorities used to manage the liquidity in a country by means of money supply targets. This method became cumbersome because of globalization and big swings in liquidity in the international financial markets. South Africa also became a bigger role player in the international financial markets after 1994 and the monetary authorities could not control the money supply effectively any more. Foreign investors and speculators make investment decisions which the South African central bank can not manage or can not influence. Secondly, in economic literature, the traditional Phillips curve refers to a negative relationship between the inflation rate and the rate of unemployment. The traditional relationship between the inflation rate and the rate of unemployment changed to the expectations augmented Phillips curve because of changed international economic circumstances (refer to IT theory section).

The important feature of IT is that the monetary authority looks forward regarding possible inflation pressures. This policy therefore anchors inflation expectations through regular monetary policy announcements. This policy application targets the inflation rate by means of an inflation index. The South African Reserve Bank, as the central bank of South Africa, used the consumer price index (CPIX) initially which is the consumer price index (CPI) excluding the interest rate component in the basket of consumer goods (Otto *et al.*, 2006:83). The South African Reserve Bank changed this CPIX index to an updated CPI index in later years as a new and more representative basket of consumer goods to calculate the inflation rate. If the inflation rate is expected to move outside the target range of the index in use, the monetary policy authority of South Africa will react proactively. Inflation targeting is about the current actions of the monetary authority regarding the expected future trend of inflation, whilst the old method of money supply targets analyzed the inflation rate in a historical perspective.

4.3 A HISTORY OF LABOUR UNIONS AND LABOUR UNION ATTITUDES ON ECONOMIC POLICIES IN SOUTH AFRICA

4.3.1 A Concise History of Labour Unions

The history of trade unions in South Africa goes back as far as 1917 when black workers began to organize themselves and established the Industrial and Commercial Workers' Unions of Africa. The government passed the first labour union legislation, namely the Industrial Conciliation Act in 1924 (Lewis, 1984). This act recognized trade unions, but the weakness of this legislation was that only white workers were recognized. During the 1930s the South African Trades and Labour Council (SATLC) came into being which was based on non-racial foundations (Lewis, 1984). This council advocated for legal rights of black trade unionists in South Africa.

SATLC was disbanded in 1954 and replaced by the Trade Council of South Africa (TUCSA). The membership of this labour union included whites, coloureds, Asians and blacks of dependent organizations (South Africa, 2010a). Membership by independent black unions was excluded from affiliation. Labour unions which were previously associated with SATLC founded shortly there after the South African Congress of Trade Unions (SACTU). SACTU later merged with the Council of Non-European Trade Unions and eventually became the labour union associated of the ANC.

Black labour unions became prominent in the 1970's and organized the biggest strike in Durban since the origin of unions in 1973 (Butler, 2009). This mobilization of black workers forced the government to change their attitude towards labour unions. This mobilization of black workers forced the government to appoint a commission of inquiry into labour relations. The report released by the Wiehahn Commission persuaded the government to change their attitude towards the collective bargaining system regarding African workers which was established in a new act. Prior to 1979 the legislation only recognized unions that had white, coloured and Indian members. Since all references to race were removed from the Labour Relations Act of 1979, the creation of new unions developed faster.

Workers established the Federation of South African Trade Unions (FOSATU) in 1979. The creation of the Council of Unions of South Africa (CUSA) followed in

1980. The next big labour union to follow was the National Union of Mineworkers (NUM) in 1982 (Butler, 2009). This labour union was deeply involved in the political conflict against the ruling National Party and became one of the biggest unions in South Africa. Unity talks between competing unions and federations followed and various competing unions established the Congress of South African Trade Unions (COSATU) in 1985 (Butler, 2009). FOSATU merged into COSATU in the same year. Since inception, COSATU as a far bigger labour representative union played a leading role in the struggle against apartheid.

The then government released a new Labour Relations Act in 1988 which restricted labour union activities. An example was the power furnished to the Labour Court to ban lawful strikes and lock-outs. These powers were short-lived, because negotiations between COSATU and other role players like the South African Committee on Labour Affairs (SACCOLA) produced in 1991 an amendment which effectively repealed the powers of the 1988 act (Butler, 2009). SACTU, known for their underground activities from exile, dissolved in 1990 and advised its members to join COSATU. COSATU eventually became a member of the tripartite alliance with the ANC and SACP and provided material support in the form of strikes which created both political and economic unrest. These labour union activities eventually lead to the displacement of the National Party and the victory of the ANC in the 1994 political elections (ANC, 2009).

Against this background the progressive labour legislation of the 1990's originated in South Africa. The new Labour Relations Act was promulgated which is regarded a result of the ANC and its alliance parties. The legislation of labour is described by Levy (1995) as amongst the most labour friendly in the world. Radical reform expressed the sentiments of the majority of trade unions shop stewards and workers. The ideas of radical reform were institutionalized during 1995 when NEDLAC was established (Webster *et al.*, 1995). The workers could express their political support through their membership of the ANC while at the same time get their labour demands addressed via their COSATU membership). According to Webster *et al.* (1995) four parties were involved, namely government, organized labour, organized business as well as communities. Community representatives were however not represented at the NEDLAC launch. This poor and marginalized group found it

difficult to develop their capacity in NEDLAC since exception. The interests and aspirations of the skilled workers were attended to, whilst the interests of the semi skilled and unskilled workers were neglected.

4.3.2 Past Labour Union Attitudes On Economic Policies

Labour unions had a political struggle all along in South Africa. Since the new legislation in the 1970's the support for labour unions (which included black workers) grew rapidly. During the 1980's the political struggle gained momentum and with the establishment of COSATU in 1985 the black workers' voice against government became more prominent. Labour was an important actor in precipitating the transition to democratic order in South Africa. COSATU continued to criticize government after 1994 even though they were a member of the alliance. It is against this historical background of political struggle and criticism against government, that their views regarding economic policy and specific monetary policy are scrutinized.

The militancy of COSATU, particularly during the late 1980's, was a crucial factor in pressurizing the National Party government to lift the ANC ban in 1989. COSATU had a few options to pursue their goals. The option that they have chosen was democratic socialism or also known as radical reform. A key attribute of this radical reform was the process of multiparty negotiating forums. This forums empowered the unions to shape macro economic policy and affecting the country as a whole, therefore broader than pure labour union issues.

One of the major activities of COSATU outside the traditional union sphere was the launch of the Reconstruction and Development Program. This reconstruction policy was launched by the government and COSATU in January 1993 (Eidelberg, 2001). The SACP also became involved in the new reconstruction and development program (RDP) since 1993. This development was so important for the SACP that they incorporated the RDP policy as the main theme of their 1995 congress. They used the RDP as a forum for their anti capitalistic revolutionary policies. Although the SACP is more dependent organizationally on the ANC than COSATU, it distances itself from any corporatist bargaining. The SACP therefore has its own ideological identity. The SACP did not immerse in the ANC and their policies, but continued as a lobby group in ANC government against international capitalistic powers.

COSATU has a history of being critical against government policies. During 1996 COSATU published for example two documents regarding their labour and macro economic view. COSATU apposed the 1996 Growth Employment and Redistribution (GEAR) macro economic policy of government since inception and had a different view than government regarding interest rates and unemployment. Labour unions and specifically COSATO were also directly involved in the promulgation of the progressive labour legislation of the 1990's.

COSATU believed in their ability, particularly during the first years of ANC rule, to influence the government through radical reform. These reforms did not only include worker rights and worker issues, but also the RDP regarding redistribution and therefore broader macro economic policy matters. The union also sent representatives to NEDLAC to negotiate with government and also used mass action to bolster their demands.

4.4 INFLATION TARGETING IN SOUTH AFRICA SINCE 2000

The history of inflation targeting in South Africa is far shorter relative to the history of labour unions. Inflation targeting (IT) surfaced as a common approach world wide in the conduct of monetary policy in the early 1990's. The South African government introduced formal inflation targeting as a new monetary policy in February 2000 (Van der Merwe, 2004). South Africa changed to this new monetary policy method in the pursuit of financial stability in the South African financial markets because of the changed international investment behaviour.

The inflation target was initially an annual average rate of increase in the CPIX. The target rate was between 3 and 6 percent initially, but changed soon to between 3 and 5 percent for the years 2004 and 2005. The target increased again during 2005 to a range between 3 and 6 percent because the monetary authorities continued to miss the lower target range. The annual average target rate was replaced in 2006 by a continuous target. This new target measure must be obtained by the monetary authority continuously per month over a 12-month period (Issing *et al.*, 2005).

4.4.1 Inflation Expectations and Theory

Central banks world wide formulate monetary policy strategies to achieve price stability. Central banks also face two impediments in this process. The first is the incidence of exogenous shocks that create short-run variation from price stability. The second impediment is the likelihood that private expectations could cease to be synchronized with price stability and become fixed on an inflationary or deflationary pathway. This inflationary bias can be addressed by anchoring the expectations of consumers and financial markets to align to the inflation target (Van der Merwe, 2004). The key characteristic of inflation targeting therefore if compared with other approaches to control inflation, is that the adjustment of policy instruments relies on a systematic assessment of future inflation.

The South African government implemented inflation targeting in South Africa for four reasons (Van der Merwe, 2004). Firstly, the previous system of informal inflation targeting created uncertainty in the minds of the South African public regarding the exact monetary stance adopted by the monetary authorities. Secondly, the decision-makers agreed that inflation targeting improves the co-ordination between monetary policy and the other economic policies implemented by government. Thirdly, formal inflation targeting was seen as an improvement from the previous system to discipline monetary policy and increase the central bank's accountability because of the clear targets which the central bank has to meet. Fourthly, inflation targeting has a positive impact on the inflation expectations of the public, which generally leads to a reduced inflation rate.

Aron & Muelbauer (2007) found that the transparency and effectiveness of monetary policy have improved since the adoption of inflation targeting in South Africa. According to their research volatility of interest rates and inflation decreased because inflation expectations were anchored in the target range. Monetary policy is under continued attack regardless of this South African empirical study. COSATU and all other parties that criticize IT fail to comprehend that interest rates will remain the main monetary policy instrument as long as the primary goal is to maintain price stability.

In the event that the central bank abandons the attainment of IT and therefore price stability as its primary objective, a decrease in interest rates can be expected to improve the living cost of the poor. This is indeed what COSATU demands, but it is merely a short run trade off. Living cost should decline because borrowing cost at banks will decrease and instalments on existing loans will decrease and disposable income will therefore increase. In the long run, the inflation rate will continue to increase because inflation expectations are not addressed by the monetary policy authorities. This short term policy will hurt the very poor that COSATU are trying to protect the most, because of rising and unsustainable prices in the long run. The poor also lack the necessarily skills and instruments to hedge themselves against rising inflation (Mishkin, 1999).

In the last cycle of restrictive monetary policy since writing, the South African Reserve Bank increased interest rates once again in August 2007. COSATU reacted to this increase in interest rates as follows (SAPA, 2007): *“COSATU is appalled that the Reserve Bank announced yet another increase in interest rates by 0,5% bringing the total increase over the past 12 months to 2,5%. The relentless rise in the cost of basic foods and other essentials is already devastating the lives of the poor. Now they face the added burden of higher costs for housing and loan repayments. Recent strikes are more than ever justified by the latest assault on the living standards of workers and the poor. The fundamental mistake the Reserve Bank keeps making is the failure to identify high levels of unemployment and poverty, rather than inflation, as the key challenges facing the country”*.

Various theoretical arguments support prudent monetary policy. According to Taylor, (1993) the main difference between inflation targeting and other monetary policy frameworks is that IT incorporates all the information contained in the macro variables to set the basic interest rate, while other regimes' only incorporates part of the information that is available to determine the interest rate. An important element of the Taylor rule is that nominal interest rates rise more than one-for-one with inflation so that the real interest rate can increase in relation to the inflation rate.

The Fisher equation is another theoretical argument which states that the level of nominal interest rates is equal to the real interest rate plus the level of inflation expectations (Mishkin, 1999). This relationship implies that the level of interest rates

is affected by inflation expectations. Therefore, if inflation expectations are not anchored, inflation expectations may continue to increase, resulting in a higher level of nominal interest rates in the future.

Unemployment and inflation are two economic goals that are sensitive issues for the public and therefore difficult for the policy makers to address. Phillips (1958) stated that there is a trade-off between inflation and unemployment, namely that unemployment and inflation is negatively related. If the monetary policy makers reduce inflation, they therefore create unemployment. This negative relationship which became known as the Phillips curve lasted for many years. Empirical work since the first oil crisis in the early 1970's proved that the negative relationship between unemployment does not exist anymore.

The negative relationship between inflation and unemployment vanished since the beginning of the 1970's according to the studies of Nobel Laureates Milton Friedman and Edmund Phelps. They emphasized a new relationship and proved that there is not a stable negative relationship between these economic twin evils. According to Fourie & Burger (2009) their empirical research proved that a negative relationship exists between unanticipated inflation (the difference between actual and expected inflation rates) and cyclical unemployment (the difference between the actual and natural unemployment rate). This relationship became known as the expectations augmented Phillips curve.

The empirical work done by Friedman and Phelps proved that the trade-off between inflation and unemployment exists only in the short run (Abel *et al.*, 2008). The world experienced cost push inflation in the nineteen seventies after the first oil crisis which suggested that the theory of original Phillips curve was not valid any more. The key factor that central banks have to manage according to this changed environment is inflation expectations. The arguments of a negative relationship between unemployment and the inflation rate based on the initial Phillips curve by COSATU have therefore no foundation since the adoption of the expectations augmented Phillips curve.

4.4.2 Inflation Targeting Policy Versus Other Economic Policies

COSATU comments about the negative relationship between inflation and unemployment as represented by the original Phillips curve and the expectations augmented Phillips curve as follows (COSATU, 2009): *“COSATU condemns in the strongest possible terms the incompetence displayed by SARB in its decision to leave the repo rate unchanged in the face of an economic recession and massive job losses. The Monetary Policy Committee (MPC) has got it grossly wrong on the basis of its statement to use the inflation expectations as a guide even in the context of a recession. The MPC statement says nothing about how its decisions address existing macroeconomic imbalances. COSATU will be arguing vigorously within Nedlac and the Alliance for a complete review of interest rate policy and will be mobilizing its members to campaign for reductions in the repo rate”*.

It appears against the historical background of labour unions in South Africa, that COSATU were involved with economic legislation and labour policies which is not a true reflection of labour unions' functions. COSATU opposed the Growth Employment and Redistribution (GEAR) macro-economic policy of government since inception in 1996. According to the GEAR policy (South Africa, 1996) the government maintains that they have hegemony as coordinator amongst the various rival sectors of the economy, in particular between capital and labour. The ANC feels that labour is a conduit to capital, which in turn is important for industrial investments and therefore to create jobs and social services. The state expects of the unions to mobilize the masses. The state believes through the unions' links with the masses that they can convince investors of their ability to guarantee industrial peace (South Africa, 1996).

Various other examples can be stated of COSATU about activities outside the associated sphere of labour unions. During 1996 COSATU published documents regarding their labour and macro-economic view (Eidelberg, 2001). COSATU had significant neoliberal reforms in mind and accused the government for lack of consultation with its alliance partners. According to these documents COSATU has a different view than government regarding interest rates. COSATU encourages direct government intervention and lower interest rates. The government was reluctant to

decrease interest rates and to increase government spending at the time, because of the fear of higher inflation in the longer term.

Government also encourages a model of wage flexibility according to the GEAR strategy (South Africa, 1996). COSATU on the other hand supports a minimum wage policy. COSATU's neoliberal reforms and criticism against GEAR also involved tariff reforms, the removal of exchange controls and opposition of any government institutions being privatized. These recommendations are not part of the scope of a labour union. These reforms were also according to government announcements outside the scope of COSATU as a labour union and against the spirit of reform.

Another example of the ANC and its alliance parties outside the traditional union sphere was the implementation of the Black Economic Empowerment (BEE) policy in 2000. Through empowerment charters, medium- and long-term goals for black ownership, skills empowerment and capacity building were set as a government strategy to promote black ownership of companies in the economy. This strategy of government laid the foundation for the Department of Trade and Industry (DTI) to launch the Broad Based Black Economic Empowerment Code of Good Practice (South Africa, 2004). This empowerment code focused on targets for black equity and ownership, employment equity, skills development, equity procurement and enterprise development by a points system for South African companies. The broad target which government set for companies was 25% black ownership by 2014. This approach has the potential to change the face of South African industry by means of transformation. There are examples of penetration by various black individuals in the corporate sector. Some of them have accumulated spectacular wealth for example, the well-known names like Tokyo Sexwale, Cyril Ramaphosa and Patrice Motsepe (Anon, 2010b).

The above mentioned race-preferring policies have a long history in South Africa mainly because these policies are popular with voters. Various studies and articles argue that the BEE policy from an economic growth perspective decreases economic growth. Only an elite group of citizens enjoy the benefit of this policy whilst the poor and unemployed masses do not share in an improvement of living standards. This policy also gives rise to other costs that reduce economic growth, but an analysis of the BEE policy falls outside the focus of this research. The political cost of implementing black race-preferring policies also induced inefficient distortions into

the economy. It can be politically deduced that an efficient BEE level must exist but deviations from what is regarded as efficient have a negative impact on economic growth. It is argued that white human and financial capital has been alienated (in a country where both types of capital are scarce) and black human and financial capital has been channelled toward redistribution rather than the generation of new enterprises.

The impact of the redistribution of wealth, together with the failure of government to use government revenue economically, created a negative impact for economic growth. According to Carline et al, (1985) workers receive annual wage increases as a result of collective bargaining. Workers therefore become accustomed to regular rises in real wages without an increase in productivity. The expected rate of increase in real wages is known as the target rate of increase. Wage demands are pitched by labour unions to achieve this target rate. Labour unions became more militant over time with industrial actions regardless of the high South African unemployment levels. Strikes became a common avenue for labour unions to express their dissatisfaction with employers. These losses of production in industry worsen the already high cost of South African production which reduces our international competitiveness even further. Wage demands by labour unions are also pitched higher than inflation. This tactic of labour increases inflation, especially if this demand for higher wages is not matched by an increase in productivity.

COSATU has a history of being critical of what it perceives as the SARB's damagingly strict application of IT. Contemporary statements of COSATU confirmed their continuation to criticize the IT policy. COSATU's argument is that the SARB should run an expansionary monetary policy, allowing inflation to increase in order for unemployment to decline. A 2007 claim of COSATU states that inflation targeting (COSATU, 2007): *“Inflation targeting contributed directly to slowing down the rate of economic growth and thus of job creation and poverty alleviation”*.

COSATU in 2008 explained their disappointment with economic growth figures below the targeted 6% of government as follows (COSATU, 2008): *“At the heart of the problem is the Government's disastrous inflation targeting policy, which is based on the false belief that inflation and excessive consumer spending, rather than unemployment and poverty, are the major problems we face”*.

While the effect of inflation targeting has on growth and employment should not be ignored, this effect is trivial when compared to other more prominent barriers to employment creation in South Africa. South Africa's unemployment rate is unresponsive to both inflation and growth due to structural inflexibility of the labour market (Barker, 1999). According to COSATU various other policies of government need a review to improve employment, for example a simplification of the tariff structure of the trade and competition policy and a shift in focus of the Industrial Development Corporation regarding the financing of new activities (COSATU, 2007). Further examples of actions that the government should engage are to increase the low saving rate in South Africa, to control the population inflow at the South African borders, to implement measures to improve productivity and to increase the investment in human capital (Aaron & Muellbauer, 2000).

COSATU also has grievances about the exchange rate policy of SARB. COSATU believes that inflation targeting has damaged South African exporting industries. The argument is based on the fact that inflation targeting has caused (COSATU, 2007): *“An overvalued currency ... a consequence of the significant inflow of capital; attracted by relatively high interest rates”*.

The argument begs the question: If COSATU sees an inflow of foreign capital as negative, how do they plan to fund the investment necessary for growth in South Africa? This challenge is near impossible against the low savings rate of South Africa. Foreign investment is generally considered positive for growth. Populist economic policies are short term based, whilst the vision of the SARB is forward-looking and seeks the optimal policy for long-run financial stability.

COSATU also called for a reversal of foreign exchange measures to relax exchange controls and for taxes on short-term capital flows in 2010. COSATU wants the rand exchange rate much weaker at 10.0 to the USA dollar to support the manufacturing sector. COSATU stated (Reuters, 2010): *“The Reserve Bank must resist pressures on the real exchange rate to appreciate ... and must accumulate reserves aggressively”*.

After the ANC-COSATU-SACP Alliance Summit meeting of May 2008 a statement was released. This statement reaffirmed the ANC-led alliance power regarding strategic political and economic issues (COSATU, 2008): *“It was agreed that the*

Alliance will work together to formulate policy, and monitor its implementation through joint ANC/Alliance policy committees and other mechanisms. This will include the drafting of the ANC Election Manifesto for the 2009 elections and matters pertaining to employment. These kinds of interactions will become a permanent feature of alliance processes in the formulation, implementation and monitoring of policies”.

After the ANC-COSATU-SACP Alliance Economic Summit in October 2008 a statement was released by the ANC on behalf of the alliance members that South Africa's economic strategy requires (COSATU, 2008): *”A discussion on the mandate and practices of the SARB to include considerations of employment and economic growth in addition to the mandate on price stability”.*

Another contemporary statement of COSATU (2008) and SACP confirmed their involvement in political activities. These two alliance members have been the united forces behind the presidential ambitions of Mr Zuma. They supported him all along to become the new president of South Africa and have called him sharply into line after becoming president over specific issues. The most notable example was regarding his comments in support of a more flexible labour policy.

The strong influence of COSATU and the SACP, reflected in the above declarations, is clear evidence that COSATU operates outside the scope of a pure labour union. COSATU was all along actively involved with politics, labour legislation through radical reform as well as the formation of macro-economic policies.

4.4.3 Supply Shocks and Inflation Targeting Policy

An adverse supply shock typically raises inflation and lowers aggregate demand (by reducing the purchasing power of consumers) and thus pushes output down. South Africa experienced a series of supply side shocks in 2008 and 2009, stemming mainly from international energy and food markets, causing an upsurge in inflation. According to the South African Reserve Bank South Africa has been outside of its target range of 3 – 6% since early 2008 (SARB, 2008). If such a supply shock scenario exists, the question remains: should monetary policy stimulate the economy to reduce the fall in output or apply a contractionary policy to counter the rise in inflation expectations?

Under an IT framework, the monetary authorities want to achieve price stability, as it is their primary objective. The prices in the economy are not the operational variable, but nominal interest rates are and therefore SARB should continue to achieve price stability through higher interest rates to offset the second round impact of the supply shocks. SARB is not increasing interest rates to control exogenous price factors. The monetary authority raises interest rates with the intention of controlling the second round effects of inflation expectations. Rising inflation has the effect amongst consumers to expect a continuous increase in inflation. If the policy makers do not increase interest rates in such an event, inflation continues to increase based on perceived inflationary pressures rather than real price pressures.

What COSATU needs to appreciate is that firstly the economy has been exposed to supply side shocks in 2008 and 2009 and secondly that this condition does not hold in the long term. It therefore makes no justifiable sense to pursue a policy that have possible short run employment and output benefits but generate imbalances in the economy in the long run. Against this background, it will not serve the interests of the South African monetary authorities to lift the inflation targeting framework if a supply shock occurs. It is also a well-known fact that excessive government expenditure induces inflationary pressures, especially in developing countries such as South Africa (SARB, 2010).

In the table below an analysis of growth and inflation rates indicates what happened in five countries 10 years before and 10 years after the implementation of IT as a policy framework. According to this comparison the inflation rate declined after the implementation of the IT framework in all the countries. This study also confirmed that the growth rate improved and that there was no negative trade off relative to growth.

Table 4.1: Inflation Pre and Inflation Post

Country	Inflation – pre	Growth - pre	Inflation – post	Growth - post
NZ	11.4	1.8	2.1	3.0
Canada	5.7	2.8	2.0	2.7
UK	5.5	2.5	2.5	2.9
Australia	6.0	3.2	2.6	3.8
Sweden	6.7	1.9	1.5	2.5
Average	7.1	2.4	2.1	3.0

Source: Federal Reserve Bank of Philadelphia

4.5 INTO THE FUTURE WITH INFLATION EXPECTATIONS

Considerable theoretical debate exists whether monetary policy measures can affect real economic variables in the long run. The South African Reserve Bank emphasizes the importance of price stability at all times (SARB, 2002). An independent monetary policy is crucial to reduce the negative impact of inflation on economic growth. This theoretical fact, proved in practice in various countries, is crucial to create employment in the long term.

Various alternatives to inflation targeting exist according to Mishkin (1999) and Epstein (2003) and will be referred to briefly. The first alternative available to countries is exchange rate targeting. This form of monetary policy involves either fixing the exchange rate to a commodity, or fixing the exchange rate to the currency value of a large economy with a low inflation rate. This form of targeting is criticized because of the loss of an independent monetary policy, which diminishes the ability to respond effectively to domestic supply shocks.

A second alternative is monetary targeting. Exchange rate targeting is not possible where a country is too large or no obvious country exists to which it can peg its currency. If such a scenario exists, then monetary targeting is a better alternative. This

method is criticized because it can only be employed if a strong and reliable relationship exists between the goal variable and the targeted aggregate, implying that there should be no velocity instability.

A third alternative method is price level targeting. Price level targeting aims to keep the general price level within a certain limit. Since inflation is the continuous increase in the price level, this policy seems to be much the same as inflation targeting. The key difference lies in the approach to time: whereas inflation targeting is a forward-looking policy, price-level targeting adopts a backward-looking stance. By adopting a backward-looking approach, the problem exists that there is no objective measure which can be used to anchor either public or central bank behaviour.

A fourth method is employment targeting. According to this viewpoint, high unemployment is the cost of fighting inflation, the so-called sacrifice ratio. A real variable is proposed to meet this challenge, for example employment growth or unemployment. This alternative focuses on a macroeconomic variable that has an immediate association with social welfare in South Africa. This target method is close to what COSATU argues for, but it is very complex because no monetary target is targeted. It therefore requires new monetary policy tools.

A fifth method is close to the fourth target method. A real target is used according to Epstein (2003) which is appropriate for a particular country, for example poverty levels. This is exactly what COSATU is advocating for because they argue that important real variables are often ignored for the sake of price stability. This target method is however very complex with comparable problems as is the case with the previous mentioned target. A further disadvantage is the considerable theoretical debate whether monetary policy can affect real economic variables in the long run.

Lastly, monetary policy with an implicit anchor can be used, namely a coherent policy that exists to meet the goals of the central bank in the long run and which is combined with a definite forward-looking behaviour. Monetary policy has long lags between implementation and results, thus it makes sense for policy makers to be pre-emptive. There are numerous disadvantages to this strategy, namely the lack of transparency, the lack of accountability to judge the success of the central bank because no clear

criteria exist and there is a strong dependence on the preferences, skills and trustworthiness of the central bank.

4.6 CONCLUSION

Black labour unions in the South African economy before 1970 experienced lack of recognition by the government. The mobilization of black workers since 1973 persuaded the government to change their attitude towards collective bargaining regarding African workers. Prior to this period the legislation only recognized unions that had white, coloured and Indian members. The Wiehahn Commission was a watershed period in the history of South African labour unions. The Labour Relations Act of 1979 followed and all references to race were removed in the legislation. New labour unions developed faster since this legislation and labour unions obtained gradually more power.

Workers established more labour unions and was deeply involved in the political conflict against the ruling National Party. Unity talks between competing labour unions followed and various competing unions established COSATU in 1985. This labour union as a far bigger representative union played a leading role in the political struggle and also economic policies.

The history of COSATU is layered with economic legislation, criticism of economic policies and promulgation of labour policies to improve work conditions in favour of the workers which is not a true reflection of a labour union's functions. Examples are the launch of the Reconstruction and Development Program by COSATU in January 1993, the severe criticism of the GEAR macro policy in 1996 where COSATU had a different viewpoint than government regarding interest rates and unemployment and the big impact of COSATU to promulgate the new labour policies of the nineteen nineties.

COSATU influenced the government in numerous ways, for example through radical reform, being a summit member about strategic issues in South Africa and also as an alliance member to direct political activities in South Africa. As an alliance member of government COSATU were involved with activities outside the traditional union sphere, for example the implementation of the Black Economic Empowerment (BEE) policy in 2000.

COSATU has a history of being critical about economic policies of government. COSATU criticize the SARB's damagingly strict application of IT and regularly call for a review of the inflation targeting policy framework in South Africa (ANC, 2009). The debate on the merit of IT is contentious due to the relative short time dimension associated with this policy framework in South Africa. The past performance of inflation targeting has proven that there is no comprehensive evidence to abandon the policy framework. Empirical studies proved that if IT is dropped as a policy measure, it will result in a higher nominal interest rate spectrum as inflation expectations will not be anchored by SARB.

The vision of SARB is very clear namely to achieve and to maintain price stability (SARB, 2005). The function of SARB as an independent political institution is anchored in the South African constitution and also in an act. The main focus of SARB is to create a stable financial scenario and not to create employment. The creation of growth and employment according to Keynes (1973) is anchored in fiscal policy as recorded by the well-known theory of Keynes.

COSATU's concerns are reasonable but these concerns represent a great deal of misconceptions about inflation targeting. Various populist statements by COSATU lack basic economic reasoning. If COSATU's monetary policy demands are met to reduce interest rates in the short run, the circumstances of the very poor that COSATU are trying to protect, will merely worsen in the long run. If the inflation rate continues to increase because the causes of inflation are not addressed by the monetary policy makers, the poor will be hurt by high and unsustainable prices in the long run which will reduce their spending power and worsen their living standards.

COSATU share in the blame for the rise in unemployment in South Africa. As a member of the political alliance which governs the country, they are involved with issues that are not related to the true nature of a labour union. They advocate for example continuously for higher wages without improved productivity of their members, whilst their activities to change labour policies in favour of the workers in South Africa increases the costs of labour. Rigidities in the labour market fuelled higher wage agreements, surpassing increases in labour productivity growth. The contribution of COSATU towards the rigidity and high cost of the South African

labour market, therefore reduce access opportunities for the vast number of unemployed people in South Africa (Laubscher, 2009).

Furthermore, all labour union arguments that propose monetary policy to reduce unemployment have to consider the studies done by Laubscher (2009) where he emphasizes the important difference between cyclical and structural unemployment. According to this research cyclical unemployment is caused by a decline in demand and structural unemployment is caused by factors such as skill shortages and poor education. The problem with the South African economy is not that it is not growing, but that the growth rates achieved is less than what it should be to reduce the high unemployment rates over various decades.

According to the Department of Statistics (2010) the unemployment rate in South Africa in 1993 was 30,1%. According to the Department of Statistics (2010) the unemployment rate in 2010 was 23,5%. These figures, though it shows improvement, still reflect a high unemployment rate in South Africa that is a lasting problem which is driven by structural unemployment. As an economic problem, unemployment can not be addressed by monetary policy only which focuses on liquidity factors and not other factors like skill shortages, poor education and lack of infrastructure development.

The performance of inflation targeting exceeds that of any alternative monetary policies. The newly appointed Minister of Finance in 2009 stated in his first budget speech in February 2010 that the IT policy and target range will stay intact. The Minister of Finance confirmed in his budget speech of 2011 that the IT policy stays intact. Prudent monetary policy and the maintenance of financial stability in South Africa in the long term stay thus intact regardless of the criticism of COSATU.

CHAPTER 5

BRICS CURRENCY VOLATILITY: CONFUSION OR INDECISION

5.1 INTRODUCTION

The year 2008 will be remembered when the world experienced the biggest financial crisis since the depression of the 1930's. The years that followed will be known for uncertainty regarding sustainable recovery. Various governments experienced escalating debt because of stimulatory policies and a reduction in income. The consequence of these developments was currency volatility. International investors adjusted their risk profiles regarding BRICS countries since the crisis and these countries received billions of new investments. Various emerging countries' exchange rates appreciated accordingly relative to the USA \$ which was to their detriment.

Exchange rates however fluctuated widely since the collapse of the Bretton Woods system of fixed exchange rates. During the past two decades the world witnessed two waves of capital flows that influenced specifically emerging economies. The first wave was in the 1990s which culminated in the Asian crisis in 1998. The second wave began in 2003 and culminated during the global financial crisis of 2008. These two periods of large inflows to emerging countries mirrored each other due to the availability of external capital and risk adjustments of investors towards emerging countries. These big inflows to emerging countries created important policy challenges in response to the surge of international capital.

This abundant liquidity available in the international market poses various challenges for the policy makers of BRICS countries because of currency appreciation pressures. These capital flows may increase financial integration in the world, but it challenges policy makers to address the impact of these inflows in the different domestic economies. Various challenges exist, namely how to address the over-heating of the economy and inflated asset values, the loss of competitiveness in exports, vulnerability to capital inflows and possible reversal of these abrupt inflows, the impact on domestic interest rates because of a changed liquidity scenario and policy measures regarding official reserve accumulation.

The G20 finance ministers stated after their meeting in February 2011 the need to combat exchange rate volatility and misalignment of exchange rates amongst countries. The G20 countries are dedicated towards greater exchange rate flexibility and reiterated the importance of improvements in the international monetary system to be implemented in order to avert unexpected shifts in capital flows and exchange rate fluctuations. The Chinese government officials and the USA government officials disagreed about the method and timeline of the measures to eliminate misalignment of exchange rates amongst countries.

Governments in the world reacted differently to mitigate the risks in emerging markets. The France Minister of Finance called for a seminar in Schengen countries end of March 2011 regarding the reform of the dollar-dominated global monetary order. China continues to manage their exchange rate regardless of heavy international criticism whilst on the other extreme taxes are levied by Brazil on capital inflows. The South African Reserve Bank (SARB) relaxes foreign exchange controls and continues to increase foreign reserves.

Volatility creates uncertainty regarding international trade and uncertainty regarding the risk profile to invest in BRICS countries. The question remains how to address these waves of capital inflows that pose macroeconomic challenges for policy makers in BRICS economies. The Bank of International Settlements established the Committee on the Global Financial System (CGFS) in November 2009 to examine macro prudential policy issues that face central banks after the 2008 financial crisis. The International Monetary Fund also established research groups to assess the new risks that face BRICS countries. Aspects that are researched are for example policy options available to address capital inflows, the benefits of different policy responses and new macro prudential measures.

In this research the reasons for volatility and the macro prudential measures available to monetary authorities are analysed. Firstly, the determinants that influence exchange rates will be briefly referred to. Secondly, a brief referral to the main economic theories in foreign exchange will follow. Thirdly, policies available for emerging countries will be analysed. Fourthly, the BRICS countries will be individually analyzed with specific referral to monetary policies of individual countries. In

conclusion, available policies of BRICS countries will be summarised and new challenges will be addressed.

5.2 DETERMINANTS INFLUENCING EXCHANGE RATES

Various participants in the economy, for example importers, exporters, investors and policy makers are all concerned with the behavior of exchange rates (Takaendesa, 2006). Two general approaches can be identified to measure currency exposure (Scott, 2004). Accounting exposure is the first approach that is concerned with the proposition of specific accounting rules that deal with the handling of accounting items which are denominated in foreign currency. Economic exposure is a broader concept that measures the degree to which the current value of the balance of payments will change if the exchange rate changes. Various determinants influence the exchange rate value and each will be briefly discussed.

5.2.1 Inflation

Inflation is the rate of change in prices of goods and services, where the price level is the cumulative figure of past inflations. One of the biggest consequences of inflation can be seen as a constant increase in the money growth, whilst a reduction in the money growth will lead to lower inflation rates (Mohr & Fourie, 2004). Various countries in the world adopted the inflation targeting method which relies on a systematic assessment of future inflation. If domestic expectations increase, the domestic currency loses purchasing power which relates to a depreciation because the inhabitants of a country increase their purchasing of goods and services at the current lower price levels.

According to Dornbush (2009) the exchange rate can be seen as the price for a foreign currency which can be determined through the demand for money. The relationship between exchange rates and inflation rates is negative according to (Mishkin, 2001). A negative relationship occurs due to depreciation in the exchange rate, which will increase the cost of imports and therefore the rate of inflation. The inflation rate is also counteracted by an appreciation in the exchange rate. Exchange rates must be exogenous to have direct effects on inflation. According to Walsh (2003) a domestic monetary expansion causes the exchange rate to depreciate which causes the inflation rate to increase.

5.2.2 Interest Rates

Interest rates are the cost of money or it is the yearly price received by an investor from the investment house for the amount invested. Ultimately, according to Dornbush (2009), the interest rate influences the growth potential of a country. Policy makers have also the ability to manage the real exchange rate level which will have a direct impact on the current account balance.

Central banks steer inflation towards the target range through different monetary tools of which the interest rate level is the main tool. Akinboade (2001) states that in order to reduce inflation, interest rates are manipulated by central banks. This strategy is costly in terms of output and employment creation. As central banks manipulate the interest rate level to reduce the rate of inflation, the higher interest rate level attracts foreign capital flows. Foreign investors compare interest rates amongst countries which is an exogenous factor for the domestic economy.

5.2.3 Exports and Imports

The current account balance, which is part of the balance of payments for any given country, is the difference between exports of goods and services (and other income received from abroad for example dividends) and imports of goods and services (and other income transferred abroad). According to Mohr (2005) a current account deficit is often regarded as an indication that a country is living beyond its means. Countries with large current account deficits in the long run experience exchange rate depreciation which could correct the deficit over time.

The current account balance serves as the basis for equilibrium exchange rate analysis and is an internationally accepted indicator which is calculated as the current account ratio relative to the GDP ratio (Xiaolian, 2010). The IMF uses this approach to assess member countries' exchange rates. The size of the gap between the current account balance and the current account norm indicates the degree of undervaluation or overvaluation. The current account balance is also determined by changes in price competitiveness, economic growth of trading partners and income growth in the domestic country.

5.2.4 Exchange Rate Policy

The exchange rate policy pursued by a country can be classified in three broad categories. When making a regime decision, all countries integrated in the financial system must choose upon a fundamental basis (Hishamh, 2009). It is a choice between more or less control over domestic monetary conditions.

The first category is a floating regime which is applicable for more developed countries combined with well rooted financial markets. It implies less control over external prices and greater volatility in the exchange rate is experienced. Secondly, a fixed regime which is more advantageous for a less developed country, especially if the capital account is relatively closed and if trade is dominated by other countries. It implies less control over interest rates and money supply (which affects inflation and growth). Thirdly, an intermediate regime that allows some degree of control over both domestic monetary conditions and external prices.

The regime choices according to literature are based on various factors, for example the size of the country, openness of trade, the size of the tradable sector, the structure and amounts involved of trade partners, capital account openness, the development of the domestic financial markets, etc. Various advantages are achieved under a flexible or managed regime relative to a fixed regime according to (Salvatore, 2001). Firstly, a country does not need to concern itself with external balances and is thus free to utilize all policies at its disposal to achieve domestic goals. Secondly, both monetary and fiscal policy can be applied to achieve the same goals. Thirdly, monetary policy can also be used to achieve other internal balances, for example higher growth. Fourthly, flexible exchange rates enhance the effectiveness of monetary policy. Fifthly, each country is allowed to pursue domestic policies aimed at reaching its own desired inflation-unemployment trade-off. Lastly, a flexible exchange rate regime imposes minimal government interventions (interventions occur only in the short-run) with maximum freedom in the financial markets.

If countries decide to employ a fixed regime it may be for several reasons, but it is normally mainly for purposes of export and trade (Salvatore, 2001). If a country like China controls its domestic currency, they keep it normally low and do not allow appreciation. This help to support the competitiveness of its goods as these goods are

sold abroad. Secondly, a low exchange rate is to the advantage for the country with low costs of production like China relative to a country like the USA with a stronger comparative currency. Thirdly, these higher earnings support a higher standard of living for the inhabitants of the country and a higher economic growth. Fourthly, countries like China also protect their economies against adverse exchange rate swings and reduce the impacts of any currency crisis abroad.

5.2.5 Productivity Growth

The remuneration of labour is a significant element of the cost of production where the actual impact on costs depends on the correlation between the remuneration of labour and workers' contribution to production and hence productivity (Mohr, 2005). The production function provides a quantitative link between inputs and outputs and productivity is the ratio which measures the amount of output that is produced with a given amount of factor inputs.

Fazeer (2007) states that there is a negative relationship between productivity and a floating exchange rate which can be rationalized by the fact that firms in open economies face two types of shocks. The first shock is a financial shock, namely when wages paid to workers are preset and cannot be adjusted to financial shocks. An appreciation will reduce the profits of companies. The second shock is a real shock. This shock is regarded as a benefit that flexible exchange rates deliver, namely the currency will adjust to changes in the terms of trade. A negative real shock (which reduces exports) can be offset by the depreciation of the currency.

5.2.6 Unemployment

Unemployment is relatively easy to define but difficult to measure, especially in developing countries. Two definitions are used regarding the unemployment rate of a country (Mohr, 2005). The strict definition as formulated by the International Labour Organization is generally used in international comparisons in developed countries. The expanded definition is more suitable to developing countries. Although the causality is from exports to an adjustment in employment, it is important to note that if unemployment continues to increase in a country because of exchange rate adjustments, a scenario of economic and political instability will develop which will cause a depreciation of the domestic currency.

5.2.7 Monetary Policy

Monetary policy refers to a government's regulation of money supply and interest rates. It is typically executed by a country's central bank to achieve certain macroeconomic goals of which a stable inflation rate is the most important. According to Scott (2004) there are various measures to consider by monetary policy authorities, namely the inflation rate, the direction of the inflation rate, the ability to change interest rates and monetary stability.

The International Trade Institute of Southern Africa states that central banks have long held the view that low inflation and exchange rate stability will do more to enhance long-term economic growth than an easing of credit conditions would (ITRISA, 2009). Easing of credit conditions does alleviate the problems of low growth and unemployment in the short-term, but in the longer-term will only lead to higher inflation and higher production costs. Exchange rate fluctuations tend to reduce the flow of international trade and investments. Salvatore (2001) states that monetary authorities may intervene in the foreign exchange market. If a freely floating exchange rate regime is implemented, historical data indicates that currencies fluctuated a lot over time.

5.2.8 Fiscal Policy

Fiscal policy refers to the taxation and expenditure policies of the central government of a country. Fiscal policy includes various goals, for example to maintain macroeconomic stability, to promote growth and to attain a fairer distribution of wealth. In practice, fiscal policy affects a number of macroeconomic variables such as aggregate demand, income distribution, resource allocation and economic activity as a whole.

The effect of monetary policy under flexible exchange rates is qualitatively the same as the effect of fiscal policy under fixed exchange rates (Salvatore, 2001). Fiscal policy impacts both directly and indirectly on a number of monetary transmission channels and thereby has implications for the implementations of monetary policy. Various channels exist whereby fiscal policy affects monetary policy, for example domestic demand, interest rates and the inflation rate. Salvatore (2001) states that under a fixed exchange regime and elastic short-term international flows, fiscal policy

is effective whereas monetary is ineffective. If flexible exchange rates exist, the opposite is true. A close relationship exists between monetary and fiscal policy to influence macroeconomic variables. If no coordination exists, then these two policies neutralize each other.

5.2.9 Foreign Direct Investment

Countries that experience sustained capital inflows have a history of higher economic growth. Foreign direct investment (FDI) is a component of the balance of payments. It represents the investment of foreign assets into domestic structure, equipment and organizations. It does not include foreign investment into the stock markets. From a macroeconomic perspective, FDI is more stable than portfolio investment and is the preferred type of investment. Equity and bond investments tend to be highly volatile and speculative. FDI's relative stability and long-term character make it the preferred source of foreign capital for emerging economies. Historical data indicates that host countries with a high component of FDI experienced less overall volatility in investment flows and also a more stable exchange rate.

5.2.10 Volatility

Given the persistent effects that changes in the exchange rate can have on economic conditions, policymakers naturally want to understand what can plausibly be done to limit exchange rate variability. Volatility refers to the spread of all likely outcomes of an uncertain variable. Changes in the exchange rate and its volatility affect export earnings in a negative direction. The exchange rate regime that a country chooses to adopt depends on the degree of financial development (Fazeer, 2007). In countries with underdeveloped financial sectors, the volatility of exchange rates induced by a flexible exchange rate regime reduces economic growth.

5.2.11 Other Determinants

The abovementioned determinants by no means constitute all the determinants that influence the exchange rate of a country. There are other determinants that also influence exchange rate changes, for example movements amongst major currencies, political or economic instability, changing prices of commodities and risk profiles of investors that change towards countries with financial problems (PIGS countries and

negative capital flows) and emerging countries (BRICS countries and positive capital flows).

Movements amongst major currencies cause changes in BRICS countries' exchange rates which is an exogenous change. If the PIGS countries for example experience financial problems, the Euro depreciates against the USA \$. BRICS countries' exchange rates adjust towards the USA \$ and the Euro without any domestic cause or policy change by their own monetary or fiscal authority. If the USA \$ depreciates because of escalating debt, BRICS currencies appreciate against the USA \$. This appreciation puts strain on their trade balance and their output growth. This appreciation may however reduce their inflationary pressures.

Political and economic instability is another cause that can change capital flows. If instability prevails, investors withdraw their capital and the currency depreciates. Perceptions and sentiment, for example the reduction in the USA credit rating during August 2011, also influence investors' decisions to move capital. Lastly, risk profiles that changed positive towards emerging countries and BRICS countries in particular, created an exogenous inflow of capital and thus an appreciation of the domestic currency if a floating regime exists. This exogenous behavioral change is not necessarily what the host country needs and what the monetary and fiscal authority policies intend to achieve.

5.3 KEYNESIAN AND OTHER THEORETICAL VIEWS REGARDING EXCHANGE RATES FOR BRICS COUNTRIES

5.3.1 Keynesian Views

The exchange rate regime that most economists and the International Monetary Fund consider as ideal for emerging countries is one with a largely unregulated capital market, where capital mobility is absolutely unrestricted and where a flexible exchange rate exists (IMF, 2002). Keynesian economists believe that capital management techniques must be introduced together with an exchange rate system that prevents excessive exchange rate fluctuations in order to create macroeconomic stability.

This is easier said than done. The type of exchange rate regime and the relaxing of capital controls in emerging countries is again an important debate after the 2008 world financial crisis. The world experienced various capital instability scenarios since the 1990s where various emerging economies lost capital. Examples were the Mexico crisis (1994-95), East Asia (1997-98), Russia (1998), Brazil (1998-99) and the Argentina crisis in (2002). The question is if capital account liberalization and financial integration have brought risks (for example contagion) to emerging countries creating a more unstable environment? Another question arises, namely which exchange rate regime and capital account convertibility is appropriate for emerging countries to reduce volatility?

Keynes' theory related to the monetary system is the creation of an environment to maintain full employment and price stability. Keynes stated that the creation of an international liquid currency was an essential condition to assure the adequate elasticity of the money supply to increase the demand for investment (Ferrari-Filho, 2009). Keynes arguments about an exchange rate regime are that it must create price stability. Secondly, he recommended a fixed but adjustable exchange rate regime to reduce uncertainties in the market place and thirdly, he recommended a fixed but adjustable exchange rate regime for a world of open capital movements (Ferrari-Filho, 2009).

Post Keynesian analysis, therefore in a post-Bretton Woods world, argues that international capital movements occur because of a combination of volatile exchange rates and financial liberalization. According to this viewpoint, capital mobility is more unstable than stable as it increases the likelihood of financial and currency crisis which make it difficult for any domestic authority to manage their different economic policies. Financial instability and speculative attacks on various domestic currencies must therefore be expected. This economic school argues that the flow of international capital must be controlled and that complimentary policies must be implemented. The question that arises is how can this be done?

According to Tobin (1978) the main macroeconomic issue is not the choice of a specific exchange rate regime, but the excessive short-run capital mobility that reduces the autonomy of monetary authorities world-wide to manage domestic employment, output and inflation goals. Tobin stated that "*the mobility of financial*

capital limits viable differences among national interest rates and thus severely restricts the ability of central banks and governments to pursue monetary and fiscal policies appropriate to their internal economies”.

5.3.2 Purchasing Power Parity

A concept which is often used to explain and predict movements in the exchange rates is the purchasing power parity (PPP). According to Mohr (2005) the PPP between two countries is the amount of units of the one country’s currency which provides the holder the same purchasing power as one unit of the other country’s currency. PPP can refer either to parity between two countries (a bilateral comparison) or to parity between the country and a group of trading countries (a multilateral comparison).

Two types of PPP can be distinguished, namely absolute and relative PPP. In the first instance, the equilibrium exchange rate between two countries is set by the ratio between the price levels in these countries. The latter example is about changes in exchange rates that reflect differences in relative inflation rates. Analysis of the absolute PPP helps to forecast changes in the exchange rate.

There are however numerous arguments against the PPP because of the fact that a range of economic forces can cause great and long-lasting fluctuations in the real exchange rate over time. The validity of the long-run PPP may depend according to Scott (2004) if the price index includes both tradable and non-tradable goods which can create a bias into the calculation if there are productivity differences between countries. Copeland (1989) however states that whether true or not, PPP is an important benchmark for the analysis of exchange rate movements particularly concerning international competitiveness. If the level of prices is a reasonable accurate index of the cost of production in a country, then the ratio of price levels for any two countries will serve as a measure of relative competitiveness.

5.4 POLICIES AVAILABLE FOR EMERGING COUNTRIES

The impossible trinity paradigm exists for any open economy all the time, namely the inability to target the exchange rate, to manage an independent monetary policy and to allow full capital mobility simultaneously. BRICS economies experience exogenous capital surges which make the management of their domestic macro economy more

cumbersome. These surges in capital may complicate their macroeconomic management as their economies are not always able to adjust to the exchange rate volatility or appreciation that is generally experienced.

Various policy options are available to BRICS countries authorities' in response to the liquidity expansion and capital inflows that they experienced since the early 2000s. The policy responses to reduce the risks of a continuation of capital inflows depend on the specific conditions in each emerging country. A brief summary of options available follows which are available to emerging economies (IMF, 2010).

5.4.1 Exchange Rate Adjustment

The monetary authorities of emerging countries can use the exchange rate as an automatic stabilizer if an undervalued exchange rate exists. The exchange rate can be allowed to adjust towards equilibrium to reduce the risks of the capital inflows. If the exchange rate is not misaligned, the appreciation of the currency has a serious negative repercussion because the country loses its competitiveness in its tradable sector. In countries with a fixed exchange rate regime, the need to preserve the credibility of the peg excludes the option of any temporary changes in the exchange rate level.

5.4.2 Intervention

Monetary authorities may intervene to slow an appreciation of the exchange rate. Sterilization is the option through which a rise in net foreign assets is offset by a decrease in net domestic assets to keep the monetary base constant. The sterilization of liquidity injected by intervention when reserves are increased may cause inflation pressures and must be addressed. Risks regarding sterilization may also cause further inflows if the differential between domestic and foreign rates is maintained. Other measures of sterilization may be done through open market operations to reduce the monetary impact.

5.4.3 Monetary Policy

The monetary authority may narrow the interest rate differential between foreign and domestic interest rates to reduce the carry trade potential. This policy measure is

limited if the domestic inflation rate is in a rising cycle. The support of restrictive fiscal policy is required in countries where inflation is high. Monetary policy may also increase the reserve requirements of financial institutions. If the remuneration of reserves is close to market rates, the cost of sterilization will increase which can limit the ability of this policy measure for central banks.

5.4.4 Fiscal Policy

Restrictive fiscal policy can support monetary policy by reducing the budget's financing needs. A restrictive fiscal policy can also reduce the creation of asset bubbles by lowering aggregate demand. A restrictive fiscal policy adjustment is not always feasible, especially if the domestic real growth rate is low. The lag time of fiscal policy must also be considered. In a country with a fixed exchange regime, fiscal policy may be an effective tool.

5.4.5 Prudential Regulation and Supervision

Prudential ratios together with conventional policy measures for example liquidity ratios which differentiate according to currencies or reserve requirements with different maturity dates, is useful to reduce the impact of capital surges. Adequate supervision of such regulations also helps to reduce systematic risk in the financial sector. The ability of such supervision is often limited by capacity constraints. Measures to reduce the external borrowing of banks can also be used to reduce capital inflows from abroad. These measures can help to reduce rapid credit growth in the financial sector or to prevent the dollarization of the bank sector's balance sheets.

5.4.6 Liberalization of Capital Outflows

Countries that experience big capital inflows may liberalize existing restrictions on capital outflows. Such a relaxation of capital controls on residents' outward investment help to alleviate appreciation pressures without adversely affecting financial integration of the economy. Adequate prudential regulation and risk management procedures should be in place for institutional investors' outward investment. The liberalization of outward investment should be based on longer-term expected flows and not only on short-term surges in capital flows.

5.4.7 Capital Controls on Inflows

If the available policy options are not sufficient to reduce capital surges, capital controls may be an option. If the capital inflows is however of a more fundamental nature, the adjustment of other macroeconomic policies is a better option. These controls are rarely successful to reduce capital surges, but it can alter the composition of inflows toward longer-term maturities.

There are two main groups of capital controls, namely market-based and administrative controls. Various factors influence the decision, for example the aim of the controls to lengthen the maturity structure, the type of flows involved and the experience of the authorities to manage these controls. Firstly, market-based controls increase the cost of the capital transaction. These controls are generally transparent and do not prohibit transactions, but only discourage capital flows by increasing the cost. These controls can become very complex to administer as the number of rates, withholding periods and exemptions increase.

Secondly, administrative controls are normally less transparent. These controls restrict capital transactions and transfers of funds through outright prohibitions or explicit quantitative limits. A transaction normally involves the approval of the central bank personnel and occurs often on a discretionary basis. These controls impose administrative obligations on the banking system and require adequate trained people in the central bank.

5.4.8 Conclusion on Policy Mix Available to BRICS Countries

The appropriate policy response to a capital surge depends on a variety of specific circumstances in various countries. The stage of the business cycle and the prevailing fiscal policy as well as the persistency of the capital surge all play a role when policy measures are analyzed for implementation. Certain general conclusions can be drawn after empirical studies were done in emerging countries. Firstly, according to Claessens (2006) countries with relative high current account deficits are more vulnerable to a sharp reversal of capital surges because they were particularly affected by the increase in aggregate demand and the real appreciation of their currencies. Secondly, a public expenditure restraint during such periods of capital inflows contributes to a lower real exchange rate appreciation as well as a better GDP growth

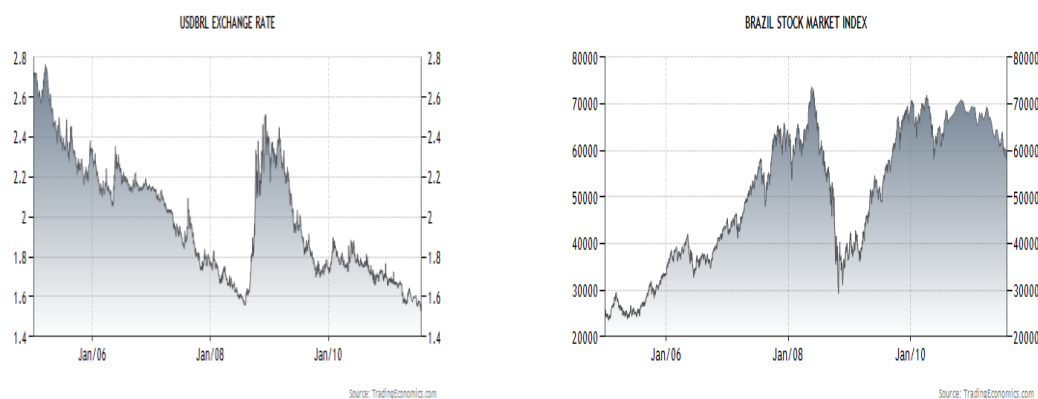
after the surge. Thirdly, a policy of resistance to nominal exchange rate appreciation is in general not effective to prevent a real appreciation and has often been followed by a sharp reversal of capital inflows. Fourthly, restrictions on capital inflows in general have not been associated with lower real exchange rate appreciation.

5.5 BRICS EXCHANGE RATE EXAMPLES

5.5.1 Brazil

Since the 1999 Brazilian currency crisis the currency depreciated for a couple of years before it stabilized and continued to appreciate to the USA \$ except for the 2008 USA financial crisis.

Figure 5.1: Brazil Exchange Rate and Stock Market



Source: Trading Economics.com

Since early 1990s the Brazilian economy had a low and volatile growth history. Various factors influenced this low growth, for example high inflation in the early 1990s, external vulnerability caused by financing needs of the balance of payments until early 2000s and high real interest rates in the early 2000s. After decades of high inflation, investment was low but it changed with the implementation of the Real Plan in the 1990s. The result of the Real Plan was a tight monetary policy to bring inflation down but these measures caused the nominal exchange rate to appreciate (Mallick, 2009).

After the 1999 Brazilian currency crisis the monetary authorities implemented various new norms that resulted in financial liberalization, for example reduction of both the

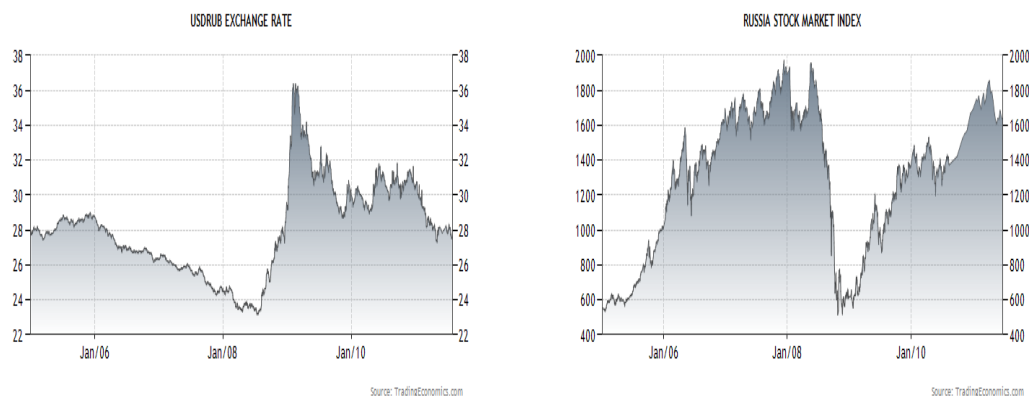
minimum average maturity for external loans and the financial tax on capital inflows, the elimination of the restrictions on investments in securities by foreign investors and the simplification of the procedures related to capital remittance to other countries (De Paula, 2007). Since then Brazil experienced a more stable economic development scenario.

Empirical results suggest that these changes resulted in greater exchange volatility and higher interest rates, probable as a result of the reduction in barriers to capital outflows. The reasons for their exchange rate vulnerability are not clear, but the fact is Brazil experienced exchange rate volatility since the 1990s and especially after 1999 whilst they were dependent on foreign capital to achieve balance of payments equilibrium.

5.5.2 Russia

Since the East Asian and 1998 Russian crisis the Russian currency depreciated for a couple of years before it stabilized and continued to appreciate to the USA \$ except for the 2008 USA financial crisis.

Figure 5.2: Russia Exchange Rate and Stock Market



Source: Trading Economics.com

The main reason why the Russian economy performed badly in the early 1990s was related to the transition period from a centralized economy to a market economy. This political change did not lead to a true independent Russian monetary authority. Some of the independent republics kept on using the Ruble and central banks of those republics conducted their own credit policies (Mallick, 2009). In 1995 the Russian

economy began to stabilize, and a new law of the Bank of Russia provided a degree of legal independence. This law allowed the monetary authority to introduce a pegged exchange regime with a crawling band against the US dollar.

Various other factors also contributed towards that weak performance of the Russian economy during the period of transition. The Russian economy experienced large budget deficits because of government's inability to collect taxes and to contain expenditure. The negative market reaction against fiscal instability continued to put pressure on the exchange rate in the band and the monetary authorities decided in 1998 to allow the currency to float.

Since 2000 the Bank of Russia's main goal was to reduce inflation and to achieve a positive real growth. The monetary authorities tried to 'froze' the budget revenues from oil and gas production in order to sterilize the expansion of the money supply (Mallick, 2009). This sterilization policy had however negative consequences, because investments in infrastructure, high technology and manufacturing was under funded. Since the adaptation of a floating exchange rate regime, the CBR pursued multiple economic objectives. The Russian government makes use of different capital controls on capital inflows and outflows from time to time, for example a requirement of permission to raise capital abroad. The government also established the Oil Stabilization Fund in 2004 to absorb the extra fiscal revenue – high revenues from oil, gas and oil products are therefore sterilized.

5.5.3 India

Since the East Asian crisis the India currency depreciated for a couple of years before it stabilized and continued to appreciate to the USA \$ except for the 2008 USA financial crisis.

Figure 5.3: India Exchange rate and Stock Marke



Source: Trading Economics.com

The basic objectives of the Reserve Bank of India during the recent two decades were to maintain reasonable price stability and to ensure an adequate expansion of credit to assist economic growth. During these two decades the monetary authority also maintained conditions to curb destabilizing and speculative activities against their currency. Since the mid eighties the broad money supply, M_3 , emerged as the nominal anchor relative to output and prices (Mallick, 2009). During 1998 the Reserve Bank of India formally adopted a multiple indicator approach. The authority used different interest rates, capital flows, the exchange rate, credit supply, the fiscal position, inflation rate and output in the policy applications.

India experienced an improvement in their economic growth after their external debt crisis of 1991. After years of fairly low growth a dramatic change occurred after 1991 when the real growth rate increased to an average rate of 6.5% for the period 1990 – 2006 (De Paula, 2007). The economic improvement is a result of various factors, namely the improvement in consumer spending, strong productivity growth, the management of a well-coordinated economic policy and the implementation of various reforms. Capital account liberalization occurred as part of broad based economic reforms. The exchange rate regime also changed from a pegged exchange rate to a managed floating regime

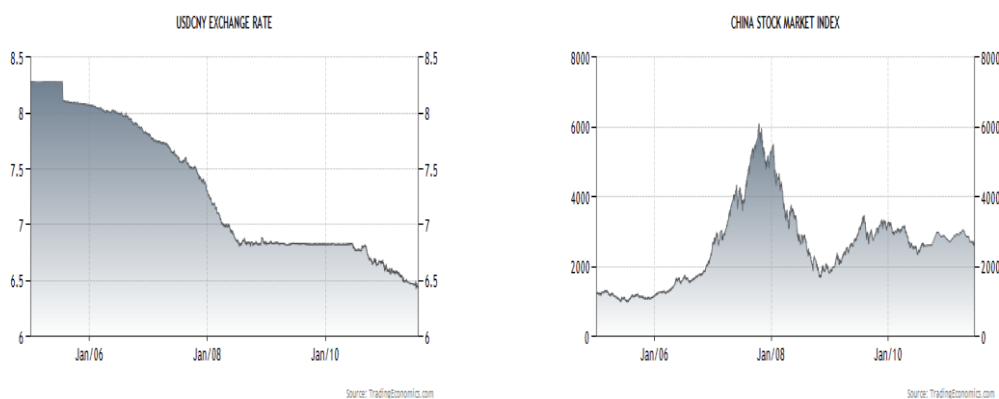
The capital controls in India are more quantitative controls rather than market based controls. It also demarcates a clear distinction between residents and non-residents. The nature and pace of India's liberalization had an influence on the dimension and

composition of the private capital inflows and outflows. The nature of their liberalization into the international financial markets caused a slow investment from abroad if India is compared to the other leading emerging economies.

5.1.1 China

The Chinese currency was very stable during the recent decade because of their managed currency regime.

Figure 5.4: China Exchange Rate and Stock Market



Source: Trading Economics.com

The monetary policy of China appears to be more complicated than advanced economies because the monetary authority applies both quantitative and price instruments in view of their imperfect monetary transmission mechanism. The law that governs the People's Bank of China states that the objective of monetary policy is to maintain price stability and the promotion of economic growth (Mallick, 2009). The People's Bank of China does not have an operational target as their main indicator of monetary policy. They use short-term interest rates as well as reserve requirements for banks to influence credit lending by banks and therefore the inflation rate.

Since the end of the 1970s the exchange rate regime changed. Initially it was centralized and fixed. During the latter half of the 1980s the exchange rate was dual. There existed an official rate which the monetary authority adjusted on a periodic basis and a market determined rate which existed on a relatively depreciated level

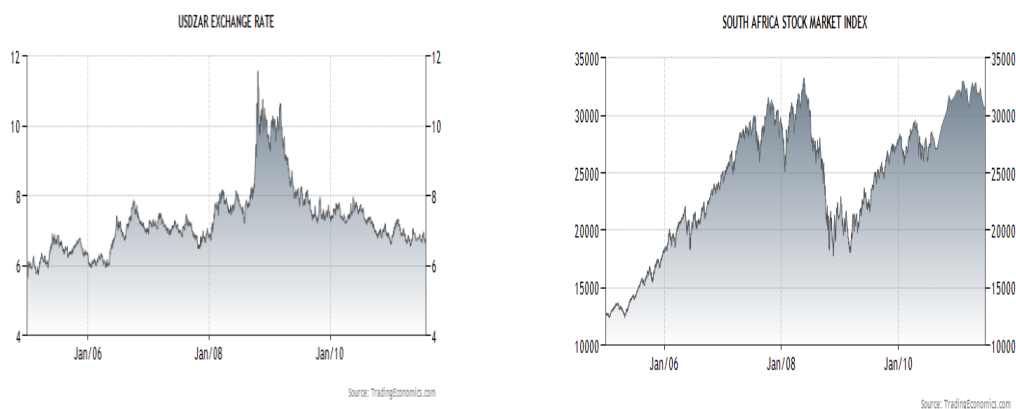
compared to the official rate. In 1994 the official rate devaluated and unified with the exchange rate and a managed float exchange regime was adopted. The exchange rate in recent years is considered to be devaluated. China experienced an accumulation of reserves since the beginning of the 1990s as a result of a deliberate foreign reserves accumulation policy of the central bank, a continuation of a current account surplus and an increasing capital inflow, mainly FDI.

Economic reforms began in the late 1970s but were very slow. Changes began in some provinces before some measures were also implemented on a national basis. The growth rate of the Chinese economy was impressive for many years. The average real GDP was 9.8% from 1990 to 2006 (De Paula, 2007). Investment in their real sector and a continuous growth in their exports is the driving force of this spectacular growth. China's expansion in international trade escalated after 2000 to such an extent that China became the biggest exporter in the world. The increase in their exports came as a result of further liberalization of their export licensing system, the increasing productivity in their industry and low wages.

5.5.4 South Africa

The South African currency depreciated to its lowest level during the 2001 currency crisis and continued to appreciate to the USA \$ except for the 2008 USA financial crisis.

Figure 5.5: South Africa Exchange Rate and Stock Market



Source: Trading Economics.com

The growth rate for South Africa was low and erratic in the 1980s and 1990s. A high growth rate is one of the goals of the growth employment and redistribution (GEAR) policy implemented in 1996. Growth again was a main priority in the accelerated growth initiative (ASGISA) in 2006. In the new growth plan of 2010 the sustainability of growth is again questioned and addressed.

After democratic elections in 1994 the authorities announced a policy of gradual abolishment of exchange controls. In 1995 the Financial Rand, an investment currency for non-residents, was abolished. The gradual relaxation of exchange control for domestic juristic persons and residents followed as the Minister of Finance announced some adjustments almost every year. The South African economy experienced a currency crisis in 2001 and the currency depreciated to the lowest level ever in December 2001. The floating exchange rate system experienced a relatively strong appreciation since 2001 as well as volatility in relation to other currencies. In recent years the central bank are involved in the purchasing of foreign exchange to increase foreign reserves and to manage the international liquidity in the market. The exchange rate is not an objective or target of SARB.

South Africa had different monetary policy regimes before 2000. The first regime was a liquid asset ratio-based system with quantitative controls on interest rates and the second regime was a cash reserves-based system with pre-announced monetary targets (Rossouw, 2009). These targets came under severe pressure during the period of financial liberalization since 1994. As a result, these targets had to be supplemented by a diverse set of indicators, for example asset prices, credit growth fiscal stance, exchange rate, output gap and wage settlements (Mallick, 2009). The third regime was an inflation targeting system that came into being in 2000 which the aim to enhance accountability, predictability and transparency and also the adoption of a floating exchange rate system.

5.5.5 Summary of BRICS

If the graphs of the five BRICS countries are compared, the similarity is obvious (China is different because of their managed exchange rate regime). Most of the countries experienced an appreciation of their currencies until the 2008 international financial crisis. During the financial crisis the currencies depreciated and recovered

again as risk profiles improved to continue their appreciation towards the USA dollar. If the indices of the various stock markets are compared, there is also similarity amongst the BRICS countries. All the indices increased until the financial crisis to decline substantially because of uncertainty in the international investment arena. All the indices began within a year after the crisis with a slow recovery phase to enter into another declining phase during August 2011 because of uncertainty in the USA regarding fiscal debt.

Although there are vast political and economic differences amongst the BRICS countries, there are also various similarities. Almost all of these countries had a financial crisis in the 1990s and went through a process of political transformation. China, India, Russia and South Africa have been in more or less degree successful to manage their exchange rate regimes with restrictive capital account convertibility. They managed their macroeconomic policy in conjunction with an exchange rate regime to reduce instability. These experiences proved that capital control measures to protect the domestic economy against the destabilizing effects of international capital flows were to some degree a success.

Russia went through an unstable political transformation process with a very bad performance in their macroeconomics to a fast growing market economy. The process of change in China was less chaotic because the authority's relaxation of restrictions was very well managed. South Africa also went through a process of political change but this political transformation was fairly smooth. Brazil on the other hand adopted a more liberal economic approach which included a less interventionist approach. The result was high exchange rate volatility, higher interest rates and a poor economic performance.

The various experiences of the BRICS can be summarized as follows: firstly, all five countries experienced a process of gradual capital account liberalization. Secondly, policy makers applied a variety of capital management techniques in relation to the overall aim of their economic policy regime. Thirdly, most of the BRICS experienced a surplus on their current account. Fourthly, the central banks accumulated foreign reserves to reduce speculative attacks on their domestic currency. This tactic enhanced the monetary policy makers' capability to influence the effective real exchange rate and to reduce volatility. Fifthly, most of the BRICS has some kind of a

managed float exchange regime with the aim to preserve a stable effective exchange rate as an intermediate target as part of other macroeconomic policies geared towards employment and growth.

Table 5.1: Exchange rate regimes of BRICS

Country	Exchange regime	Monetary policy framework	Indicator exchange rate	Capital account convertibility	Exchange rate volatility
Brazil	Floating with dirty floating	Inflation targeting	Nominal bilateral	High	High
Russia	Managed floating	Multiple indicators	Nominal bilateral	Partial with restrictions	Low
India	Managed floating	Multiple indicators	Nominal bilateral & real effective	Partial with many restrictions	Very low
China	Semi-fixed	Various indicators	Real effective	Partial with many restrictions	Very low
South Africa	Floating	Inflation targeting	None	Partial with restrictions	High

Source: De Paula (2007) and author's own research

5.6 CONCLUSION

Central banks in the BRICS countries reacted differently to mitigate the risks in financial markets. The appropriate mix of tools applied by central banks is influenced by the state of their financial markets and domestic economy, for example how close the economy is to full capacity, what is the level of official reserves available to intervene, the quality of existing prudential regulation and the scope for the currency to appreciate further without damaging the domestic economy. There exists no one strategy for all countries to reduce the destabilization of short-term capital surges (Ostry, 2010). From any individual country point of view, policies applied are normally some kind of mix between reserves accumulation, adjustments in either the fiscal and monetary stance as well as the strengthening of the prudential framework.

In some countries it was necessary to implement capital controls as a legitimate component of the policy mix to reduce the impact of capital surges.

Keynes however stated that the creation of an international liquidity currency was an essential condition to assure the adequate elasticity of the money supply to increase the demand for investment. The different post Keynesian viewpoints are against the background of financial globalization. Conditions for greater economic interdependence must be created by the different authorities in order for their national economic policies to operate autonomously. Authorities in BRICS economies are challenged to introduce exchange rate management to assure domestic policy objectives and to promote a more predictable environment for domestic investment. Monetary authorities should implement capital controls to preserve the independence of their monetary policy, therefore countries should not have a fixed exchange rate regime. Capital controls to support macroeconomic stability should be added as and when necessary.

The growing economic power of the BRICS created a new international environment where it becomes impossible for the United States to resist a reshaping of the international monetary system. The Framework of the G20 leaders towards a process of mutual assessment of each other's policies is also step in the right direction. The creation of a new international reserve currency which is not connected to domestic deficiencies of individual countries for example high debt is a step in the right direction. A solution is to enhance the role of the Special Drawing Rights (SDR) of the IMF in international trade and finance.

The BRICS are likely to support reforms that should create a more stable international environment, based on a stable currency not linked to deficiencies of debt or any kind of historical perceptions. A new currency of some kind can help to improve international currency stability. This step in conjunction with better coordinated monetary policies in the G20 countries, improved financial regulation and coordinated G20 intervention can reduce future international instability and volatility in exchange rates and stock markets.

CHAPTER 6

TO REDUCE INFLATION: NEW APPLICATION OF OLD THEORIES

6.1 INTRODUCTION

The primary goals of monetary policy are to create stability in the financial markets and to foster an environment where the economy can facilitate growth and development. In the aftermath of the 2008/2009 Global Financial Crisis, monetary policy has experienced evermore limitations in applying existing instruments to achieve financial stability. As a result, destabilizing imbalances continue to exist in the global economy today.

The Global Financial Crisis proved not to be a normal cyclical downturn. The crisis has highlighted the need to go beyond micro-approaches to financial regulation, supervision and traditional policy application. Capital flows to emerging markets displayed dramatic shifts over the crisis period, collapsing at the start of the crisis and rebounding during 2009 (Mohan, 2009:4). During 2011, the European debt crisis caused international investors to adjust their risk. Emerging countries experienced large capital outflows due to these adjustments. These fluctuations in capital flows should be controlled in order to ensure financial stability in emerging markets.

However, traditional measures of monetary policy cannot assist in this as the global economy has been tasked with ensuring that growth is facilitated in the wake of the crisis. This means that monetary policy should be relaxed, which is in direct opposition to the need for controlled capital outflows. Clearly a new policy mix is required in order to reduce capital surges to the BRICS nations, which will also reduce negative turnaround experienced after the 3rd quarter of 2008.

Of the Brazil, Russia, India, China and South Africa (BRICS) country grouping currencies, the South African Rand depreciated the most during 2011, followed by an appreciation in the first half of 2012. This currency volatility questions the ability of policy makers to achieve stabilization objectives using traditional monetary policy. Growing inflationary pressures in emerging countries heightens the need for sound

economic policies. With inflation increasing in the BRICS countries, a new perspective is needed in order to reduce inflation in South Africa. If the inflation rate declines because of a new application of, or approach to monetary policy, interest rates should decline accordingly and the interest gap between BRICS nations and developed countries should decline. This reduced interest rate gap should reduce international capital volatility and the negative impact of a volatile exchange rate on economic growth and financial stability.

The International Monetary Fund (IMF) stated that improved multilateral surveillance is necessary in order to reduce the impact of negative spillovers (Strauss-Kahn, 2011). These negative spillovers include the policy actions made by one country that affects countries in other parts of the world. The IMF has identified three activities that must take place in order to reduce these spillovers, namely, reviewing economic theory to address the global crisis, reviewing economic policy and its implementation, and the improvement of multilateralism and global cooperation efforts amongst countries.

In this article, the need to rethink traditional economic theory and policy advice in the wake of the global crisis is debated. Against the background of the statement made by the IMF, this article contains an analysis of inflation differentials amongst emerging countries (BRICS countries in particular) and probable policy changes to reduce negative spillovers for emerging economies.

Policies available to emerging countries will be discussed with additional reference to macroprudential policies available to financial authorities. Determinants that influence exchange rates will be described and Keynesian views on exchange rates will be discussed. The symptoms and causes of international capital flows will be discussed by means of a comparison of interest rates and inflation differentials amongst the United States of America (USA), Europe, Japan and the BRICS countries. The solution to reduce international capital volatility is addressed.

6.2 POLICIES AVAILABLE TO EMERGING ECONOMIES

According to Santomero (2001), the monetary authorities should provide price stability in the markets and create an environment that fosters sustainable growth. Underpinning the philosophy of monetary policy is the traditional economic principles of price stability and its contribution toward economic growth and

development. Price stability is crucial in order for an economy to function. Should prices fluctuate in response to supply and demand change and this is combined with excess money supply and sustained credit, inflation would increase.

6.2.1 Monetary Policy

Monetary authorities are, however, limited in their capacity to assess and influence these price fluctuations and, by extension, measure economic performance (Santomero, 2001). Questions such as how close the economy is to full potential or how robust demand should be in order to impact negatively on inflation, must be asked. If good readings of economic parameters are difficult to achieve, the effect of individual saving and investment decisions based on stock market wealth changes, perceived opportunities and a possible change of fiscal policy can be added.

A second limitation is the lack of capacity to model people's economic behaviour. Market participants are emotional beings that over- or under react to changes that result in market optimism and pessimism. The decisions and expectations of market participants are, therefore, not always rational. The third limitation is that monetary authorities try to stabilize the economy with a blunt instrument, namely, the repurchase (repo) rate. The repo rate is subject to long and variable time lags. In summary, monetary authorities have limited capacity to measure economic performance precisely in real time which limits their stabilization policy ability in the short-run.

To add to the above mentioned limitations Stern *et al.* (2004) states that monetary authorities can place too much emphasis on short term output stabilization rather than long term price stabilization. Empirical findings proved that output responds temporarily in the short term. Empirical findings also proved that prices change permanently over the medium to long term and sustained increases in inflation reduce output over the long term.

Monetary policy should be analyzed according to certain principles (Mishkin, 2010). The first eight principles are known as the new neoclassical synthesis. The last principle has been added since the financial crisis. The following scientific principles should be used to examine monetary policy which is derived from theory and empirical research:

- Inflation is a monetary phenomenon;
- Price stability has important benefits;
- No long-run trade off exist between unemployment and inflation;
- Expectations play an important role in the determination of inflation and transmission of monetary policy to the macro economy;
- The Taylor principle is applicable, namely that real interest rates need to rise when inflation rises;
- Monetary policy experiences a time inconsistency problem;
- Central bank independence improves an efficient monetary policy;
- A strong nominal anchor is necessary; and
- Financial frictions play an important role in business cycles.

The application of available policies for emerging economies in a financial crisis is two-fold. A distinction is necessary between an outflow of capital and an inflow of capital. The outflow of capital during the latter half of 2008 will be addressed first. The spectrum of options for emerging market economies is limited (Ghosh *et al.*, 2009). The first response is to allow the exchange rate to depreciate. This will help these economies to cope with weaker international demand, but it may cause adverse balance of payments effects and also initiate inflation. The second response is to increase interest rates and simultaneously tighten credit conditions. This may restore confidence in the value of the currency, but during an international crisis foreign investors flee the country, want to reduce risk and move their capital to safe heavens. The third response for emerging economies is to borrow from the IMF. Monetary authorities can borrow from various funds at the IMF to ease the constraint on their reserves. The last response is to impose capital controls on the outflow of capital. This will create a wrong perception which will reduce potential inflow of new capital.

The inflow of capital since 2009 when confidence was restored towards emerging economies will be addressed secondly. The developed economies responded to the

crisis through monetary and fiscal policy easing on an unprecedented scale. The interest differential between these developed economies and emerging economies widened. These countries' authorities had little scope to implement an accommodative monetary policy stance because the policies had to restore confidence first. In countries where there was scope for a more accommodative monetary policy, monetary authorities had to be mindful of the trade-off between a decreased interest rate spectrum and the negative effect of a depreciating currency on balance sheets that are not hedged.

According to Ghosh *et al.* (2009), monetary authorities in emerging economies have several instruments to address capital inflows at their disposal. Firstly, interest rates can be lowered as part of an accommodative monetary policy stance. This policy stance has however limitations because country specific circumstances did not allow the same scale of stimulatory stance as in developed countries. Secondly, quantitative measures can be employed. This is a policy option if credit markets remain unresponsive to a stimulatory stance or when monetary authorities have to intervene if a systemic bank crisis develops. Thirdly, monetary authorities may intervene in the foreign exchange market to stabilize the exchange rate. This policy stance also has limitations because the scope of reserves required to intervene in the foreign exchange markets is limited. Lastly, central banks may drain liquidity in the local financial market and increase the national reserves.

In addition to these measures, policy makers may adjust the monetary versus fiscal policy mix to tighten the fiscal policy stance whilst allowing interest rates to decrease (Zhu, 2011). This policy stance has its limitations because most emerging countries' scope to reduce interest rates is limited because of higher inflation rates than in developed economies. Lastly, capital control measures or macro prudential measures may be imposed. These measures will be referred to in the next section.

If all these measures are analyzed, policy measures must be aligned to country-specific circumstances. The spillover effects of these different policy measures may be different from country to country. The applied policy measures can only influence the effect of these capital surges, which are mainly driven by exogenous factors in developed countries whose economies are far bigger than most emerging economies.

6.2.2 Macro-prudential Policies

Before the available instruments of macro-prudential policies are referred to, it is necessary to firstly define what systemic risk is all about. According to Hoogduin (2010), systemic risk is the risk of disruption to financial services. This disruption weakens the financial system which can cause negative consequences for the real economy. Monetary policy adjustments by means of interest rate changes and the application of macroprudential instruments should act as dual reinforcements and, in turn, influence or adjust financial conditions in the markets.

Two viewpoints are described under macroprudential policy (Galati & Moessner, 2011). The first viewpoint is that financial stability is influenced by external shocks. The second viewpoint indicates that financial instability can be influenced by endogenous shocks that originate from within the financial market. According to these two views, the goal of macroprudential policy is to limit the risks and costs of a systemic crisis. In Table 1, the goals and instruments of macroprudential policy are compared with other policies available to policymakers.

Table 6.1: Alternative sets of tools to foster financial stability

Tool set	Goal	Instruments
Prudential policy: Micro	Limit distress of individual institutions	e.g. quality/quantity of capital, leverage ratio
Prudential policy: Macro	Limit financial system-wide distress	e.g. countercyclical capital charges
Monetary policy	Price stability	e.g. policy rate, standard repos
	Liquidity management	e.g. collateral policies; interest on reserves; policy corridors
	Lean against financial imbalances	e.g. policy rate; reserve requirements; mop-up of liquidity; FX reserve buffers

Tool set	Goal	Instruments
Fiscal policy	Manage aggregate demand	e.g. taxes; automatic stabilizers; discretionary countercyclical measures
	Build fiscal buffers in good times	e.g. measures to reduce debt levels; taxes/levies on the financial system
Capital controls	Limit system-wide currency mismatches	e.g. limits on open foreign exchange positions; constraints on the type of foreign currency assets
Infrastructure policies	Strengthen the resilience of the infrastructure of the financial system	e.g. move derivative trading on exchanges

Source: Galati and Moessner (2011)

Macroprudential policies are being used more frequently by policymakers. Some emerging countries use these instruments to target mortgage lending and to tighten capital requirements against household credit (Caruana, 2011). According to Mishkin (2010), macroprudential policies have another impact, that is, to dampen the interaction between credit provision and asset price bubbles. A rise in asset values normally results in increased capital buffers at financial institutions which supports increased lending if capital adequacy stays unchanged for mortgage loans. Bank capital requirements are important in all phases of the economy cycle. Macroprudential instruments should however, not be confused with administrative capital controls

According to Hoogduin (2010) macroprudential policy should strengthen a financial system's resilience against shocks, as well as reduce the effect of financial shocks. Macroprudential policy should, however, compliment other policies in order to negate the impact of potential financial shocks. Table 2 provides a brief summary of the risk measurement methodologies that can be followed under macroprudential policies.

Table 6.2: Macroprudential instruments

1. Risk measurement methodologies	
By banks	Risk measures calibrated through the cycle or to the cyclical trough
By supervisors	Cyclical conditionality in supervisory ratings of firms; Develop measures of systemic vulnerability (e.g. commonality of exposures and risk profiles, intensity of inter-firm linkages) as basis for calibration of prudential tools; Communication of official assessments of systemic vulnerability and outcomes of macro stress tests;
2. Financial reporting	
Accounting standards	Use of less procyclical accounting standards; dynamic provisions
Prudential filters	Adjust accounting figures as a basis for calibration of prudential tools; Prudential provisions as add-on to capital; smoothing via moving averages of such measures; time-varying target for provisions or for maximum provision rate
Disclosures	Disclosures of various types of risk (e.g. credit, liquidity), and of uncertainty about risk estimates and valuations in financial reports or disclosures

3. Regulatory capital	
Pillar 1	Systemic capital surcharge; Reduce sensitivity of regulatory capital requirements to current point in the cycle and with respect to movements in measured risk; Introduce cycle-dependent multiplier to the point-in-time capital figure; Increased regulatory capital requirements for particular exposure types (higher risk weights than on the basis of Basel II, for macro prudential reasons)
Pillar 2	Link of supervisory review to state of the cycle
4. Funding liquidity standards	Cyclically-dependent funding liquidity requirements; Concentration limits; FX lending restrictions; FX reserve requirements; currency mismatch limits; open FX position limits
5. Collateral arrangements	Time-varying Loan-to-value (LTV) ratios; Conservative maximum loan-to-value ratios and valuation methodologies for collateral; Limit extension of credit based on increases in asset values; Through-the-cycle margining
6. Risk concentration limits	Quantitative limits to growth of individual types of exposures; (Time-varying) interest rate surcharges to particular types of loans
7. Compensation schemes	Guidelines linking performance-related pay to ex ante longer-horizon measures of risk; back-loading of pay-offs; Use of supervisory review process for enforcement

8. Profit distribution restrictions	Limit dividend payments in good times to help build up capital buffers in bad times
9. Insurance mechanisms	Contingent capital infusions; Pre-funded systemic risk insurance schemes financed by levy related to bank asset growth beyond certain allowance; Pre-funded deposit insurance with premia sensitive to macro (systemic risk) in addition to micro (institution specific) parameters
10. Managing failure and resolution	Exit management policy conditional on systemic strength; Trigger points for supervisory intervention stricter in booms than in periods of systemic distress

Source: Galati and Moessner (2011)

Financial instability contains systemic risks. Macroprudential policy is not concerned with the management of risk of individual financial institutions, but rather concerned with the reduction of risks in the financial markets that can eventually influence the macro environment negatively. Macroprudential intervention can broadly be classified in four groups (Moreno, 2011). The first group of instruments is to measure capital inflows. The second group refers to foreign exchange rate intervention and management of foreign reserves. The third group of instruments contains measures to strengthen balance sheets and capital of banks. The last group stresses the management of the quality of credit that banks supply. As and when policy makers apply macroprudential policies it is important that the effect of these instruments must not neutralise other policies.

The problem, however, is that although macroprudential measures in conjunction with other policies mitigate systemic risk, the source of the risk cannot be influenced. Despite implementation of macroprudential policies, the source of the capital surges experienced by BRICS countries is still not neutralized.

6.2.3 Determinants Influencing Exchange Rates

Kohler (2010) states that exchange rates are predominantly determined by the trading relationship between two countries. Factors that play a role are discussed in the following section.

6.2.3.1 Inflation and interest rate differentials

Countries with lower inflation rates generally possess currency with higher values and, in turn, much lower interest rates. The purchasing power of the currency, relative to its trading partners, would increase. For developing nations, this would have a profound impact on their balance of payments as the price of their merchandise would increase, causing trading partners to seek cheaper alternatives.

Countries with higher rates of inflation would experience depreciation in the value of their currency, accompanied by higher interest rates. These higher interest rates would cause capital inflows as investors seek the highest possible return on their investment. No safeguards exist however, and the only deterrent to this inflow of capital would be a currency appreciation or if the inflation in the country was much higher than in others.

6.2.3.2 Current account deficits

Any deficit on a country's current account would indicate that the country is spending more on foreign trade than it is earning. The country, essentially, requires more foreign currency than it receives, and supplies more of its own currency than demanded for its products by foreign markets. This excess demand for domestic currency causes the exchange rate to depreciate, making domestic goods much cheaper for foreign buyers.

6.2.3.3 Public debt

Nations with large public deficits are less likely to attract foreign investors as debt encourages inflation. Shapiro (2006) indicates that governments may print money in order to pay off the debt, but this action would cause an increase in inflationary pressure within the economy. If governments cannot service their debt through domestic instruments then the only recourse available is to increase the sale of

securities to foreigners (often lowering their price in order to attract investment). A country's debt rating is often crucial to the determination of its exchange rate as foreign investors would be less likely to own securities if the risk of default is great.

6.2.3.4 Economic growth rates and terms of trade

Nations with strong economic growth rates would attract investment (Shapiro, 2006). The demand for domestic assets would cause an increase in the demand for domestic currency. Nations with low growth prospectus can expect an exodus of potential capital investment and a weakening of its currency. Favourable terms of trade also indicate increased demand for the country's exports.

6.2.3.5 Political stability

Investors seek stable countries with no inherent political risk. Any instability would result in an immediate outflow of capital and a resultant depreciation of the domestic currency.

6.3 THEORETICAL VIEWS REGARDING EXCHANGE RATES

6.3.1 The Keynesian Perspective

The IMF considers an exchange rate regime that has unregulated capital markets (unrestricted capital mobility) and flexible exchange rates as ideal for emerging economies. Ferrari-Filho & de Paula (2009) indicate that such a regime would regard domestic financial assets as substitutes for international securities. Effective monetary policy would be determined by domestic and international interest rates, whereby monetary expansion would decrease interest rates to levels below the international norm. This, in turn, would result in capital flight and domestic exchange rate depreciation, which raises domestic interest rates until equilibrium is established in the balance of payments. Keynesian economists are of the opinion that capital management techniques and an exchange rate regime that prevents excessive exchange rate fluctuations are needed in order to achieve macroeconomic stability.

Keynes (1964) indicates that fluctuations in effective demand and the level of employment occur because investors would rather withdraw their investment in light of uncertainty. Keynes's proposals aimed at creating an international market maker

that would maintain full employment level and price stability (Ferrari-Filho & de Paula, 2009). According to Keynes, the creation of an international liquidity currency was a fundamental condition to ensure the creation of funds necessary for balance of payments adjustment and an elastic supply of money which would expand or contract with demand.

Keynes's proposals relating to the international monetary system aimed at stressing macroeconomic management instead of utilizing Adam Smith's 'invisible hand', reducing investor uncertainties in order to facilitate investment and create a flexible monetary system that would expand demand and employment globally. Keynes recommended that countries adopt a regime of fixed but adjustable exchange rates and capital controls in order to preserve the flexibility of monetary policy and expand the demand for investment.

6.3.2 Mundell-Fleming Model

The Mundell-Fleming model is an extension of the IS-LM model in an open economy. The model is often used to argue that an economy cannot maintain a fixed exchange rate, free capital movement and an independent monetary policy.

Obstfeld (2001) indicates that under a flexible exchange rate, the model predicts that an increase in money supply would shift the LM curve downward. This reduces domestic interest to rates lower than international rates, which depreciates the domestic currency. Domestic goods are cheaper as a result, leading to expanded exports and decreased imports. Increased exports causes the IS curve to shift to the right to the point where domestic interest rates equalize with international rates once again.

Any increase in government expenditure would cause local interest rates to increase above the international rate, causing capital inflows. This leads to an appreciation of the domestic currency relative to foreign currencies, thereby leading to increased imports. The IS returns to its original level as a result.

Under fixed exchange rates, the Mundell-Fleming model proposes that the central bank will adjust the exchange rate as a result of excess demand or supply for the currency. The exchange rate will be depreciated or appreciated until it reaches its

original level (Obstfeld, 2001). Increased government expenditure will shift the IS curve to the right, increasing the interest rate. The central bank would purchase foreign currencies with local currency in order to maintain the exchange rate or relieve pressure from it. This would shift the LM curve in tandem with the IS curve shift, which would increase the local money supply in the local market. The exchange rate remains the same; however, general income in the economy increases.

6.4 SYMPTOMS OF INTEREST RATE DIFFERENTIALS

6.4.1 Symptoms of High Interest Rate Spectrums in Emerging Countries

To address the impact of international capital and exchange rate volatility on economic growth in emerging countries, and specifically South Africa, the root causes of the problem of capital surges must be investigated and not the symptomatic mechanisms of the current economic dispensation. However, the structure of higher interest rate spectrums in emerging economies (compared to developed countries) has not been scrutinized to the point of being able to find the real cause.

It is important to analyze the framework of the economic system within which the South African economy is operating as a typical emerging country. Such an analysis is important to gain perspective of alternatives to the current framework.

In the preceding months of the financial crisis in 2008 the world experienced two financial storms (Wolf, 2009). The first storm was the sustained increase in international commodity prices which caused international inflation to rise. The second storm was a deflationary financial storm where the United States of America experienced a credit crunch in their financial markets with a spill over effect to European financial markets.

According to Wolf (2009), two reasons were the cause of these financial storms. The first reason is a surplus of savings which developed globally. The cause of these savings surpluses can be traced to a few countries that experienced persistent surpluses like Japan, Germany and the oil producing countries of the Middle East. Another cause is the shift of emerging countries from deficits into surpluses on their current accounts. China, as the world's largest exporter, became one of the world's biggest investors.

The second reason is the transformation that occurs in the world economy. The emerging economies are growing faster than the traditional Western countries. China as the biggest of these emerging economies is growing very fast on a sustained basis relative to the growth rates of the traditional Western countries. This faster growth of the emerging economies creates a pattern of global imbalances on balance sheets. Most emerging economies develops strong external positions which is resource driven.

According to Bernanke (2010), accommodative policies in advanced economies caused negative spillover effects in emerging economies. These policies induced capital inflows to emerging economies which caused upward pressure on emerging market economy's currencies and also threatened to create asset price bubbles in these economies. These capital flows to emerging economies was driven by perceptions of higher growth and higher interest rates that prevailed in 2010 relative to advanced economies.

Another factor according to Bernanke (2010) that caused the sustained inflow of capital to emerging economies was the incomplete adjustment of the exchange rates by the authorities of these emerging economies. Investors anticipated high returns arising from continued exchange rate appreciation. The authorities of some emerging economies intervened in the foreign exchange markets to prevent a sustained appreciation of their currencies. The authorities of emerging markets that did not intervene aggressively and allowed market forces to determine new levels experienced reduced competitiveness regarding their exports.

Monetary authorities were forced to intervene in the foreign exchange markets. On the one hand, advanced economies pursued with accommodative monetary policies to foster economic recoveries in their economies – interest rates continued to decline. On the other hand, authorities in emerging economies were forced to increase interest rates to prevent overheated economies or rising inflation in the medium term. This simultaneous decrease of interest rates in advanced economies and increase of interest rates in emerging economies lead to big capital inflows to emerging economies. Depending to what extent these authorities intervened in the foreign exchange market, emerging market currencies appreciated which reduced their net exports and current account surpluses. The emerging market economies were at a disadvantage because

these economies received sustained capital inflows which harmed their specific economic status. Most of these economies experienced appreciation of their currencies which was to their detriment. This process of capital inflows in emerging economies all began with interest rates being higher than in advanced economies.

Policymakers in the emerging countries face four different challenges (Caruana, 2011). The first challenge is about the intrinsic volatility of international financial flows. Emerging economies received foreign capital even before the crisis reached its peak in the second half of 2008. After the third quarter of 2008, emerging economies lost billions of dollars but received the bulk of those dollars again in 2009 and 2010. The main reasons for this were the robust growth in the emerging economies relative to developed economies as well as the favourable interest rate differentials. This high volatility creates financial instability in the markets and makes it difficult for policymakers to distinguish between the short term and long term nature of these flows.

The second challenge for policymakers is to avoid accommodative financial conditions in the financial markets. Weak growth prospects and historical low interest rate spectrums in the developed economies led to prolonged periods of ultra-low interest rates. This condition in the developed economies raised the attractiveness of financial assets in emerging economies.

The third challenge is that sustained inflows of capital make it difficult to pursue internal stabilization objectives. These capital inflows contribute towards credit growth in local economies as well as inflationary pressures. Policymakers are tempted to increase interest rates to avoid negative spillovers which will only suck more international capital flows. If this happens then the exchange rates will appreciate with even worse results for emerging economies.

The fourth challenge is the expectation that developed countries' short term rates will remain low for an extended period of time. This scenario attracts carry trade capital where investors borrow cheap in developed economies and invest at a healthy interest margin in emerging economies. The unwinding of these carry trade transactions causes potential and additional volatility.

As long as these ultra-low interest rate spectrums prevail in developed economies, policy makers in emerging economies will experience extreme difficulty to create sustainable financial stability in their local financial markets. It is also difficult for policy makers to distinguish between longer term investments and short term hot money investments. In the next section inflation - and interest differentials will be analyzed since the beginning of 2008. The sustained higher nominal interest returns for foreign investors in emerging economies is discussed.

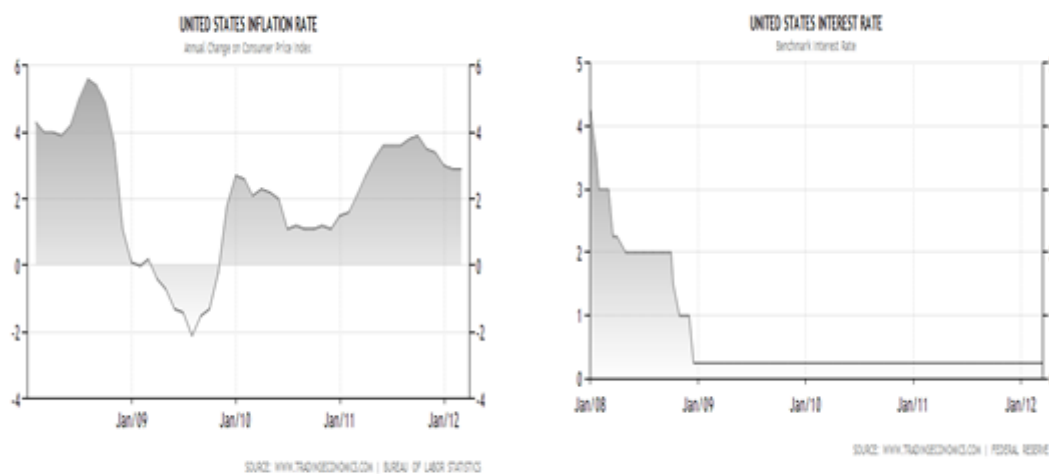
6.4.2 Inflation Statistics of USA and Europe versus BRICS Countries

In the graphs that follow below distinct comparisons between inflation rates and nominal interest rates are highlighted. These comparisons are done for three developed economies. A similar comparison will follow for the BRICS countries.

In the first analysis of the developed economies three distinct conclusions are derived. Firstly, the inflation rates declined substantially after the outbreak of the financial crisis in 2008. Secondly, interest rates declined substantially because of stimulatory monetary policy. Thirdly, interest rates continued to stay at record low levels for a long time indicating that the global recovery is very slow.

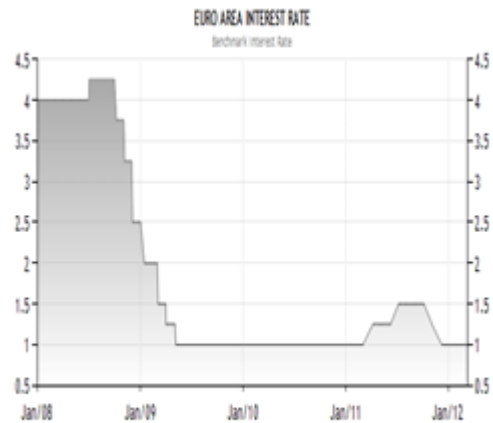
6.4.2.1 Inflation and interest rate comparison of developed economies since 2008

Figure 6.1: Inflation rates for USA, Europe and Japan





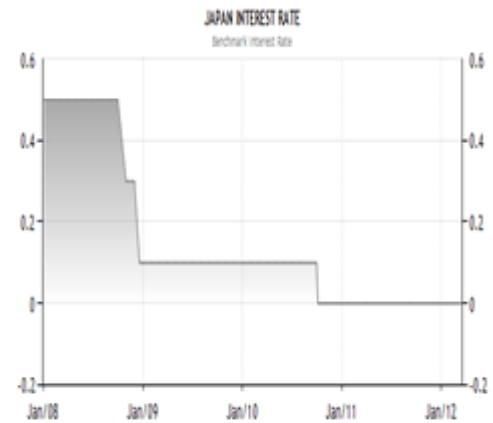
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SOURCE: WWW.TRADINGECONOMICS.COM | BANK OF JAPAN

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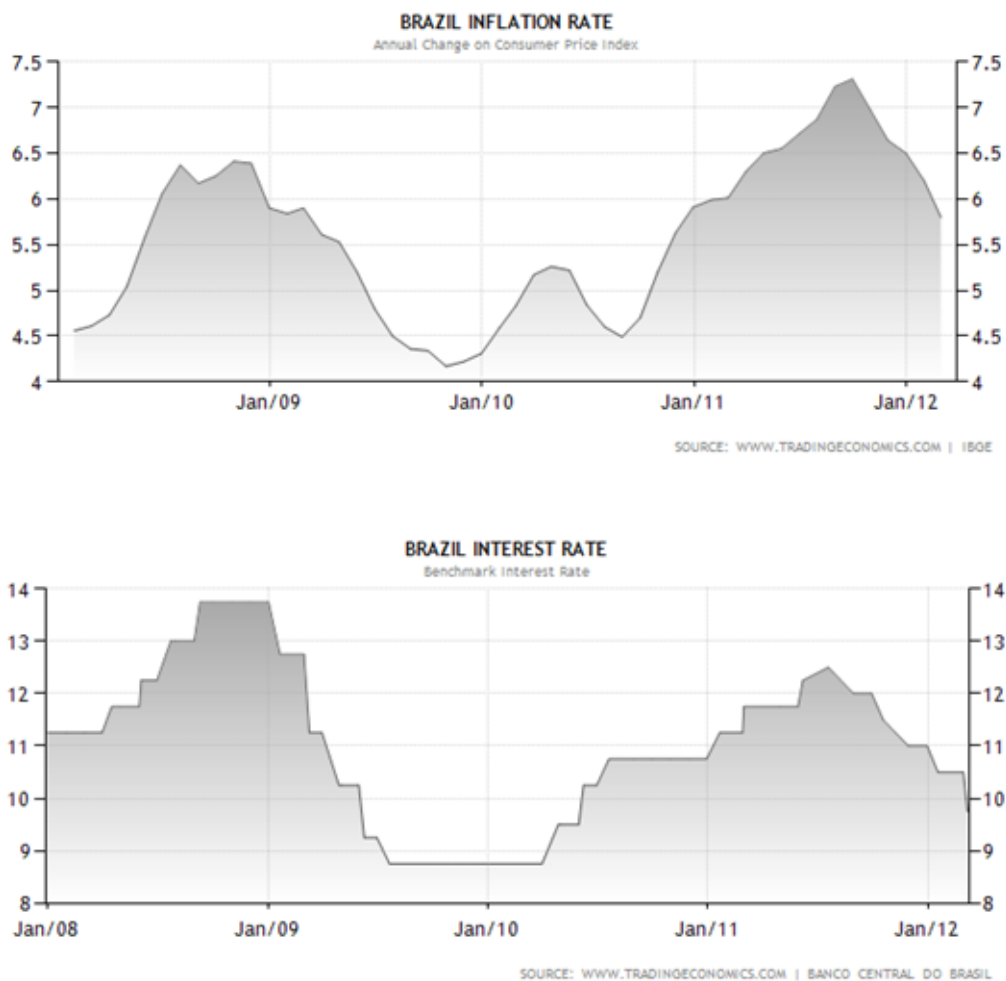
6.4.2.2 Inflation and interest rate comparison of BRICS economies since 2008

In the second analysis of the BRICS economies seven distinct conclusions are derived. Firstly, the inflation rates declined substantially after the outbreak of the financial crisis in 2008. Secondly, interest rates declined substantially because of stimulatory monetary policy. Thirdly, when the collapse occurred in the second half of 2008, these countries' exchange rates depreciated because of an outflow of capital. Fourthly, these economies experienced a massive appreciation in 2009 because of capital surges. Fifthly, the inflation rates of these economies continue to be at higher levels than the developed economies which caused higher interest rates to prevail. Sixthly, some of these emerging economies experienced higher interest rates as part of policies to adjust to capital surges and higher growth and inflation pressures relative

to developed economies. Seventhly, these economies experienced a turnaround of capital surges late in 2011 because of problems in Europe which caused their exchange rates to depreciate again. These effects were muted in China because of their managed exchange rate system.

Brazil

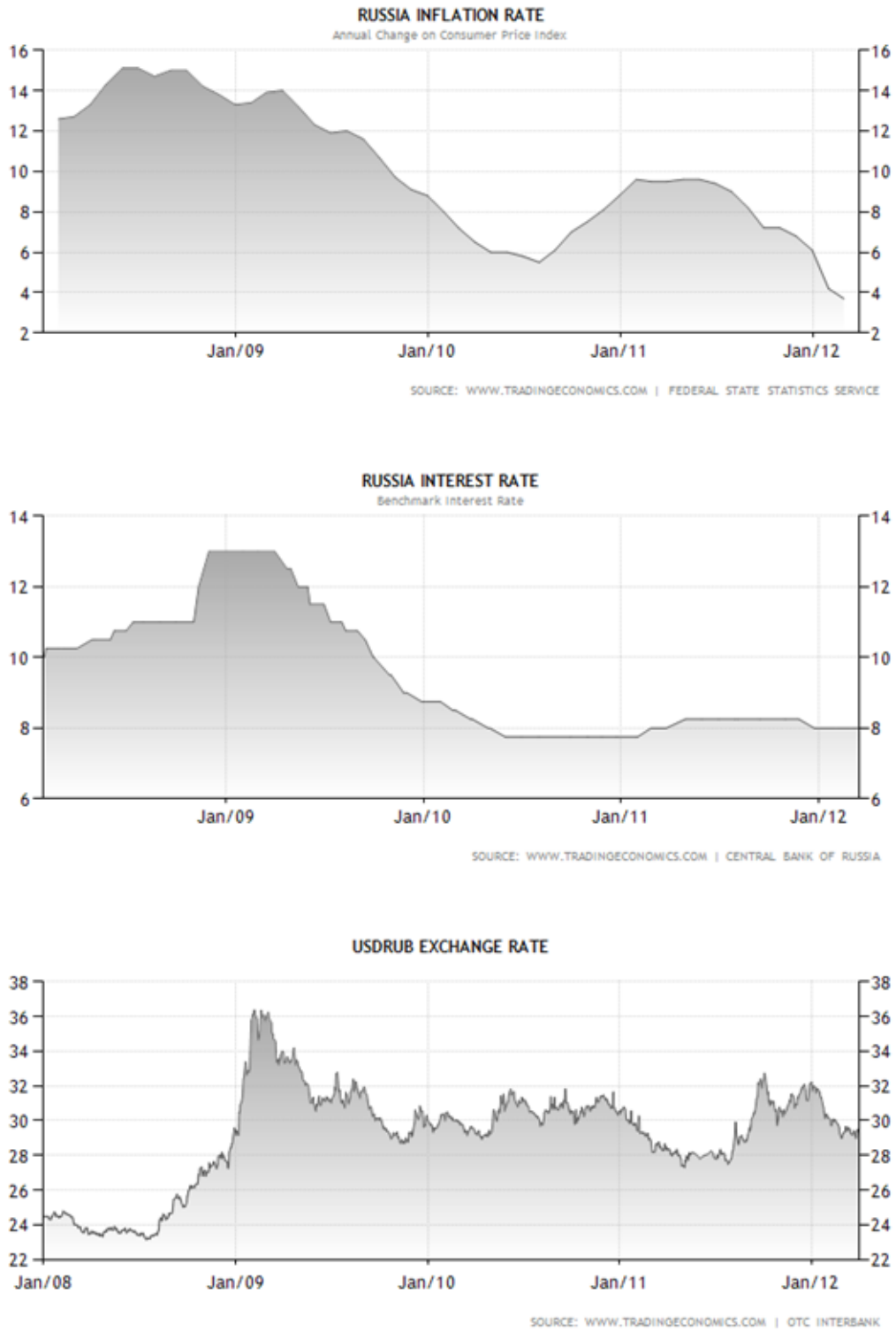
Figure 6.2: Brazil: Inflation rate versus interest rate



Source: Trading Economics.com

Russia

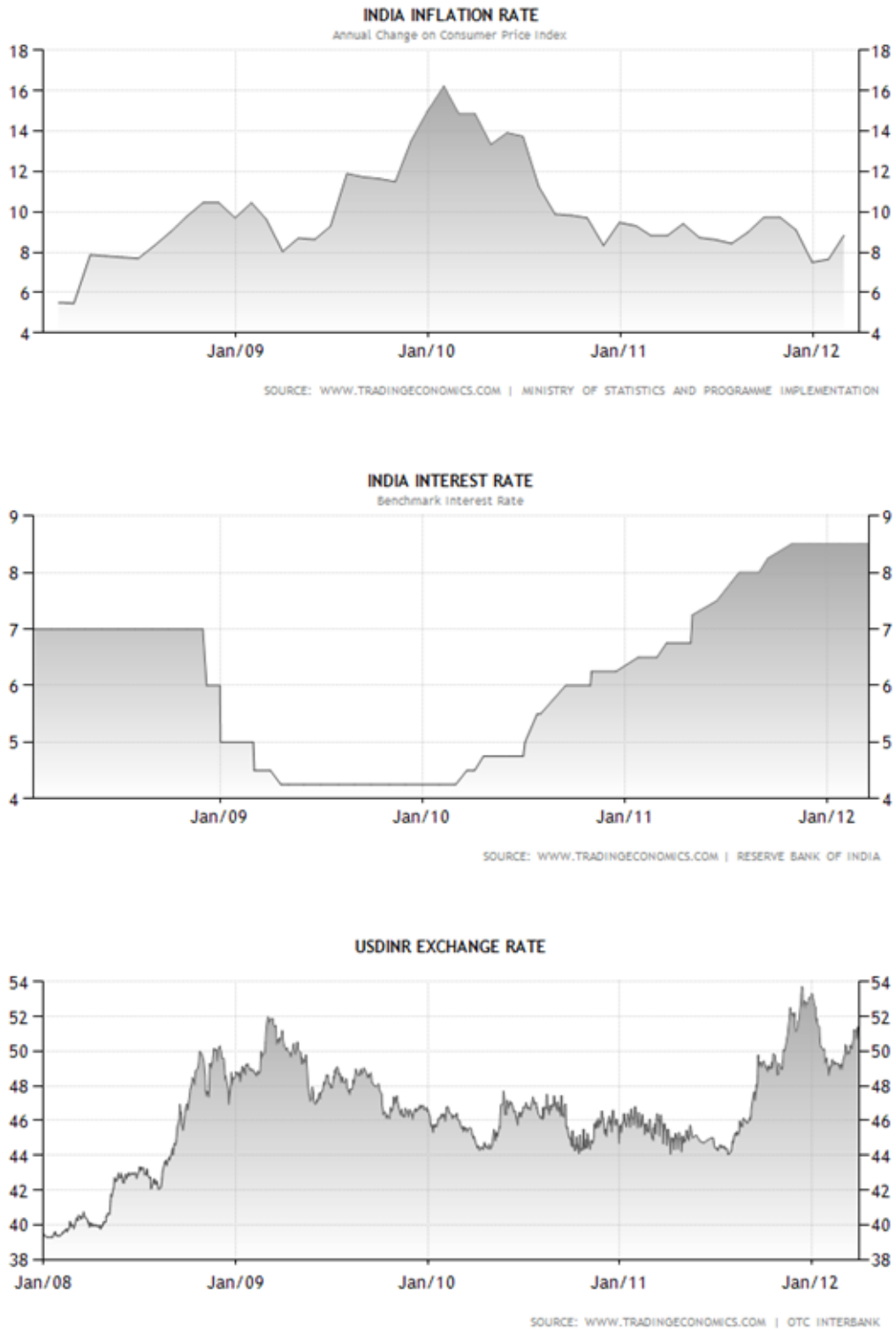
Figure 6.3: Russia: Inflation rate versus interest rate



Source: Trading Economics.com

India

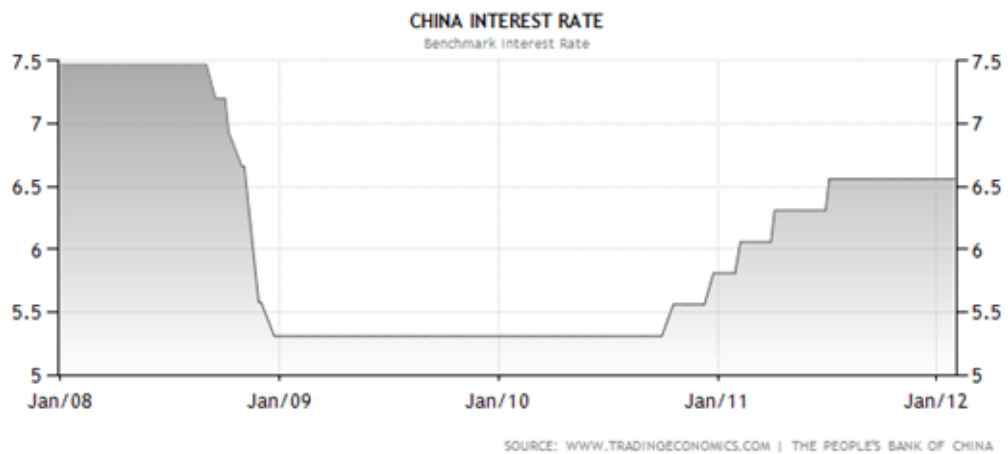
Figure 6.4: India: Inflation versus interest rate



Source: Trading Economics.com

China

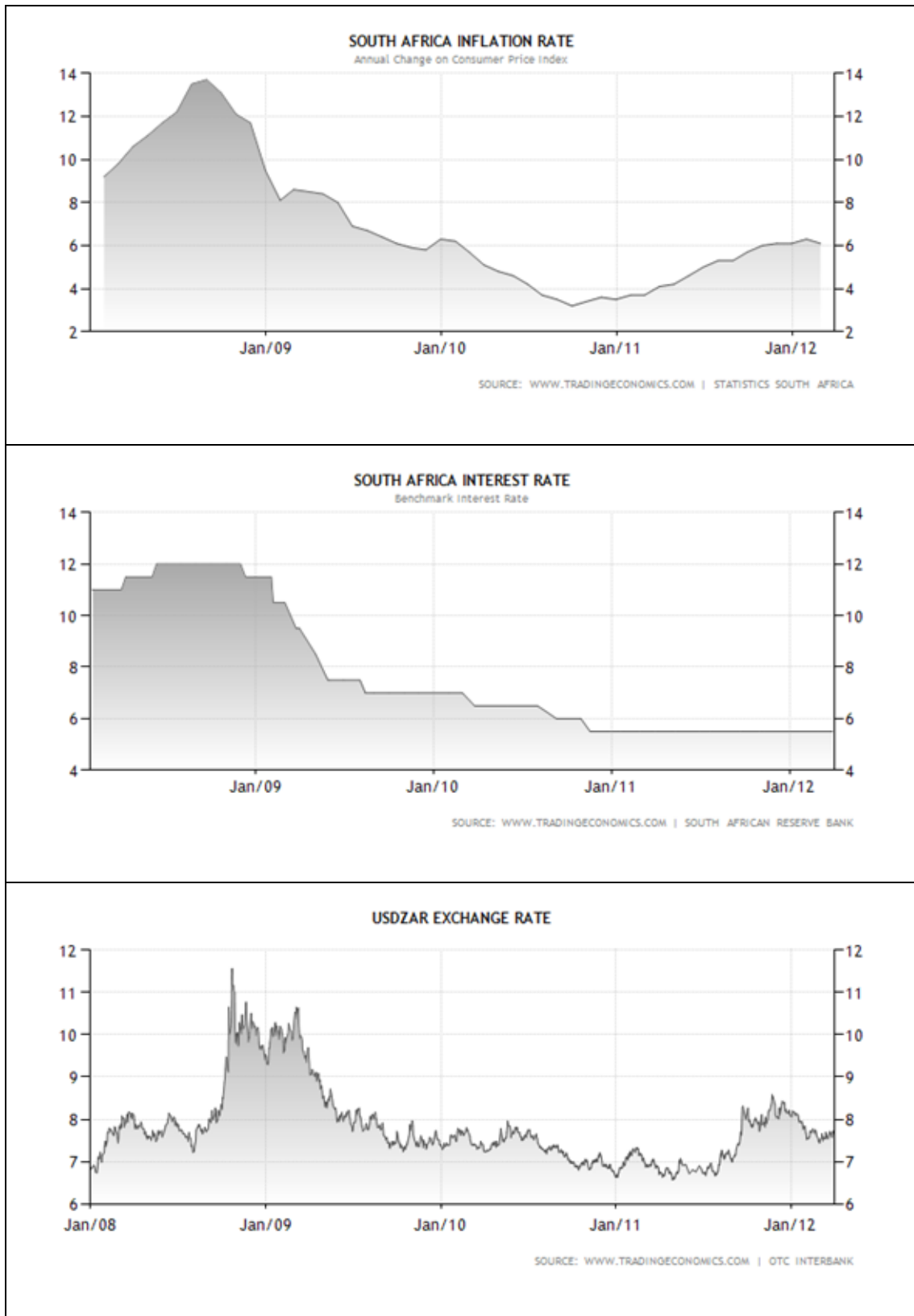
Figure 6.5: China: Inflation versus interest rate



Source: Trading Economics.com

South Africa

Figure 6.6: South Africa: Inflation versus interest rate



Source: Trading Economics.com

Interest rates continued to stay at record low levels in developed economies because of very loose monetary policies. Interest rates in all the BRICS economies were higher on a sustained basis than in the developed economies and some of the BRICS monetary authorities increased interest rates as part of their policy kit to manage capital surges and to address rising inflation pressures. As long as these positive interest rate differentials exist between developed economies and BRICS economies it will be attractive for foreign investors to invest in these BRICS economies. The root cause of these investments is exogenous and very difficult for the BRICS authorities to manage.

6.5 SOUTH AFRICAN INFLATION RATE

6.5.1 Analysis of South African Scenario

The author analyzed the South African inflation scenario and found numerous aspects which must be addressed to reduce inflation and thus also the nominal interest rate spectrum. Firstly, SARB inflation research will be referred to. The persistence of inflation is determined by how effective monetary policy and fiscal policy address inflationary pressure in the economy. Policy measures must also address second round price effects before these effects increase inflation (Anon, 2010a). These statements are questionable. Reason being, that SARB acknowledge that inflation is persistent in the South African economy and that no other policy measures are referred to than only monetary policy and fiscal policy. Furthermore, that SARB must address second round effects before these effects take place. These second round effects are normally associated with a cost push inflation scenario, because according to theory an adjustment in the repo rate will not affect first round effects of cost push inflation. Therefore, the measurement of these second round effects and the timing of monetary policy measures are questionable.

Secondly, administered prices will be addressed. Administered prices are defined as prices that are determined by government or through a government agency without any reference to market forces (Anon, 2010). Administered goods and services comprise 17.89% of the 2008 headline CPI basket according to (Anon, 2010). The following administered prices are included in the new CPI basket which is calculated since January 2008:

- Housing (sanitary fees, refuse removal, assessment rates, water and university boarding fees);
- Fuel and power (electricity and paraffin);
- Medical care (public hospitals);
- Communication (telephone calls, telephone rental and installation, postage, cell phone connection fees and calls);
- Education (school fees and university, technicon and college fees);
- Transport (petrol, public transport – municipal buses and trains, motor licenses and registration), and
- Recreation and entertainment (television license).

Table 6.3: CPI excluding administered prices

Year	Index/ rate	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave- rage [1]
2008	Index	96.00	96.50	97.70	98.10	98.60	99.90	100.50	101.20	102.20	102.70	103.00	103.60	100.00
	Rate	.	.	.	.	.	.	.	.	.	.	.	.	.
2009	Index	104.70	105.80	107.00	107.40	107.80	108.20	108.50	108.80	109.10	109.30	109.30	109.50	108.00
	Rate	9.10	9.60	9.50	9.50	9.30	8.30	8.00	7.50	6.80	6.40	6.10	5.70	8.00
2010	Index	109.90	110.60	111.40	111.40	111.50	111.70	111.60	111.70	111.90	112.20	112.20	112.40	111.50
	Rate	5.00	4.50	4.10	3.70	3.40	3.20	2.90	2.70	2.60	2.70	2.70	2.60	3.20
2011	Index	112.90	113.60	114.70	114.80	115.30	115.90	116.30	116.40	116.90	117.50	117.70	.	.
	Rate	2.70	2.70	3.00	3.10	3.40	3.80	4.20	4.20	4.50	4.70	4.90	.	.

Source: Department of Statistics

Table 6.4: CPI for regulated administered prices

Year	Index/ rate	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average [1]
2008	Index	90.00	90.70	93.60	96.70	99.20	101.60	109.40	109.20	106.10	105.00	102.90	95.70	100.00
	Rate	.	.	.	.	.	.	.	.	.	.	.	.	.
2009	Index	89.40	92.10	94.20	95.70	95.60	96.20	103.90	104.30	105.80	104.00	104.00	105.30	99.20
	Rate	-0.70	1.50	0.60	-1.00	-3.60	-5.30	-5.00	-4.50	-0.30	-1.00	1.10	10.00	-0.80
2010	Index	104.90	105.80	105.80	108.00	108.70	107.40	112.60	112.80	112.40	112.60	113.50	114.10	109.90
	Rate	17.30	14.90	12.30	12.90	13.70	11.60	8.40	8.10	6.20	8.30	9.10	8.40	10.80
2011	Index	115.50	116.70	118.70	121.20	122.50	122.50	127.80	128.60	129.00	130.80	131.80	.	.
	Rate	10.10	10.30	12.20	12.20	12.70	14.10	13.50	14.00	14.80	16.20	16.10	.	.

Source: Department of Statistics

By comparing Tables 4 and 5, it is clear that administered prices since 2010 influenced the CPI negatively with the exception of 2009. This exception was caused by the appreciation of the rand currency (refer to South African graphs). The CPI for the different years since the implementation of the new index and base year was as follows: 7.1% for 2009, 4.3% for 2010 and 5.0% for 2011 (Department of Statistics, 2012). A disturbing fact is that the negative influence of administered prices is escalating.

The monetary authority addresses increases in administered prices by voicing their opinion on increases. According to Anon (2010a) the *“monetary authorities may endeavour to achieve a “buy-in” from other entities in the economy to try and avert unwarranted administered price increases. The only “instrument” immediately at the disposal of the monetary policy authority in dealing with administered price adjustments is moral persuasion. The effectiveness of such intervention is subject to the political will of all concerned”*. This policy strategy is clearly not a recommended method to get the political will changed of other government departments. The problem here may be not only a lack of political will, but also a lack of economic literacy.

An economist of Investec Bank in South Africa, Annabel Bishop, stated that lower inflation is possible if increases in administered prices can be mitigated (Van Zyl, 2012). According to Bishop, several reasons cause high administered prices that prevail in South Africa. Examples are squandering, inefficiency and corruption of government and semi government institutions and the fact that South African consumers are penalized with high tariffs to pay for capital expenditure of semi government institutions like Eskom. In addition to the high tariffs, consumers carry the burden of the government through subsidization of free electricity for the low income groups in South Africa. The use of government property for personal use by government officials is another example of inefficiency. Lastly, proper management of costs will filter through to consumers by means of lower prices for government services which are not the case. According to this analysis, various examples exist for government to reduce administered prices. But the question is if the political will and economic literacy of government officials exist to implement these changes.

Thirdly, the methodology and bias of the current CPI basket must be addressed. According to Anon (2010) if “*an index is not regularly rebased when a fixed-weight methodology is used, a substitution bias will emerge where high inflation items have a higher effective weight over time, which places an upward bias on inflation. This means that simply rebasing the CPI series (without changing the weights or basket of goods) should have a downward impact on overall inflation. Based on May 2008 inflation numbers, it is estimated that the rebasing of the index alone can reduce total inflation by about 1.2 percentage points. Estimates show that the reweighting exercise has reduced overall inflation further by about 2.0 percentage points at current levels of food and petrol price inflation, at the time of analysis in May 2008*”. According to this research done by the South African Reserve Bank the interval of years between rebasing and reweighting must be reduced without a shadow of a doubt.

Fourthly, research done in respect of the repo rate elasticity will be referred to. The Bureau of Market Research of the University of South Africa has done research about the impact of interest rates on inflation and unemployment. Two types of analysis were done to determine which prices in the CPI basket are sensitive to changes in the repo rate. The elasticity research revealed that 53% of the prices of products in the CPI basket are insensitive to and changes in the repo rate (Van Aardt *et al*, 2011). This denominator increases to 73% if the prices of products with small elasticity are added if the repo rate changes.

This research has shown that a number of interest rate changes must be initiated by SARB to have any meaningful impact on prices and therefore inflation. The results further proved that prices of products in the CPI basket are more likely influenced by other factors such as a change in the exchange rate, price changes of international commodities, administered price changes and competitive pricing practices. According to (Van Aardt *et al*, 2011) the results clearly shows “*that traditional macro-economic policy whereby the Minister of Finance sets the inflation target and then leaves it to the Reserve Bank to achieve the target via the use of interest rates, are not yielding results a country such as South Africa – with a very high unemployment rate and high rates of interest rate inelastic prices – deserves. The Reserve Bank cannot be held solely responsible for achieving the inflation target. Government must also play its part by keeping administered price increases as low as*

possible via efficiency gains, whilst structural inflation must be eliminated via among others fierce competition policy. South Africa has a large component of structural inflation that cannot be eliminated via higher interest rates”.

Fifthly, Glenn Rudebusch, senior vice-president of the Federal Reserve Bank of San Francisco, developed another method to determine the optimal level of interest rates (Rudebusch et al, 1998). These researchers used the Taylor rule to evaluate the weights that monetary policy apply to address inflation and unemployment. Two gaps are analyzed, namely how the monetary policy authorities should change the real interest rate if inflation misses its target and if GDP misses potential GDP (Van N Fourie et al, 2009).

The research done in the USA was for three different periods when the Federal Reserve Bank had three different chairmen. This rule recommends a high real rate when the inflation is above its inflation target and if the economy is at potential or full capacity. If the inflation rate is within the target range and the economy experiences high unemployment, then the real interest rate level must decrease substantially.

The Bureau of Market Research at UNISA applied this equation for the South African circumstances (Van Aardt et al, 2011). In this South African scenario the researchers addressed inflation and unemployment as two equal goals of monetary policy. Unemployment was not addressed as a subordinate target relative to inflation as is the case in the South African monetary policy. The expanded unemployment rate was used because the researchers felt that the expanded unemployment rate is a true reflection of unemployment in South Africa and no specific target range was used for inflation. The results for 2011 was startling, namely that the prime rate should have been 5.2% rather than the 9% that prevailed. This research proved that the interest level in South Africa is too high if specific circumstances are addressed, namely exceptional high unemployment.

Lastly, various structural problems exist in the South African economy that causes inflation to be higher than it should be if a developed scenario prevailed. Almost all of these factors are labour related, namely low productivity, inadequate skills levels, high cost of labour relative to the competitors of South Africa and labour unions that is politicized. The labour laws that are inflexible can also be added. These labour

related factors cause higher production costs which also reduce the South African competitiveness of exports. Various reports emphasize these facts, for example the selected country report done by the IMF (Coorey *et al.*, 2008). According to this country report the real growth rate can be three percent higher if the productivity growth was the same as countries in the panel research done by the IMF and nearer to its potential.

6.5.2 New Application of Old Theories for South Africa

The chief economist of the IMF, Oliver Blanchard, admitted during 2011 that macroeconomic policies are inadequate after the 2008 financial crisis to deal with the economic problems of the world (Blanchard, 2011). He stated that monetary policy is not only about inflation stability anymore and output and financial stability must be added. Many policy instruments are available, for example macro prudential measures in addition to monetary and fiscal policy measures. The question however is the uncertainty of policy makers to use these instruments in the correct mix. The crisis questioned the beliefs of authorities to conduct the different policies. Blanchard elaborated that new distortions in macroeconomics developed, more distortions than authorities believed before the crisis existed. Behavioural economics and behavioural finance are perfect examples of new fields of research which must be added to the scope of authorities to address instability in the financial markets.

According to Blanchard (2010) it is easy to identify the flaws of existing policy. The financial crisis taught policy makers that macroeconomic policy must address numerous targets. The problem however is to identify the correct mix of policy instruments and regulatory instruments towards multiple targets. Many questions about future policy application require substantial research to address the probable solutions to improve financial stability in the markets. Examples of probable questions are: should the inflation targets of countries be raised; how should monetary and regulatory policy be combined; how should inflation targeting and foreign exchange intervention be combined; how should liquidity be provided by the central bank; should fiscal space be created during good times and which automatic fiscal stabilizers are required?

One of the outcomes of the financial crisis is that very big capital flows were triggered towards emerging economies. These capital flows may be beneficial at times for some receiving countries, but surges in capital inflows to emerging economies carries different risks for such economies and the management of this increased liquidity in the financial systems (Strauss-Kahn, 2011). Such capital surges pose various challenges for the policy makers such as how to cope with the currency appreciation and such surges may also create asset price bubbles and increased credit growth. The sudden reversal of these inflows also causes big challenges for policy makers. South Africa and all the BRICS countries (except China because of their managed exchange rate dispensation) experienced such outflows during the second half of 2011 which caused the exchange rates to depreciate again.

The questions to address these capital surges are numerous. More examples of probable questions are: how should policy makers employ capital control measures; when and how much reserves should be accumulated; should countries employ their own measures and should there be international rules that emerging countries must abide to? The managing director of the IMF stated what is probable (Strauss-Kahn, 2011). The authorities of different countries should apply the following principles when employing policies. Firstly, no policy measure fits all countries because of the specific state of each economy. Secondly, structural reforms to increase the capacity of domestic capital markets should be encouraged. Thirdly, correct macro policies should be pursued all the time. Fourthly, capital controls should be part of each policy toolkit. Fifthly, policies should be applied to address the specific financial instability concerns and must be withdrawn again when the instability recedes. Lastly, policies applied in specific countries must not discriminate against other countries. These principles may be true, but it is vague and general. It does not give a BRICS country policy authority the specific tools to address capital surge inflows or outflows.

Policymakers face numerous questions and uncertainties about policy application to address capital surges as well as the sudden reversal of these inflows. If policy makers address capital surges the root causes of the capital volatility between developed and emerging countries are not addressed. As policymakers apply instruments and combination of instruments, the symptoms of capital surges and reversals are addressed. The root cause of the problem of capital surges is not addressed in the

research of various international institutions namely the structure and level of higher interest rate spectrums in the different emerging economies.

The interest rate spectrum in all the BRICS countries are higher than in the developed economies (refer to section 6.4). All the BRICS countries experienced capital surges because of their higher interest rate spectrum. If the interest levels of these economies were much lower or the same than the interest rate levels in the developed economies the magnitude of the capital surges would be negligible. The negative impact on the local economies for example exchange rate volatility and the policy challenges to address such volatility would also be much less.

The researchers analyzed the core reason why interest rate differentials exist in South Africa relative to developed economies, namely a higher inflation rate. The solution to reduce the negative impact of capital surges lies with inflation management in each BRICS country. This research focused on the South African inflation scenario. Numerous reasons for the higher inflation in South Africa were analyzed in section 6.5.1. A similar study can be conducted for each of the other BRICS countries.

The traditional method to address a rising inflation rate is contractionary monetary policy. The traditional tactic is to increase interest rates to address the first round effect of demand-pull inflation or the second round effect of cost-push inflation. As interest rates increase the demand is curbed and the rising trend of inflation comes to an end. But if the South African monetary policy makers increase the repo rate, the interest rate differential relative to developed countries will increase. The researchers indicated in section 6.5.1 that the cause of inflation after the 2008 financial crisis is not demand-pull inflation. The cause is rather structural and of a cost-push nature. Empirical tests proved to distinguish between the first and second round effects of any supply shock is difficult which hampers the response of policy makers (Cuevas *et al.*, 2008).

The underlying factors and propagating factors which cause a higher inflation in South Africa must be addressed (Van N Fourie *et al.*, 2009). To address the higher inflation in South Africa relative to developed economies, a structuralist approach is necessary. A coordinated strategy of monetary policy authority, labour, other semi government institutions and other policy makers is necessary to reduce the inflation

level. The likelihood that such a structuralist approach will occur in South Africa is slim. The scope for the monetary authority to address a declining income and gross domestic product because of supply shocks is also limited. The theory of the augmented Phillips curve verifies that a sustained output is achieved at a higher inflation rate (Van N Fourie *et al.*, 2009). A new tactic is needed to reduce inflation and thus interest rates.

A new inflation index is proposed to reduce the negative impact of capital surges in the South African economy. The monetary policy makers use a new CPI index since January 2008. Various problems with this index were highlighted in section 6.5.1, for example the negative impact of administered prices, the 53% inelastic nature of the prices in the basket and several other structural problems of the South African dispensation. A new CPIX index is proposed which will exclude all exogenous factors which the monetary authorities cannot manage with traditional interest rate management.

The Bank of Canada adopted a new measure of core inflation when the inflation targets were renewed in 2001 (Macklem, 2001). The new CPI measure excludes the eight most volatile components from the basket and also adjusts the remaining components for the effect of changes in indirect taxes. This new measure of inflation measurement has a firmer statistical basis, an improved correspondence with economic theory and also predicts future inflation better than the previous index. This kind of new index is needed in South Africa which will exclude the administered prices and structural problems which traditional monetary policy cannot address. A monetary policy stance with a new index is necessary to reduce the interest rate spectrum in South Africa.

6.6 CONCLUSION

The financial crisis of 2008 influenced the international economic environment in many ways. A few examples are capital volatility, exchange rate volatility, destabilized capital balances, high unemployment and rethinking of policies. Since the crisis monetary policy authorities had to look broader than inflation stability and have to address financial instability as well. Monetary policy authorities therefore have to address numerous targets and have to apply a new mix of policies. Existing policy

measures is challenged and the outcome of new combinations of policies are in uncertain territory.

Various negative consequences developed for example BRICS countries that experienced capital surges because of very loose monetary policy in developed economies. Examples of problems are high levels of government debt and big budget deficits which hamper a continuous counter cyclical fiscal policy application. Very high unemployment in the world and policy challenges to reduce unemployment to normal levels again will also be part of international agendas for a long time. Any new policy mix of policymakers was not part of this research.

The rethinking of inflation theory to address the capital surges which emerging economies face is of utmost importance. The solution to reduce the negative impact of capital surges lies with inflation management in each BRICS country. This research focused on the South African inflation scenario. The reasons why international investors invest in South Africa and other BRICS countries are of an exogenous nature. Existing policies can only influence the outcome, but cannot address the source of the investment.

A new inflation index is proposed for South Africa to reduce the negative impact of capital surges in the South African economy. The high interest rate spectrum and the core reason for attracting foreign capital are addressed. The root causes of the capital surges were investigated and not the symptomatic mechanisms to reduce the impact of capital surges. The new index which excludes all exogenous factors will allow National Treasury to introduce a much lower inflation target for the monetary authority to manage. The interest rate differential of South Africa will narrow significantly relative to developed economies. If the government can buy in towards a coordinated structuralist approach, the outcome will improve so much more. Other countries have a broader policy application, namely where industrial, labour and competition policies are coordinated towards the combat of inflation.

This reduced interest spectrum will also bring other advantages. The difficulty to introduce new policy instruments or a new policy mix to address imbalances will reduce. A lower interest rate spectrum will also cause significant other macroeconomic benefits. A lower interest rate will stimulate real growth, increase

employment opportunities and contribute towards a reduction in poverty. Similar research can be done for the other BRICS countries. If the interest rate spectrum can be reduced in all the emerging economies, the world will be a better place to live in. The positive outcomes will be higher growth in the world, reduced unemployment and also a reduction in poverty levels.

CHAPTER 7

THE COUNTER-CYCLICAL CHALLENGES OF FISCAL POLICY IN SOUTH AFRICA

7.1 INTRODUCTION

The world experienced a global financial crisis in 2008. The negative effects of the global crisis could not be resolved through the application of monetary policy, exchange rate policy and macro prudential policy alone. A stable exchange rate, inflation rate and overall financial stability are all needed in the application of the macro toolkit of policy makers. Counter-cyclical fiscal policy was also needed to coordinate with abovementioned policies in order to create economic stability and growth. The application of all these policies influences each other and contributes to the success of economic stability in any economy.

Each policy has its own challenges however. Debate prevails in the international markets regarding the degree of policy instruments applied and the mix of these instruments to create maximum financial stability. In this article, the causes and challenges of high government debt created by counter cyclical fiscal policy are highlighted. High government debt neutralizes the sustainability of a stimulatory stance of fiscal policy which is needed in the world.

Fiscal policy should aim to reduce debt in good times to the international norm of 2 – 3% GDP (Mohr, 2004:404). The G-20 countries and the IMF advised its members to apply counter-cyclical policy since the end of 2008 to reduce the negative impact of the global crisis. All the member countries increased their government spending as part of their macro tool kit to reduce the negative consequences of the global crisis. The result of this increased spending is well known. The recovery in the world is very slow and increased growth rates worldwide are not sustained.

The soaring government debt is a new challenge that developed and caused other problems for policymakers to address. The debt levels of the United States of America and European countries, which are well above the international norm, are a prime example. Debt levels also soared in South Africa. However, there is another reason

for concern. The main cause for the increase in South African government debt is a soaring wage bill and escalating social grants. This soaring debt, caused by incorrect spending policies, is investigated which neutralizes the desired effect of a sound counter-cyclical policy. This soaring debt increases the financial instability and reduces the creditworthiness of South Africa. The rethinking of economic theories and policy advice for South Africa in the wake of the global crisis is debated to reduce the negative consequences of soaring debt.

The background of the high government debt problem is firstly debated. Secondly, the proposals of the G20 countries are debated from a fiscal policy perspective to counter the negative consequences of the international recession which developed in 2009. Thirdly, the current stance of government debt, as at the beginning of 2012, is analyzed. Fourthly, comparisons amongst the developed countries and the BRICS countries indicate the severity of the international debt problem. Lastly, the specific debt scenario of South Africa is analyzed. A new approach is required with regard to counter cyclical fiscal policy and application of old theories to prevent future generations suffering from the fiscal mistakes of the government.

7.2 GROUP OF TWENTY COUNTRIES (G20)

According to the Washington Summit declaration (G20, 2008), authorities in developed countries did not address all the risks in the financial markets and did not keep pace with financial innovations. Other factors, for example macroeconomic policies which were not coordinated in countries and structural reforms which were inadequate in various countries, contributed to the global crisis.

Authorities all over the world had to take swift action when the crisis erupted. Governments took over financial institution debt, assisted banks to recapitalize and introduced stimulatory policies to revive demand. The IMF advised advanced countries to introduce large and lasting fiscal stimulus programs (Ghosh, 2009). The IMF indicated that these sustainable fiscal stimulus programs had to be coordinated across countries with a commitment to increase stimulus if the crisis deepened.

The G20 countries held several meetings after the outbreak of the global crisis in 2008. The following press release was issued after the first meeting in Washington (G20, 2008): “*We have taken strong and significant actions to date to stimulate our*

economies, provide liquidity, strengthen the capital of financial institutions, protect savings and deposits, address regulatory deficiencies, unfreeze credit markets, and are working to ensure that international financial institutions (IFIs) can provide critical support for the global economy.use fiscal measures to stimulate domestic demand to rapid effect, as appropriate, while maintaining a policy framework conducive to fiscal sustainability”.

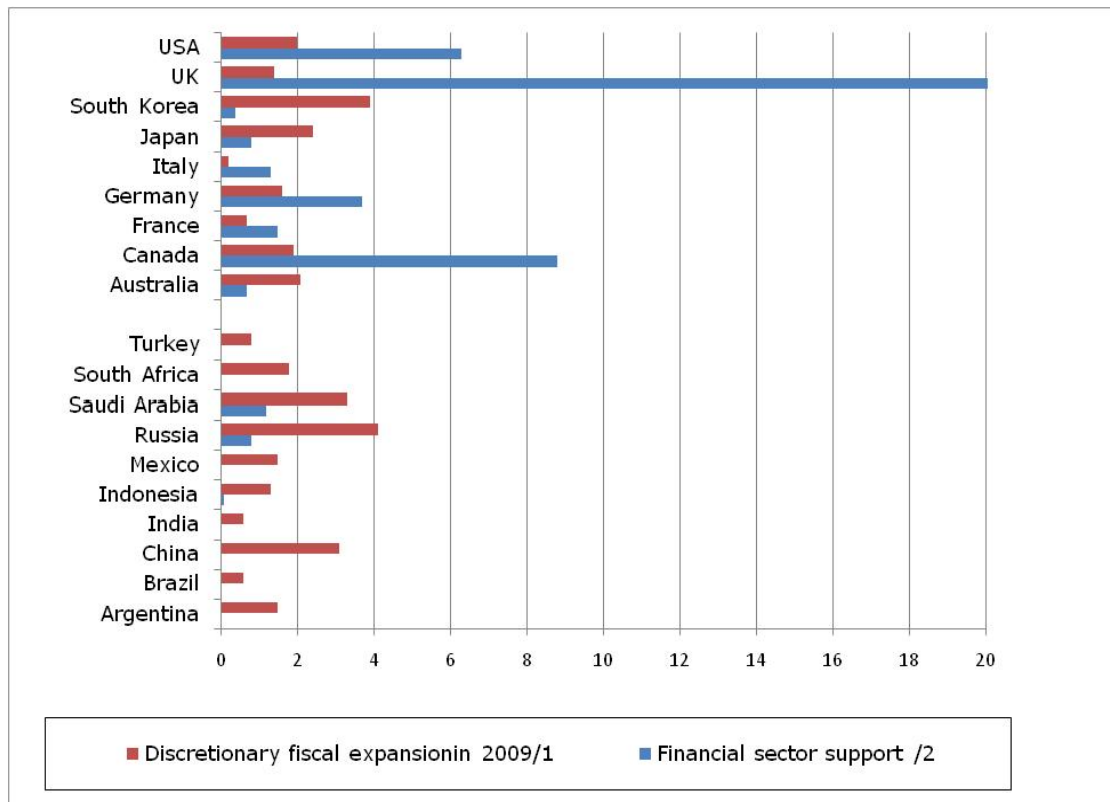
The following press release followed after the third G20 meeting in Pittsburgh (G20, 2009): “.....we reviewed the progress we have made since the London Summit in April. Our national commitments to restore growth resulted in the largest and most coordinated fiscal and monetary stimulus ever undertaken. The growth of the global economy and the success of our coordinated effort to respond to the recent crisis have increased the case for more sustained and systematic international cooperation. In the short-run we must continue to implement our stimulus programs to support economic activity until recovery clearly has taken hold”.

The global financial crisis led to an increase in public debt of advanced economies. In addition to the stimulus programs of advanced economies, emerging economies also implemented fiscal stimulus policies which led to increased public debt. Various emerging economies faced constraints on their fiscal space, namely to finance an increasing deficit without an increased borrowing cost. This constraint on the fiscal space of emerging economies limits their authorities to pursue fiscal expansion. The risk of such stimulation is that any adverse development in their financial markets will force their authorities to reconsider or reverse their sustained stimulation.

The following press release followed after the sixth G20 meeting in Cannes (G20, 2011): “Global growth has weakened, downside risks have heightened, and confidence has waned. Uncertainty over the sustainability of public debt levels in some advanced economies has increased and the rebalancing in demand from the public to the private sector and from the external to the domestic sector has not materialized. In Europe, sovereign debt risks in some countries have generated a difficult dynamic of rising interest costs and stresses in the banking system, which are now weighing on confidence and real activity in the euro area. Growth in the euro area is now projected to be weaker and unemployment higher”.

“In the US, the recovery has been shallower than expected. The desired rebound in private demand has not materialized due to a combination of weak job growth, the ongoing correction in the housing sector and the associated rebuilding of household balance sheets. In emerging markets, there are also clear signs of a slowing in growth as developments in advanced economies begin to weigh on these countries”.

Figure 7.1: G20 countries fiscal stimulus and financial sector support



Source: World Bank (2009)

In Figure 7.1, the fiscal stimulation and financial sector support of the G20 countries is summarized. The average discretionary fiscal expansion for advanced economies amounted to 1.5% of GDP in 2009. The average financial sector support amounted to 5.4% of GDP in 2008. The average discretionary fiscal expansion for emerging economies amount to 2.0% of GDP in 2009 (World Bank, 2009). The financial sector support was far smaller than in advanced economies and again expressed in % of GDP for 2008. Financial sector support consisted of any capital injection by the authorities, purchase of assets and lending by treasury departments and any central bank support.

The G20 member countries agreed to implement a mix of measures to secure recovery in the world again. The short term policy measures included monetary policy stimulation or easing, the recapitalization of financial institutions, fiscal policy stimulation, bailout of corporate sector institutions by different authorities and the supply of liquidity by international financial organizations. In addition to these measures the G20 member countries agreed to improve regulatory control of their financial systems. The longer term issues that developed after the application of these policy measures are global imbalances, accumulation of government debt in various countries, currency volatility as balance sheets were adjusted in various countries and complex policy measures to bring to a close the recovery world wide (World Bank, 2009).

7.3 ANALYSIS OF GOVERNMENT DEBT

The general government gross debt as percentage of GDP is reflected in Table 7.1. A selection of advanced countries (G7) and BRIC countries data indicates, with the exception of India, that gross debt has increased since the global financial crisis erupted. The advanced countries ratios are in excess of the international norm of 60% of GDP. The same ratio for the BRIC countries occurred, with the exception of Russia and China. The data of the IMF is actual figures for 2008 – 2011 and estimated figures for 2012 – 2013.

Table 7.1: General government gross debt (% of GDP)

Countries	2008	2009	2010	2011	2012	2013
United States	76.1	89.9	98.5	102.9	106.6	110.2
France	68.3	79.0	82.4	86.3	89.0	90.8
Germany	66.7	74.4	83.2	81.5	78.9	77.4
Italy	105.8	116.1	118.7	120.1	123.4	123.8
Spain	40.2	53.9	61.2	68.5	79.0	84.0
United Kingdom	52.5	68.4	75.1	82.5	88.4	91.4

Countries	2008	2009	2010	2011	2012	2013
Canada	71.1	83.6	85.1	85.0	84.7	82.0
Japan	191.8	210.2	215.3	229.8	235.8	241.1
Brazil	63.5	66.9	65.2	66.2	65.1	63.1
Russia	7.9	11.0	11.7	9.6	8.4	7.9
India	74.7	75.0	69.4	68.1	67.6	66.8
China	17.0	17.7	33.5	25.8	22.0	19.4
G20-Advanced	87.0	99.3	105.9	110.3	113.2	115.4
G20-Emerging	34.7	35.9	41.0	37.0	34.7	32.9

Source: IMF Fiscal Monitor (2012)

The fiscal balances as a percentage of GDP is reflected in Table 7.2. A selection of advanced countries (G7) and the BRIC countries data indicates, with the exception of Germany, that the negative fiscal balances increased since the global financial crisis erupted. The fiscal balances on average paint a bleak picture for advanced countries relative to the emerging economies, with the exception of India. The data of the IMF is actual figures for 2008 – 2011 and estimated figures for 2012 – 2013.

Table 7.2: Fiscal balances (% of GDP)

Countries	2008	2009	2010	2011	2012	2013
United States	-6.7	-13.0	-10.5	-9.6	-8.1	-6.3
France	-3.3	-7.6	-7.1	-5.3	-4.6	-3.9
Germany	-0.1	-3.2	-4.3	-1.0	-0.8	-0.6
Italy	-2.7	-5.4	-4.5	-3.9	-2.4	-1.5

Countries	2008	2009	2010	2011	2012	2013
Spain	-4.2	-11.2	-9.3	-8.5	-6.0	-5.7
United Kingdom	-4.9	-10.4	-9.9	-8.7	-8.0	-6.6
Canada	0.1	-4.9	-5.6	-4.5	-3.7	-2.9
Japan	-4.1	-10.4	-9.4	-10.1	-10.0	-8.7
Brazil	-1.4	-3.1	-2.8	-2.6	-2.3	-2.4
Russia	4.9	-6.3	-3.5	1.6	0.6	-0.3
India	-7.2	-9.8	-9.2	-8.7	-8.3	-8.2
China	-0.4	-3.1	-2.3	-1.2	-1.3	-1.0
G20-Advanced	-4.3	-9.6	-8.2	-7.2	-6.3	-5.0
G20-Emerging	-0.2	-4.8	-3.5	-2.2	-2.1	-2.2

Source: IMF Fiscal Monitor (2012)

The data displayed in the two tables above poses a stark reality. The fiscal risks for many advanced countries remain elevated. The debt to GDP ratios in many advanced economies are at historic high levels because of coordinated international stimulation programs. Borrowing requirements remain high and several countries, for example the USA and the European Community, had to implement legislation to continue borrowing in the financial markets to supply necessary capital for their economies to operate efficiently. This sustained borrowing in the financial markets increases the risk of default as well as other risks such as the availability of future capital and borrowing at inflated market rates, which increase the cost to the future generation.

Fiscal policy authorities in the G20 countries must consider the overarching outcomes of their decisions. The fiscal scope for many countries is limited whilst these authorities must continue to support a fragile international recovery. Furthermore, fiscal policy authorities have to consolidate their fiscal stance because it cannot be expected of future generations to pay the bill for policies applied after the 2008 financial crisis. The impossible policy becomes the norm that is, to continue to stimulate whilst creating a fiscal exit strategy. This consolidation of fiscal policies is reflected in the Cannes Summit G20 statement.

The press release after the sixth G20 meeting in Cannes stated the following regarding fiscal policy (G20, 2011): *“Specific and concrete fiscal consolidation plans are essential to put public finances on a credible and sustainable track, and are key to reducing current account deficits which will further promote global rebalancing in a number of large countries. The United States commits to place its debt-to-GDP ratio on a declining path no later than the middle of the decade through a balanced deficit reduction plan and locked in at least an additional \$1.2 trillion in deficit reduction beyond that. The plan will include: additional spending reductions, tax reform that raises revenue and cuts tax loopholes and expenditures; and stronger budgetary rules to enhance predictability and credibility. In combination with the Budget Control Act, these reforms will yield a total deficit reduction of \$4 trillion over 10 years”*.

The G20 countries stated at this meeting that the various authorities in the member countries will support recovery, create financial stability and restore confidence through collective policy applications. Various group targets and individual country targets were agreed upon. Examples include Australia, Canada, France, Germany, Italy, Korea, Spain and Britain who indicated they would reduce their government debt ratios by 2016. Certain countries, for example Brazil, India, Indonesia, Mexico and South Africa must increase their infrastructure investment to increase growth and reduce unemployment. Member countries must provide formal and quality jobs through structural reforms of individual labour market policies. Member countries must enhance competition and reduce distortions in the market place. Other policies to be employed are for example structural reforms to boost productivity, tax reform, phasing out of distortive subsidies and the promotion of household savings. South Africa also has to enhance trade and investment in the southern region of Africa.

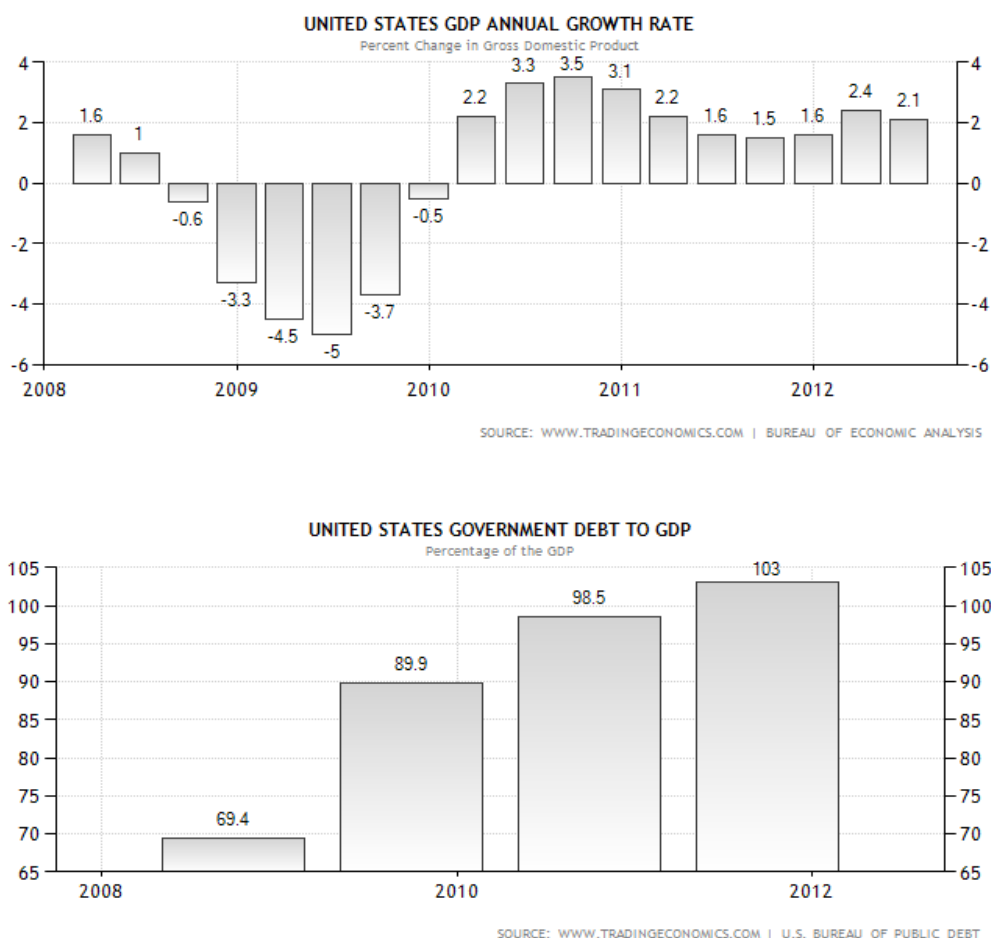
7.4 COMPARISONS OF GOVERNMENT DEBT AND GROWTH

7.4.1 USA and PIGS Countries Government Deficit Versus Growth Statistics

In Figure 7.2 the annual growth rate of the United States of America is compared with the government debt as percentage of gross domestic product (GDP). The fiscal risk for the USA poses a stark reality. The annual growth rate is subdued after the fiscal stimulation programs over several years. The fiscal balances as a percentage of GDP increased after 2008 which does not allow any space for the fiscal authority to continue with further stimulation programs. The IMF warned in the July IMF Survey (2012) and again at the October 2012 Tokyo meeting that the world recovery depends on two conditions. Firstly, it is up to the United States to relieve the intended government spending cuts and tax increases that will take effect in 2013. Secondly, the Euro zone debt crisis must be resolved.

The IMF Survey (2012) states: *“In the extreme, if policymakers fail to reach consensus on extending some temporary tax cuts and reversing deep automatic spending cuts, the U.S. economy could face a steep decline of more than 4 percent of GDP in its fiscal deficit in 2013. That so-called fiscal cliff would cause a severe decline in U.S. growth, with significant spillovers to the rest of the world. Moreover, if the United States does not act promptly to raise its federal debt ceiling, there will be increased risk of financial market disruption and loss in consumer and business confidence”*. An impossible fiscal policy is proposed for the United States, namely to continue to stimulate whilst creating a fiscal exit strategy. The prospects of sustained growth in the United States are not encouraging for several years to come.

Figure 7.2: United States Annual Growth Rate versus Government Debt



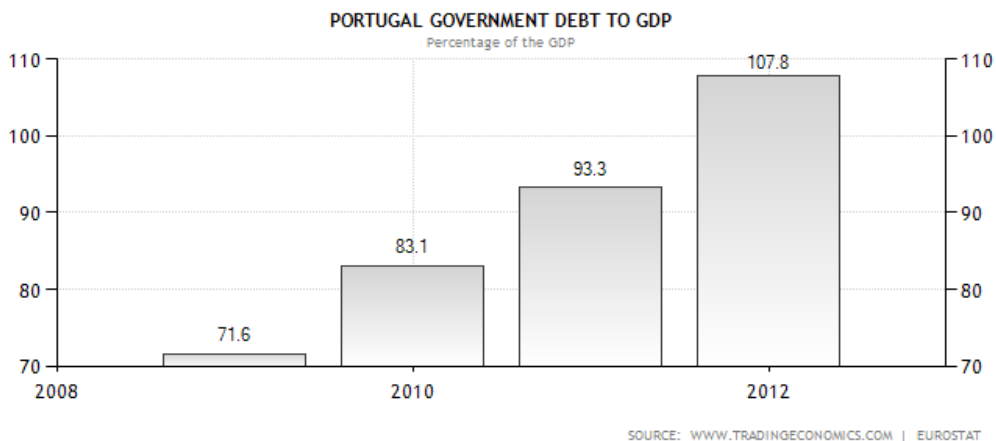
Source: Trading Economics.com

In Figure 7.2 to 7.6 the annual growth rate of the PIGS countries is compared with the government debt as percentage of gross domestic product (GDP). The fiscal risk for the PIGS countries poses a stark reality. The annual growth rate is negative or subdued after the fiscal stimulation programs over several years. The fiscal balances as a percentage of GDP increased after 2008 which does not allow any space for the fiscal authority to continue with further stimulation programs.

All of these PIGS countries received loans from various international institutions and are subject to conditions to reduce government debt. PIGS countries are subject to fiscal exist strategies and fiscal structural reforms are required. High debt ratios are not sustainable and empirical studies done by the IMF proved that high government debt reduce growth (Cottarelli, 2010:11). The stark reality of these high debt ratios

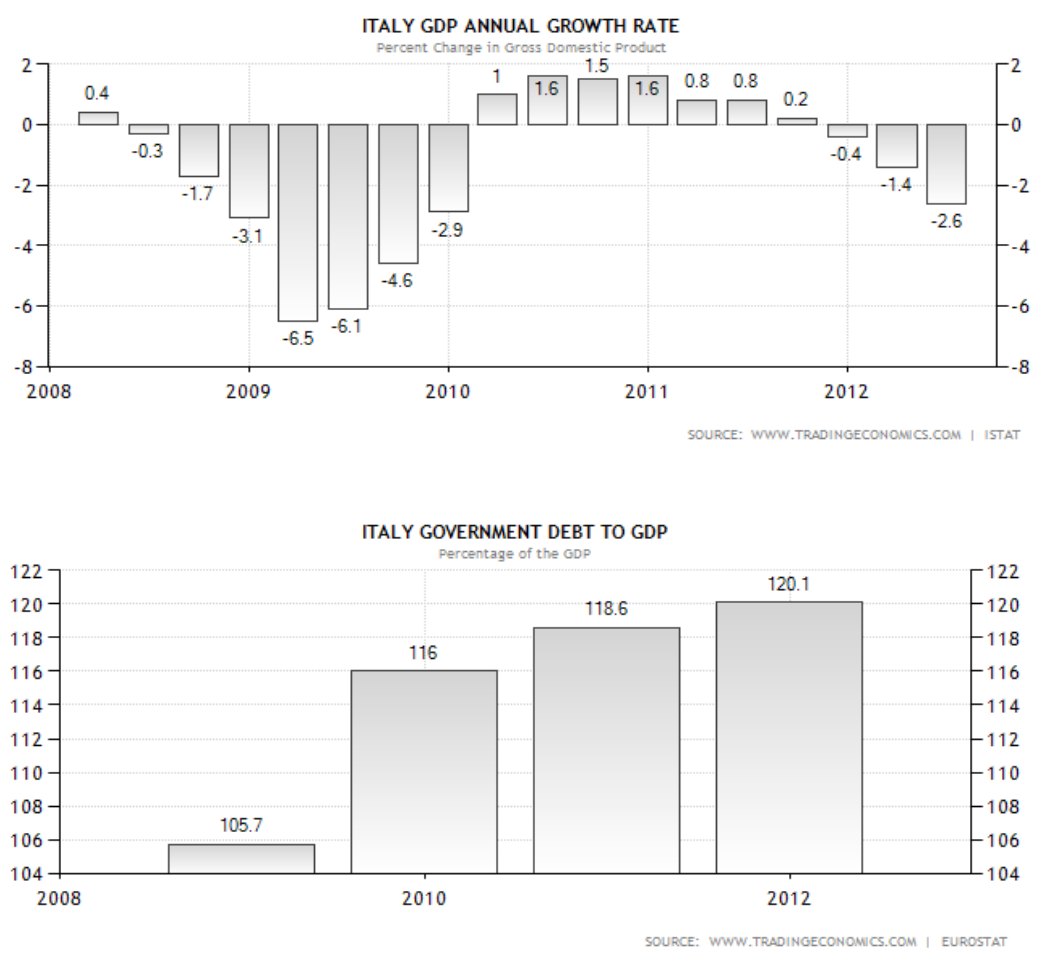
and fiscal exist strategies means no prospect of high growth in the PIGS countries. Several other European countries also experience high government debt ratios. The prospects of sustained growth in Europe are not encouraging for several years to come.

Figure 7.3: Portugal Annual Growth Rate versus Government Debt



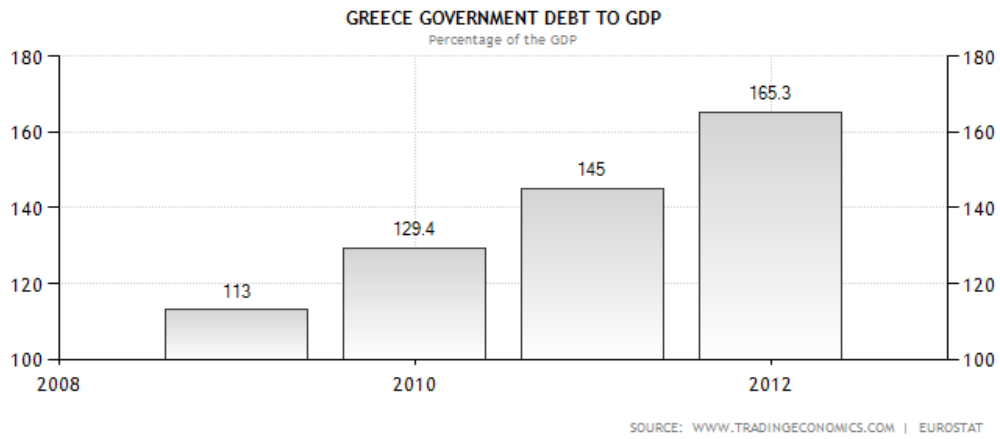
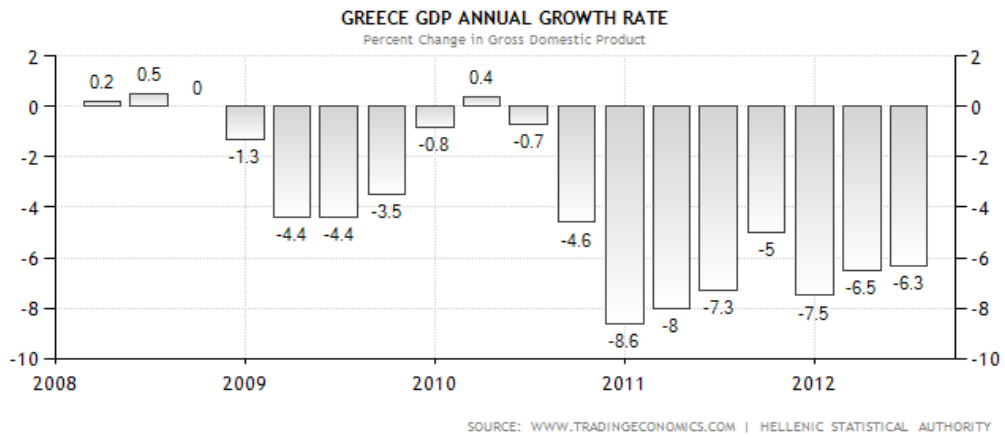
Source: Trading Economics.com

Figure 7.4: Italy Annual Growth Rate versus Government Debt



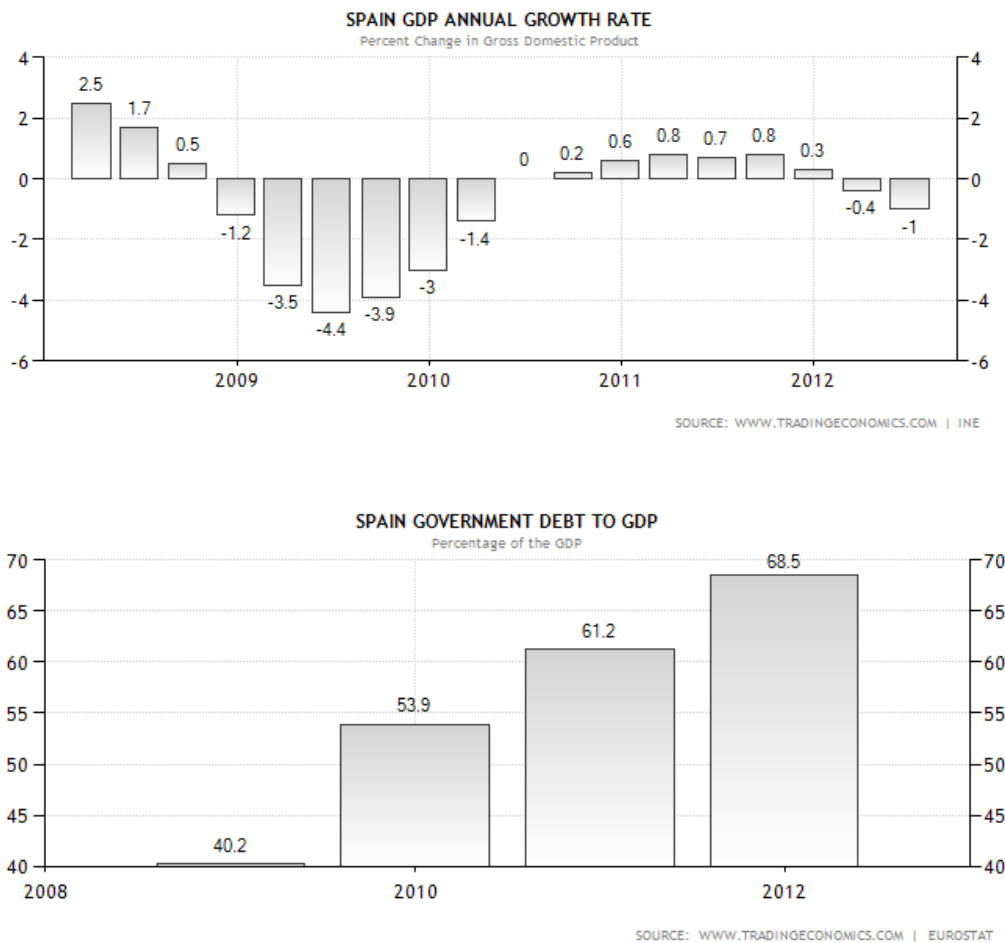
Source: Trading Economics.com

Figure 7.5: Greece Annual Growth Rate versus Government Debt



Source: Trading Economics.com

Figure 7.6: Spain Annual Growth Rate versus Government Debt



Source: Trading Economics.com

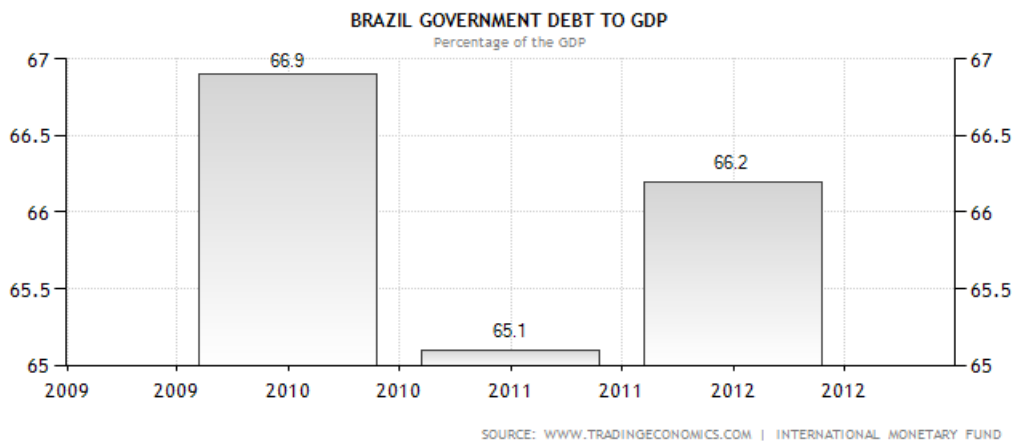
7.4.2 BRICS Countries Government Deficit Versus Growth Statistics

In Figure 7.7 to 7.11 the annual growth rate of the BRICS countries is compared with the government debt as percentage of GDP. The picture of these countries is vastly different than the growth versus debt scenario in the United States and the PIGS countries. The growth rates in most BRICS countries are elevated relative to the United States and Europe. The growth rates however declined due to a weaker external environment and a decline in domestic demand mainly in response to policy tightening measures in several BRICS countries.

Whilst the United States and the PIGS countries experience increasing government debt, the BRICS countries experience decreasing government debt with the exception of South Africa. An analysis of the peculiar debt scenario of South Africa follows in

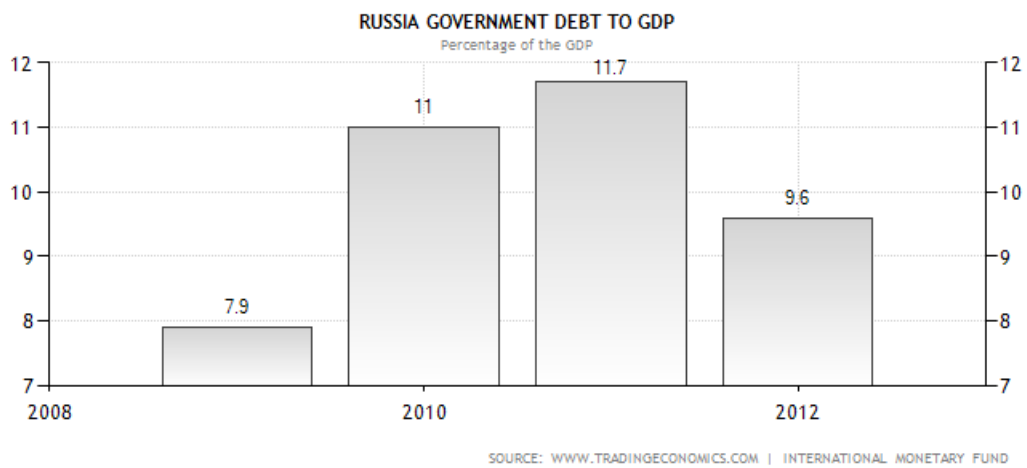
section 7.5. The government debt levels in many advanced economies increased because of coordinated international fiscal stimulation programs. Regardless of fiscal stimulation programs, the government debt levels did not increase in the BRICS countries mainly because of low government debt levels with the exception of South Africa. Most BRICS country fiscal policy authorities have fiscal scope to stimulate, but because of inflation risks and domestic growth of credit that can create asset bubbles, such stimulus programs are not planned.

Figure 7.7: Brazil Annual Growth Rate versus Government Debt



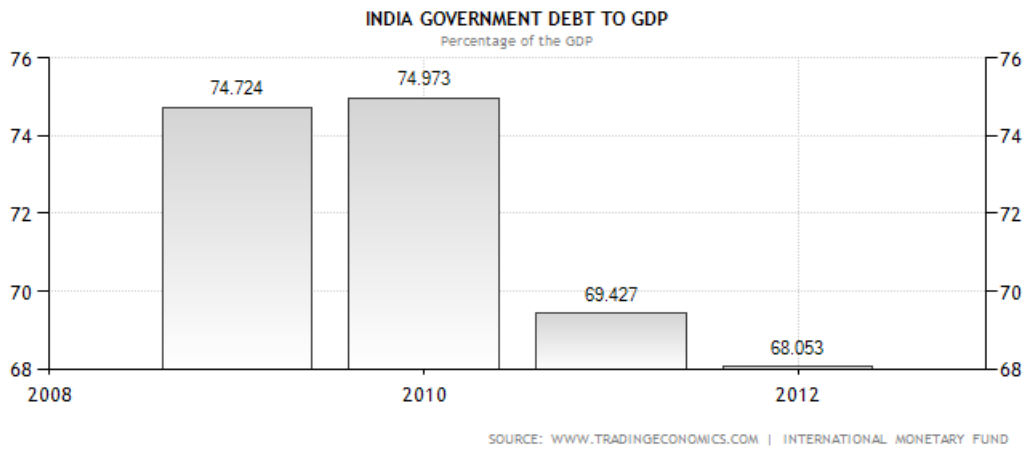
Source: Trading Economics.com

Figure 7.8: Russia Annual Growth Rate versus Government Debt



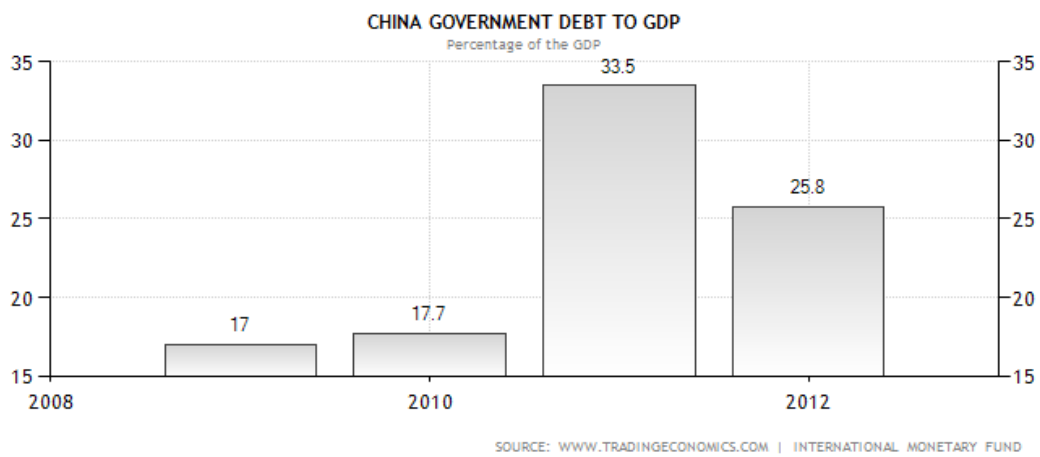
Source: Trading Economics.com

Figure 7.9: India Annual Growth Rate versus Government Debt



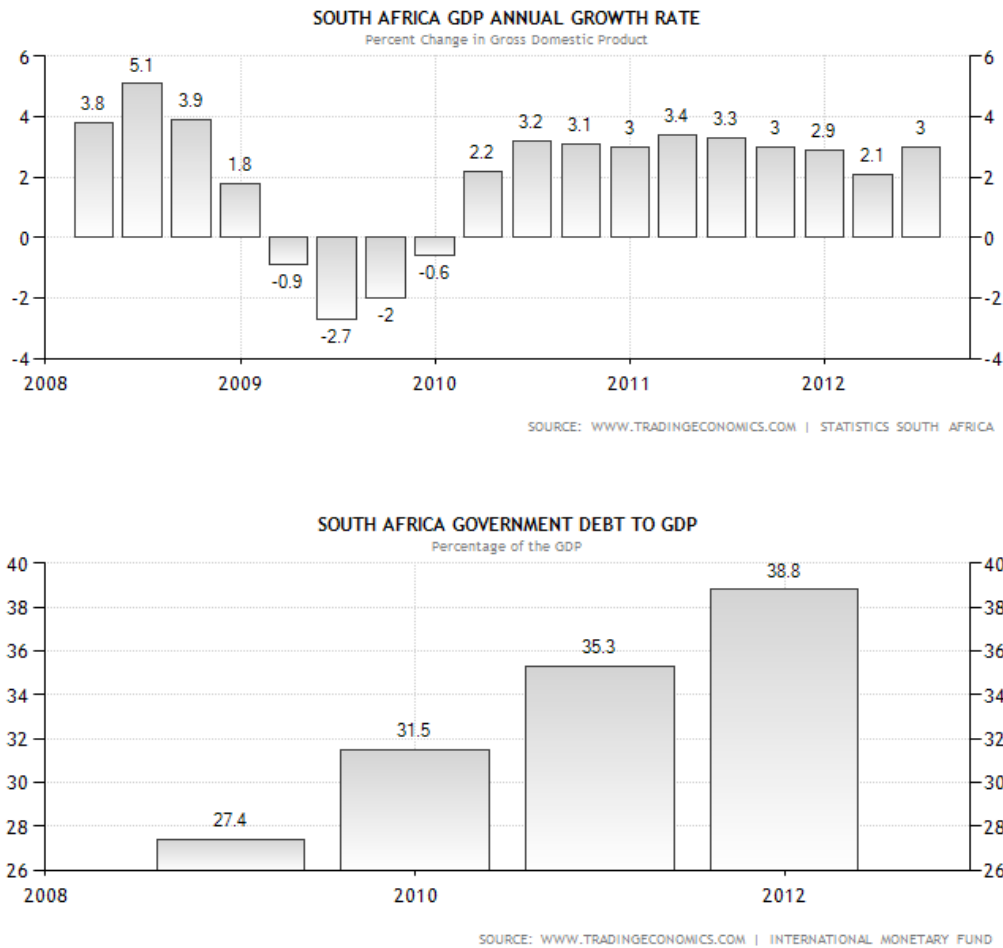
Source: Trading Economics.com

Figure 7.10: China Annual Growth Rate versus Government Debt



Source: Trading Economics.com

Figure 7.11: South Africa Annual Growth Rate versus Government Debt



Source: Trading Economics.com

7.5 SOUTH AFRICA’S OWN PECULIAR DEBT PROBLEM

Whilst the BRICS countries experience decreasing government debt, South Africa experience increasing government debt. The South African government decided soon after the outbreak of the 2008 financial crisis and in conjunction with G20 coordinated policy programs to apply counter cyclical fiscal policy. According to Swanepoel & Schoeman (2003), countercyclical fiscal policy requires government deficit and debt to swell during times of economic recessions and to decline during economic booms again. The government debt levels are rising from a fairly low basis as percentage of GDP because of fiscal stimulation programs. But, there are various debt concerns to be highlighted.

Table 7.3: Total Government Loan Debt (National and International)

Year/R million	Total Government loan debt	Percent increase y-o-y
2007	552064	
2008	571876	3.6
2009	616655	7.8
2010	796260	29.1
2011	981503	23.3
2012 (June)	1223657	24.7

Source: South African Reserve Bank (2012)

The data displayed in Table 7.3 above poses a stark reality. A countercyclical policy is implemented to increase macro demand when the South African economy grows below its long run potential. An effective countercyclical monetary policy aims to shield aggregate economic output from the effects of a shock in aggregate demand (Ireland, 1996). Government debt however accelerates and continuous to rise. An analysis of government spending reveals that the rise was driven by consumption spending instead of investment activities.

Table 7.4: Compensation of employees of consolidated government

Year / R million	Compensation	% of Budget Expenditure	% of Non interest Expenditure
2008/09	233345	32.9	35.7
2009/10	273980	33.3	35.8
2010/11	309802	35.4	38.3
2011/12	346714	35.6	38.7
2012/13	371170	35.1	38.3

Source: Budget Review (2012)

Compensation of government employees is reflected in Table 7.4. One of the most alarming trends in government expenditure is the increased wage bill. According to Minister Gordhan: *“Part of the revision to baseline allocations is the carry-through cost of the 2010 wage agreement, which requires an additional R39.4 billion for remuneration of employees over the MTEF period. The public service salary bill has doubled over the past five years. This cost constitutes just under 40 per cent of consolidated non-interest expenditure”* (Budget Review, 2011).

Minister Gordhan stated in the 2012 Budget that government intends to cap public sector wage hikes at 5 per cent in 2012/13. This assertion has been met with doubt from many quarters. The common reason for this doubt is the threat of strike action, because industrial action has become the norm than the exception in South Africa. The increase in public sector wages for 2012 was in fact higher than the budgeted figure in February 2012. The continuous rise in wages above the inflation rate poses serious risks for fiscal policy application in South Africa. This high wage bill in conjunction with the rising interest bill, can reduce the scope of fiscal policy on capital expenditure. Government should at all times balance current expenditure and capital expenditure.

Table 7.5: Social Grants Expenditure

Year / R million	Budget – actual & projected	Budget total Expenditure	% of Budget Expenditure
2008/09	70715	708489	10.0
2009/10	79260	823323	9.6
2010/11	87493	874172	10.0
2011/12	96703	972547	9.9
2012/13	104888	1058321	9.9

Source: Budget Review (2012)

The social grants expenditure by government as percentage of total budget expenditure is reflected in Table 7.5. The number of social grant recipients has grown

in recent years. According to Minister Gordhan: “*There will be a marked decrease in the spending on social grants as a percentage of GDP from 3,5% in the 2011/12 period to 3,2% over the MTEF. This decrease is the result of no planned grant increases occurring over the medium term and because economic growth is expected to outpace the growth in the number of grant recipients*” (Budget Review, 2012). The IMF reviewed the South African growth several times after the 2012 budget speech and reduced the growth rate for 2012 and 2013. The forecasted decline in social grant spending as percentage of GDP will most probably not occur.

Table 7.6: Public sector infrastructure expenditure

Year/ R million	Budget – actual & projected	Actual Expenditure	Percentage spent of Budget	% of Budget total expenditure
2008/09	195809	193011	98.6	27.2
2009/10	245466	203637	83.0	24.7
2010/11	260407	177799	68.3	20.3
2011/12	226600			
2012/13	262300			

Source: Budget Review (2012)

The allocation of public resources with regard to infrastructure investment has not produced the results needed by an emerging nation such as South Africa. Actual capital expenditure as a percentage of total budget expenditure is reflected in Table 7.6. For the period 2010/11, actual spending amounted to 68,3% of the amount actually been budgeted for (Budget Review, 2012). The actual capital expenditure continues to decline as a percentage of total expenditure. For the period 2010/11, actual spending amounted to 20,3% of total expenditure (Budget Review, 2012). Capital expenditure suffered because the investment in announced infrastructure projects did not materialize because of capacity constraints. If the actual budgeted capital expenditure occurred in the last three years, the government debt would be

R127 billion higher. The annual budget deficit as percentage of GDP is therefore lower for the wrong reasons.

According to Minister Gordhan (Budget Review, 2012): *“The allocation of public resources to infrastructure investment has not always yielded the desired result. In 2010/11 actual spending was about 68 per cent of budget allocations. This figure masks wide disparities in delivery capacity. Some agencies and municipalities have a strong record of spending implementation, in others there are serious deficiencies in delivery capacity. This reflects the lack of sufficient skills in public sector”*.

7.6 RE-THINKING OF COUNTER CYCLICAL POLICY IN SOUTH AFRICA

The great depression of the 1930’s created uncertainty within the international economic circles regarding the role of government during economic downturns. Industrialized countries were facing an ongoing depression and the solution was unlikely to be found in classical economics (Vera, 2006:1). During this time John Maynard Keynes, the famous British economist, proposed a solution that changed the way how governments acted to reduce the negative impact on growth and aggregate demand.

Keynes suggested that government deficit spending should be used as a stabilization tool during recessionary cycles (Perez, 2003:15). According to the theory of Keynes deficit spending of governments can provide stimulus to end a recession (Mitchell, 2005:6). The theory of Keynes also stated that policy authorities must reduce government spending once the economic recession recovered in order to prevent inflation. Keynes also suggested that government spending be focused on large-scale public works programs (Vera, 2006:1). Keynesian economics was influential for many decades since the 1930s.

The world experienced another financial crisis and recession since 2008. The Keynes theory of deficit spending by governments played an immense role in the recovery policies suggested by the G-20 member countries. The G-20 member countries agreed to implement deficit spending in combination with other measures to secure economic recovery in the world again. The result of these measures was soaring government debt especially in the developed countries. Since the 2008 financial crisis government

debt continuous to increase in South Africa. In a South African context, the implementation of countercyclical fiscal policies has to be analyzed against the theory of Keynes as well as other theories that developed since the 1930s.

The theory of fiscal policy developed in Europe in the 1950s and 1960s. The theory of fiscal policy states that policymakers have two objectives (Tanzi, 2004:4). The objectives are either the promotion of social welfare or the public interest of the inhabitants of a country. The social welfare depends on several indicators. Some of these indicators are of an economic nature and some are of a social nature. Examples of economic indicators are growth, inflation, income distribution and productivity. Examples of social nature are life expectancy, literacy rates, incidence of crime and incidence of illnesses.

This normative theory explained how the world should behave (Tanzi, 2004:11). This theory provided the theoretical framework for fiscal policy authorities to employ different instruments to promote desirable economic objectives. The instruments are various taxes, specific features of taxes, various categories of expenditure and specific features of expenditure.

Two other theories developed that challenged the principles of the theory of fiscal policy. The school of public choice theory was skeptic and elaborated on the suspicion that policymakers can not separate their personal interest from the goals of public interest which they have to achieve according to the mandate from their constituencies (Tanzi, 2004:11). The positive theory of fiscal policy also developed in which the institutional set up of governments was analyzed that determined the policy outcomes. This theory provided the institutional framework that is necessary for good policies to pursue objectives.

Literature on fiscal policy also reveals the effect of productive and unproductive spending by governments (Semmler *et al.*, 2007:3). Public investment is defined as productive government expenditure and public consumption is defined as unproductive government expenditure. According to these empirical studies productive government spending financed by non-distortionary taxes achieves the best long term growth outcomes. On the other hand, if unproductive government spending

is financed by distortionary taxes, a negative long term growth outcome can be expected.

Faraglia *et al.* (2011:3) states that fiscal policy and the debt structure of government must be jointly determined. This approach is different than the traditional practice of debt management to only minimize the interest cost of government debt and to provide appropriate amounts of government bonds and therefore liquidity to the financial markets. This joint determination of policy and debt is crucial because it is influenced by the government's ability to react to unexpected fluctuations in either government expenditure or revenue. This joint determination of fiscal policy and debt structure of a government is important because it has an impact on the type of debt instruments that a government issues and the proportion of these debt instruments.

Cyclical government spending caused elevated government debt in several developed countries. The debt ratio in South Africa is rising despite a slow economic recovery. South Africa is the only country of the BRICS country group that experiences a rising debt ratio. South Africa has little margin for error to absorb any kind of macroeconomic shock without the debt ratio rising to even higher levels. If the South African fiscal policy is measured against the theory of fiscal policy, the school of public choice theory, the positive theory of fiscal policy and other literature studies, the South African government should be concerned. The question however is if the South African government possesses the economic literacy and skills to address these incorrect policies.

7.7 CONCLUSION

The global financial crisis created challenges for policy makers in the world. The negative effects of the global crisis could not be resolved through the application of one policy. Debate prevailed amongst G-20 member countries and in the international markets about the degree of the different policy instruments applied and the mix of these instruments to create financial stability. Policy makers applied *inter alia* counter cyclical fiscal policy and government debt increased all over the world. High government debt neutralizes the sustainability of the stimulatory stance of fiscal policy.

The soaring government debt caused other problems for policy makers to address. The debt levels of the United States of America and European countries increased well above the international norm. A selection of developed versus emerging of advanced countries (G7) and the BRIC countries data indicates, with the exception of Germany, that the negative fiscal balances increased since the global financial crisis erupted. The fiscal balances on average paint a bleak picture for advanced countries relative to the emerging economies, with the exception of India.

Debt levels also soared in South Africa. The main cause for the increase in South African government debt is a soaring wage bill and escalating social grants. The actual capital expenditure continuous to decline as a percentage of total expenditure whilst the compensation of employees and social expenditure increases. This soaring debt caused by incorrect spending policies, neutralizes the desired effect of a sound counter-cyclical policy. This soaring debt also increases the financial instability and reduces the creditworthiness of South Africa.

Alesina & Tabellini (1987:1) states that budget deficits and debt accumulation serve two purposes in developed countries. It provides the means to redistribute income and to minimize the deadweight loss of taxes as public goods and services are provided. Public debt becomes a strategic instrument by the ruling government to influence the choices of the successor government. The time path of government debt is the result of the interaction of various governments which are in office. Fiscal policy programs applied, differ therefore vastly between a democratic elected government and the programs applied by social planners which are certain of their reappointment in future. The research of Alesina & Tabellini (1987:2) revealed that government debt is likely to be higher if the ruling government will not be reappointed. The likelihood of government debt is also higher if the ruling government is constrained to provide a minimum level of different kinds of public goods.

If the results of this research are applied to the South African scenario, a very negative state of government debt is revealed. The ruling ANC government should not allow the government debt to escalate because the next elected ANC government has to manage this worsening state of affairs. The likelihood of the ANC government to be elected again and again is good because of their vast numbers of supporters. The majority of these supporters is however economic illiterate. A peculiar government

debt scenario prevails in that the ruling ANC government has to manage the escalating debt which the ANC government created and which will become unmanageable for the next ANC government. The result will be lower credit ratings of credit institutions and higher risk premiums on future government bonds issues that will increase the debt even more.

Evens (2010:43) argues that an effective public service is a prior condition to infrastructural and industrial development. The rapid growth of East Asian countries can be attributed to a public bureaucracy that was recruited on meritocracy. Sustained growth depends on the ability of a public service to identify and execute investments efficiently. The South African government should therefore attract a high quality of employee to lay the foundation for long term growth.

Furthermore, fiscal exit strategies are proposed by the G-20 member countries to eliminate the negative consequences of soaring government debt for future generations. Cottarelli (2010) suggests that successful exit strategies emphasize cuts in government wages and transfers, over tax increases. Ghosh (2009) recommends that subsidies to specific industries and increases in the compensation of the public sector wage bill should be disposed of. Cottarelli (2012) also suggests that passive unemployment benefits should be reduced. Passive benefits (social grants) also dilute incentives for the unemployed to seek employment.

South Africa needs a redesign of government expenditure. The composition of fiscal expenditure should be changed. Public infrastructure investment should increase and allocations of capital in the annual government budget should be implemented. Unproductive current expenditure should be reduced at all cost. In the absence of proper fiscal actions, investors will demand a much higher compensation for the risk of holding increasingly large amounts of public debt that the South African authority needs to issue to finance their unproductive means.

CHAPTER 8

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

South Africa's growth rate never reached the goals set by either the GEAR strategy of 1996 or ASGISA policy of 2006. The RDP of 1994 represented a vision for the fundamental transformation of SA. This policy did not specify growth targets; it only referred to the creation of sustainable and environmentally friendly growth. The New Growth Path of 2010 is too recent to address the probable impact on the low growth rate and the NGP goals to create more and better jobs to fight poverty and to reduce inequalities. The National Development Plan envisages to create 11 million jobs by 2030 and to reduce inequality from 0,7 in 2011 to 0,6 by 2030. The NDP describes the long term development goals of the country as well as the processes and structures that are necessary to meet the strategic objectives for South Africa. The NDP is also too recent and of a long term nature to address the probable impact on the low growth rate.

The main objective of this research was to explore the application of policies to create sustainable growth with the simultaneous reduction in unemployment. Conclusions and recommendations are presented in published articles about five important growth and employment aspects. Only five probable answers to the vast number of questions regarding sustainable growth are addressed. Various other questions can be asked and studies can be done to address this important issue for South Africa. Examples are the impact of trade and industrial policy (only referred to) and the impact of the educational system (only referred to as a structural problem).

Economic policy constitutes the actions of a government that influence the economic outcomes of a country (Acocella, 2005:2). The contribution of Tinbergen towards policy theory is the insight of policy makers towards consistency as policies are developed (Theil, 1956:360). Situations may occur where politicians may formulate policies based on inconsistent desires, but it is important to strike a compromise between short term conflicting priorities and a long term suitable framework which a country needs. Theil introduced an objective function that obtained the best choice in

policy making (Hallett, 1989:201). Such a preference function creates utility for the government policy makers if the choices they implemented ultimately achieved their initial policy aims. Such a preference function also generates any tradeoffs between unattainable and conflicting policy targets. Boulding stated that policy is about social choices and the sacrifice of some objectives in order to pursue other objectives. Complex relations exist amongst policy objectives, but any economic policy should pursue progress, stabilisation, justice and freedom which are interrelated (Boulding, 1959:19).

The South African growth rate is not at a high sustainable level regardless of the application of various policies. Unemployment, poverty and inequality also continue to be at unacceptable levels. If the South African policies are measured against the principles of policy as stated above, it is obvious that something is very wrong. Progress and a stable growth and employment scenario are not achieved. Something is wrong with the application of these policies. Something is wrong with the management of the various policies by the politicians of South Africa's economic affairs. Something is wrong regarding the attitude of institutions and their influence in economics, for example the labour unions with their political agendas and short term goals to improve the conditions of employees whilst losing track of the bigger economic picture.

Various reports highlight different structural problems which must be addressed in the macroeconomic environment. An OECD report for example warns that there is a contradiction between the weaknesses of government identified by ASGISA and the excessive reliance of ASGISA on the government to solve these identified constraints in the economy. In another report the Harvard Group report states that successful growth countries share certain characteristics. Sustainable growth requires committed, credible and capable governments. A World Bank report states that the low intensity of labour in production must increase, low rates of investment and savings must increase and productivity of labour must enhance. These reports refer to policy matters in question and recommend solutions, but the progress if any is deplorable and very slow.

If these reports are analyzed, it is obvious that policy makers must make important choices in the application of different policies to increase growth. Policy authorities

must choose sustainable growth as their objective function. Policy is about social choices and the sacrifice of some objectives in order to pursue other objectives. If sustainable growth is managed as their objective function, the country's leadership will achieve growth results. Political and ideological issues will be secondary goals and should not dilute the main objective. It is however a known fact that the transformation policy is the objective function of the ruling government, that different political agendas exist in cabinet and that policies are not coordinated amongst departments. This lack of consistency between conflicting priorities cancels out probable sustainable growth achievements!

8.2 FINDINGS

Article 1: The Challenge of South Africa to Reduce its High Unemployment

This article stated the problem of weak sustainable economic growth and high unemployment that prevails in South Africa. This article analyzed macroeconomic policies and sought reasons from international best practice to increase economic growth. The first theoretical objective to conduct a literature review regarding growth of a country is addressed. The first secondary objective to compare macroeconomic policies of South Africa with international best practice with specific reference to East Asia is also addressed.

Various binding constraints exist in South Africa that hampers sustained growth and the reduction of unemployment. Various policy adjustments are needed to rectify this major problem. Recommendations of various institutions and groups of researchers are summarized and lessons learned from East Asia are addressed. These recommendations summarize the required policy changes needed to improve growth and the creation of job opportunities in South Africa.

The Harvard economist group refers to a non-tradable sector which employs relatively few unskilled people and a tradable sector like mining, agriculture and manufacturing that employs greater numbers of unskilled people. The problem in SA is that the people are mainly unskilled and that there is a big supply of unskilled labour whilst there is a small supply of skilled labour. The panel made five policy recommendations to improve the growth and unemployment problem in South Africa:

- Macroeconomic policy: to reduce constraints of growth, fiscal policy must be counter-cyclical and must make a bigger contribution to national savings, existing restrictions on capital outflows must be eliminated, the current inflation targeting regime must be maintained and the level as well as the stability of the exchange rate must be addressed;
- Trade and competition policy: a radical simplification of the tariff system with low or no tariffs on inputs, a review of the SACU arrangements, SA to lead African economic integration without unrealistic custom union agreements and changing to a pro-active approach regarding competition policy;
- Labour market policies: to implement a wage subsidy for 18 year olds, the relaxation of SETA (skills education training authorities) regulations and the implementation of a high-skilled immigration approach of government;
- Industrial policy: a shift in focus of the Industrial Development Corporation (IDC) from asset management to the financing of new activities, that the existing Customized Sector Programs be substituted with an approach of self organization of the different actors, to create a special central budget for structural transformation, to change the Motor Industry Development Program (MIDP) policy with a supplier based promotion scheme and lastly, that beneficiation should not be used as the basis for selective intervention and industrial promotion; and
- Public administration and Black Economic Empowerment: recommendations regarding public administration are two fold, namely a certification system for government entities which provides economic services and municipalities with poor capacity to use central bodies to procure municipal services. Regarding BEE three recommendations are stated, namely a review of the current BEE scorecard system to include elements to facilitate employment creation, learnerships and training, the development of a system to collect information regarding BEE and a mechanism to evaluate the progress of this policy.

The Country Partnership Strategy (CPS) developed between the World Bank and the Department of National Treasury focused on the eradication of poverty and the

reduction of inequality in the Southern African region. This joint strategy proposed a theme consisting of two pillars to reduce the poverty and inequality problems:

- The first pillar of the CPS is about measures to improve urban and rural development. This pillar support key areas of ASGISA, for example urban and municipal development, land reform and agriculture, privates sector development, environment and infrastructure; and
- The second pillar of the CPS is about measures to improve regional integration. This pillar proposes activities to support Africa, for example facilitation of South African companies' investments in Africa, building of regional communities in cooperation with the SADC countries and the sharing of knowledge to support Africa.

Lessons to be learned from East Asia, after a study tour in 2010 and 2011 by the researcher, are numerous. Firstly, specific lessons of China will be referred to and secondly, general principles of other East Asian countries will be referred to. Various specific reasons are applicable to China. The government of China made a decision to break with the communist ideology and to apply capitalistic principles which proved to be a use success. The sheer size of China, growing from a very low base and which opened various internal markets, created vast opportunities. Against the background of these foundational issues and regardless of a fairly weak ranking in industrial capability and skill base the following specific factors are also driving high growth in China:

- The liberalization of trade policies;
- Very cheap labour cost in comparison to other countries;
- Offshoring where sections of production processes of other countries are transferred to China; and
- The monetary authority which manage the Yuan not to appreciate.

General factors applicable to other East Asian countries from which South Africa can learn are firstly to shift from labour intensive (mainly agriculture) production to small- and medium manufacturing. Secondly, to expand export manufacturing instead

of employing import substitution tactics. Thirdly, decreasing the cost of labour and fourthly, to increase FDI to upgrade infrastructure. Fifthly, to stimulate domestic demand and supply in order to change current account deficits into surpluses. Lastly, the liberation of trade policies.

The Harvard group of economists and the World Bank made certain recommendations to address the lack of growth in South Africa. Despite these recommendations, theoretical principles must also be employed in policies. Examples are to increase saving, to control the population growth, to employ technology in manufacturing, to improve productivity, to improve skills and to allocate more capital to research and development. Many of these aspects do not feature in the South African economy.

The political dispensation before 1994 was characterized by sanctions, global isolation, strikes and violence in the townships against the apartheid system, lack of foreign capital, a low growth rate, high inflation and capitalism. February 2010 was the commemoration of the speech of the previous president, Mr FW de Klerk, twenty years ago to release Mr Nelson Mandela and to legitimize the ANC political party. This historical speech paved the way to the first democratic elections in 1994.

In 2010, twenty years after this historical speech, the picture is vastly different. The South African economy is characterized by violence in the townships against poor service delivery by municipalities, strikes organized by politically inclined labour unions to improve workers benefits, volatile foreign capital, a volatile growth rate, high unemployment, numerous structural problems in the macroeconomic environment, a sick educational system absorbing the biggest percentage of national budget funds, bad management and corruption in all three levels of government and a socialistic ideology in government. Tension exists between the constitution and the transformation policy of the ANC.

The various structural problems identified in ASGISA and the NGP must be addressed by government and principles of Asian success stories must be incorporated in the South African economy. Certain policies for example ASGISA and the NGP have good foundations, but the main problem in South Africa is two-fold. Firstly, sustained high growth of 6% will not be achieved as long as economic principles are overshadowed by the political agenda of transformation in South Africa. Secondly,

fundamental changes are needed in the South African economy and need urgent attention, but the lack of management at all levels in government to address the structural problems, handicap such changes.

Article 2: Labour Union Voices in South Africa and Arguments to Scrap Inflation Targets - a Historical and 21st Century Debate

This article stated the need for monetary stability. Regardless of the continued criticism of COSATU against monetary policy (and government policies in general), the need of a stable financial environment is a necessary foundation for economic growth. The second theoretical objective to conduct a literature review regarding inflation targeting regardless of criticism of labour unions to scrap this monetary policy strategy is addressed. The second secondary objective to analyze the impact of COSATU criticism on the formulation of monetary policy is also addressed.

Black labour unions in the South African economy before 1970 experienced lack of recognition by the government. The mobilization of black workers since 1973 persuaded the government to change their attitude towards collective bargaining regarding African workers. Prior to this period the legislation only recognized unions that had white, coloured and Indian members. The Wiehahn Commission was a watershed period in the history of South African labour unions. The Labour Relations Act of 1979 followed and all references to race were removed in the legislation. New labour unions developed faster since this legislation and labour unions obtained gradually more power.

The history of COSATU is layered with economic legislation, criticism of economic policies and promulgation of labour policies to improve work conditions in favour of the workers which is not a true reflection of a labour union's functions. Examples are the launch of the Reconstruction and Development Program by COSATU in January 1993, the severe criticism of the GEAR macro policy in 1996 where COSATU had a different viewpoint than government regarding interest rates and unemployment and the big impact of COSATU to promulgate the new labour policies of the nineteen nineties.

COSATU influenced the government in numerous ways, for example through radical reform, being a summit member about strategic issues in South Africa and also as an

alliance member to direct political activities in South Africa. As an alliance member of government COSATU were involved with activities outside the traditional union sphere, for example the implementation of the Black Economic Empowerment (BEE) policy in 2000.

The vision of SARB is very clear namely to achieve and to maintain price stability. The function of SARB as an independent political institution is anchored in the South African constitution and also in an act. The main focus of SARB is to create a stable financial scenario and not to create employment. The creation of growth and employment is anchored in fiscal policy as recorded by the well-known theory of Keynes.

COSATU criticize the SARB's damagingly strict application of IT and regularly call for a review of the inflation targeting policy framework in South Africa because the IT policy creates unemployment. COSATU's concerns represent a great deal of misconceptions about inflation targeting. Various populist statements by COSATU lack basic economic reasoning. If COSATU's monetary policy demands are met to reduce interest rates in the short run, the circumstances of the very poor that COSATU are trying to protect, will merely worsen in the long run. If the inflation rate continues to increase because the causes of inflation are not addressed by the monetary policy makers, the poor will be hurt by high and unsustainable prices in the long run which will reduce their spending power and worsen their living standards.

COSATU share in the blame for the rise in unemployment in South Africa. As a member of the political alliance which governs the country, they are involved with issues that are not related to the true nature of a labour union. They advocate for example continuously for higher wages without improved productivity of their members, whilst their activities to change labour policies in favour of the workers in South Africa increases the costs of labour. Rigidities in the labour market fuelled higher wage agreements, surpassing increases in labour productivity growth. These high costs of labour reduce the South African international competitiveness which hampers export opportunities. The contribution of COSATU towards the high cost of the South African labour market, therefore reduce access opportunities for the vast number of unemployed people in South Africa.

According to the Department of Statistics the unemployment rate in South Africa in 1993 was 30,1% and by 2010 it dropped to 23,5%. These figures reflect a high unemployment rate in South Africa that is a lasting problem which is driven by structural unemployment. The economic problem regarding structural unemployment can not be addressed by monetary policy. Monetary policy focuses on financial stability and not on factors like skill shortages, poor education, low productivity, ideology and lack of infrastructure investment.

Prudent monetary policy and the maintenance of financial stability in South Africa in the long term stay intact regardless of the criticism of COSATU. The newly appointed Minister of Finance in 2009 stated in his first budget speech in February 2010 that the IT policy and target range will stay intact. The Minister of Finance confirmed in his budget speech of 2011 that the IT policy stays intact.

Article 3: BRICS Currency Volatility: Confusion or Indecision

This article analyzed various tactics available to authorities in BRICS countries to reduce exchange rate volatility and therefore the negative impact of the 2008 financial crisis on growth. It also analyses protectionist measures by exchange rate authorities relative to the artificial management of exchange rates. The third theoretical objective to conduct a review of monetary policy instruments and macro prudential strategies to reduce exchange rate volatility is addressed. The third secondary objective to analyze the application of macro prudential strategies is also addressed.

Central Banks in the world reacted differently to mitigate the risks in emerging markets. The appropriate mix of tools applied by Central Banks is influenced by the state of their financial markets and domestic economy, for example how close is the economy to full capacity, what is the level of official reserves to intervene, the quality of existing prudential regulation and the scope for the currency to appreciate further without damaging the domestic economy. There exists no one strategy for all countries to reduce the destabilization of short-term capital surges. From any individual country point of view, policies applied are normally some kind of mix between reserves accumulation, adjustments in either the fiscal and monetary stance as well as the strengthening of the prudential framework. In some cases it is necessary

to implement capital controls as a legitimate component of the policy mix to reduce the impact of capital surges.

Keynes stated that the creation of an international currency was an essential condition to assure the adequate elasticity of the money supply to increase the demand for investment. The different Keynesian viewpoints (post) are against the background of financial globalization. Conditions for greater economic interdependence must be created by the different authorities in order for their national economic policies' to operate autonomously. Emerging economies must therefore introduce mechanisms to allow exchange rate management to assure domestic policy objectives and to promote a more predictable environment for domestic investment. Monetary authorities should implement capital controls to preserve the independence of their monetary policy, therefore countries must have a managed exchange rate regime with capital controls to create macroeconomic stability.

The appropriate policy response to a capital surge depends on a variety of specific circumstances in various countries. The stage of the business cycle and the prevailing fiscal policy as well as the persistency of the capital surge all play a role when policy measures are analyzed for implementation. Certain general conclusions can be drawn after empirical studies were analyzed of emerging countries. Firstly, countries with relative high current account deficits are more vulnerable to a sharp reversal of capital surges because they were particularly affected by the increase in aggregate demand and the real appreciation of their currencies. Secondly, a public expenditure restraint during such periods of capital inflows contributes to a lower real exchange rate appreciation as well as a better GDP growth after the surge.

Thirdly, a policy of resistance to nominal exchange rate appreciation is in general not effective to prevent a real appreciation and has often been followed by a sharp reversal of capital inflows. Fourthly, restrictions on capital inflows in general have not been associated with lower real exchange rate appreciation.

Although there are vast political and economic differences amongst the BRICS countries, there are also various similarities. Almost all of these countries had a financial crisis in the 1990s and went through a process of political transformation. China, India, Russia and South Africa have been in more or less degree successful to

manage their exchange rate regimes with restrictive capital account convertibility. These countries managed their macroeconomic policy in conjunction with an exchange rate regime to reduce instability. These experiences proved that capital control measures to protect the domestic economy against the destabilizing effects of international capital flows were to some degree a success.

Russia went through an unstable political transformation process with a very bad performance in their macroeconomics to a fast growing market economy. The process of change in China was less chaotic because the authority's relaxation of restrictions was very well managed. South Africa also went through a process of political change but this political transformation was very smooth. Brazil on the other hand adopted a more liberal economic approach which included a less interventionist approach. The result was high exchange rate volatility, higher interest rates and a poor economic performance.

The various experiences of the BRICS can be summarized as follows: firstly, all five countries experienced a process of gradual capital account liberalization. Secondly, policy makers applied a variety of capital management techniques in relation to the overall aim of their economic policy regime. Thirdly, most of the BRICS experienced a surplus on their current account. Fourthly, the central banks accumulated foreign reserves to avoid speculative attacks on their domestic currency. This tactic enhanced the monetary policy makers' capability to influence the effective real exchange rate and to reduce volatility. Fifthly, most of the BRICS has some kind of a managed float exchange regime with the aim to preserve a stable effective exchange rate as an intermediate target as part of other macroeconomic policies oriented to employment and growth.

The growing economic power of the BRICS created a new international environment where it becomes impossible for the United States to resist a reshaping of the international monetary system. The Framework of the G20 leaders towards a process of mutual assessment of each other's policies is also step in the right direction. The creation of a new international reserve currency which is not connected to domestic deficiencies of individual countries for example high debt is perhaps a step in the right direction. A solution is to enhance the role of the Special Drawing Rights (SDR) of the IMF in international trade and finance. This step in conjunction with better

coordinated monetary policies in the G20 countries, improved financial regulation and coordinated G20 intervention can reduce future international instability and volatility.

Article 4: To Reduce Inflation: New Application of Old Theories

This article stated the dilemma of monetary policy authorities in BRICS countries. Capital flows to emerging markets displayed dramatic shifts since the 2008 financial crisis; collapsing at the start of the crisis, rebounding during 2009 and collapsing again during 2011 because of the European debt crisis. These fluctuations in capital flows should be controlled in order to ensure financial stability in emerging markets. The fourth theoretical objective to conduct a literature review of the new application of old theories to reduce inflation and capital volatility is addressed. The fourth secondary objective to analyze the application of a new inflation strategy is also addressed.

The financial crisis of 2008 influenced the international economic environment in many ways. A few examples are capital volatility, exchange rate volatility, balance of payments instability, high unemployment and rethinking of existing policies. Since the financial crisis monetary policy authorities had to look broader than inflation stability and have to address financial instability as well. Monetary policy authorities therefore have to apply a new mix of policies. None of the old policy measures is good enough anymore to address the new international financial challenges. New combinations of policies are in uncertain territory and the probable outcomes as well.

Various negative consequences developed for example BRICS countries that experienced capital surges because of very loose monetary policy in developed economies. Other challenges are escalating government debt and big budget deficits which hamper continuous counter cyclical fiscal policy. Very high unemployment in the world and policy challenges to reduce unemployment to normal levels again will be part of international agendas for a long time. Any new policy mix of policy authorities was not part of this research.

The rethinking of inflation theory to address the capital surges which emerging economies face is of utmost importance. The solution to reduce the negative impact of capital surges lies with inflation management in each BRICS country. This research focused on the South African inflation scenario. The reasons why international

investors invest in South Africa and other BRICS countries are of an exogenous nature. Existing policies can only influence the outcome, but cannot address the source of the investment.

The high interest rate spectrum and the core reason for attracting foreign capital are addressed. The root causes of the capital surges were investigated and not the symptomatic mechanisms to reduce the impact of capital surges. A new inflation index which excludes all exogenous factors will allow National Treasury to introduce a much lower inflation target for the monetary authority to manage. The interest rate differential of South Africa will narrow significantly relative to developed economies. If the government can buy in towards a coordinated structuralist approach, the outcome to reduce inflation will improve so much more. Other countries have a broader policy application, namely where industrial, labour and competition policies are coordinated towards the combat of inflation.

This reduced interest spectrum will also bring other advantages. The difficulty to introduce new policy instruments and a new policy mix to address imbalances will reduce. A lower interest rate spectrum will also cause significant other macroeconomic benefits. A lower interest rate will stimulate real growth, increase employment opportunities and contribute towards a reduction in poverty. Similar research can be done for the other BRICS countries. If the interest rate spectrum can be reduced in all the emerging economies, the world will be a better place to live in. The positive outcomes will be higher growth in the world, reduced unemployment and also a reduction in poverty levels.

Article 5: The Counter-cyclical Challenges of Fiscal Policy in South Africa

This article stated the dilemma of government debt above the international norm of developed countries. This article also analyzed the rising government debt of South Africa. The global financial crisis created challenges for policy makers in the world. The negative effects of the global crisis could not be resolved through the application of one policy. Policy makers applied inter alia counter cyclical fiscal policy. High government debt neutralizes the sustainability of the stimulatory stance of fiscal policy. The fifth theoretical objective to conduct a literature review of the new application of old fiscal policy theories to improve counter-cyclical fiscal policy is

addressed. The fifth secondary objective to analyze the application of a new counter-cyclical fiscal policy is also addressed.

The soaring government debt caused other problems for policy makers to address. A selection of developed versus emerging of advanced countries (G7) and the BRIC countries data indicated, with the exception of Germany, that the negative fiscal balances increased since the global financial crisis erupted. The fiscal balances on average paint a bleak picture for advanced countries relative to the emerging economies, with the exception of India.

Debt levels also soared in South Africa. The main cause for the increase in South African government debt is a soaring wage bill and escalating social grants. The actual capital expenditure continuous to decline as a percentage of total expenditure whilst the compensation of employees and social expenditure increases. This soaring debt caused by incorrect spending policies, neutralizes the desired effect of a sound counter-cyclical policy. This soaring debt also increases the financial instability and reduces the creditworthiness of South Africa.

An effective public service is a prior condition to infrastructural and industrial development. The rapid growth of East Asian countries can be attributed to an efficient public bureaucracy. Sustained growth depends on the ability of a public service to identify and execute investments efficiently. The South African government should therefore attract a high quality of employee to lay the foundation for long term growth.

Fiscal exit strategies are proposed by the G-20 member countries to eliminate the negative consequences of soaring government debt for future generations. Successful exit strategies emphasize cuts in government wages and transfers, over tax increases. Successful exit strategies also suggest that passive unemployment benefits should be reduced. Passive benefits (social grants) also dilute incentives for the unemployed to seek employment.

South Africa needs a redesign of government expenditure. The composition of fiscal expenditure should be changed. Public infrastructure investment should increase and allocations of capital in the annual government budget should be implemented. Unproductive current expenditure should be reduced at all cost. Fiscal actions that are

not based on theoretical principles increase the risk of escalating government debt. The government must arrest the trend of a growing government debt that needs to be financed. South Africa cannot afford lower credit ratings of credit institutions and higher risk premiums on future government bonds issues that will increase the debt even more.

For empirical analysis regarding each article's findings, refer to Addendum 1.

8.3 RECOMMENDATIONS

The South African economy does not grow at a sustainable high enough level to address the high unemployment that is experienced after the new political dispensation in 1994. Government has an enormous challenge to rectify the high unemployment levels as well as the negative coupled consequences of poverty and inequality. Before the recommendations of this research are summarized, reference to certain speeches and press releases is necessary to stress the severity of the growth challenge in South Africa.

The Minister of Finance corroborated in 2011 the structural problems as conveyed in the different policy documents (refer to chapter 2). The Minister addressed the annual national internal audit conference and stated Gordhan (2011:4): “.....*a formidable task which will require South Africans from all backgrounds to unite around a single vision and develop a common purpose and passion to effect the changes we need.*” The list gets longer and the obstacles to sustained growth according to the Minister are as follows (Gordhan, 2011:5):

- To Maintain macroeconomic stability;
- To Increase labour participation rates;
- To increase savings and investment which is essential for a higher growth;
- To lower the cost of young and inexperienced low-skilled workers to stimulate the demand for labour;
- To improve the efficiency of job search and job matching;
- To improve education and skills levels through the release of skills constraint;

- To remove regulatory constraints of SMEs;
- To reform the micro-environment of businesses through a reduction of cost to operate as a business and improvement in logistics and communications;
- To increase competition in industry which is characterized by a high level of concentration;
- To enhance regional integration; and
- To improve the efficiency of government.

It is obvious from the address of the Minister of Finance that the task to create sustainable high growth is formidable and the stumbling-blocks enormous to reach such a goal. Numerous stumbling-blocks are referred to in the different policy documents (refer to chapter 2) since the GEAR strategy of 1996. Referral to the stumbling-blocks continue in various policy documents, but the list does not shorten over time.

In the address at the annual Economist of the year banquet by the head of the secretariat of the National Planning Commission the following statement summarizes the challenges of South Africa to increase growth and to create employment (Naidoo, 2012:8): “.....*there are intangibles that need to be dealt with too. Presently, we have low levels of trust and respect amongst the major social partners. Government does not trust business and has a relationship with labour best described as dysfunctional despite alliances. Business does not trust government and has little respect for the challenges that government faces. To state the obvious, unions don't trust business. The net effect of this mistrust is low levels of investment, short term perspectives in business, amongst unionists and even in public policy. Ladies and gentlemen, it is inconceivable that a country as fractured as ours will make progress if we are not able to build up the trust required to carry us forward*”.

The head of the secretariat of the National Planning Commission elaborated further (Naidoo, 2012:8): “*In South Africa, we need a new type of social compact to renew our bonds. We do need a second transition aimed at giving jobs and hope to millions of young people. We have to convince the top 20 percent of the population, most of*

you here tonight, that your lives will be better off if the bottom half of the income spectrum was better off. We also have to convince the bottom half of the income spectrum that their lives are only likely to be better off if they work with the top 20 percent, and not by demonizing them into fleeing. This is the new social compact that we need".

It is obvious from the head of the secretariat of the National Planning Commission that a new mindset is necessary in South Africa. Respect and trust is needed amongst all social partners to build a better society. These principles and required mindset change lies at the core of an improvement in growth and development for all the inhabitants of South Africa. The researcher had a discussion with the head of the secretariat later that evening and pleaded that this breath of fresh air must be propagated to cabinet members and senior government officials. If the leaders have a changed mindset in the application of policy, the masses can be positively influenced!

President Zuma stated at the June 2012 ANC planning conference and confirmed his viewpoint the next week that South Africa needs a plan to address unemployment, inequality and poverty. At a press interview Joubert *et al.* (2012:11) the president stated that the country needs a national plan and that the report of the Planning Commission is not ideological and political, it is only a report compiled by independent people which is open for debate. In this press statement the President effectively drew a line through the work of the Minister of Planning and private sector experts to create a long term vision and plan to create a better society for all the inhabitants of South Africa. If a new plan is needed, then the work done and main goal of the New Growth Path (NGP) to create more and better jobs to fight poverty and to reduce inequalities is also in vain. South Africa do not need more policy plans, South Africa need a mindset paradigm shift!

The severity of the growth challenge in South Africa is highlighted further in a visit of the author to the fiscal policy managers late 2011. A senior government official stated that it is soul destroying to perform research, to write research papers to the Minister of Finance and then to be rejected by cabinet colleagues in cabinet meetings. Numerous reports stress that education and skills levels must improve and that the efficiency of government must improve. This required improvement of competence is

indeed necessary. It is required at all levels of the society, from the top level of policy authorities to the bottom levels at school in all the different grades.

The recommendations of this research are summarized under the following headings:

Research Visit to South East Asia: Visits and Interviews with International Government Departments and Research Institutions

Confucianism is the value system of East Asia with cultural roots that can be traced far back into Asian history. This cultural value system constitutes a competitive advantage in business. Key principles of Confucianism are that juniors owes seniors respect and obedience in all spheres of society, virtuous behavior is to treat others as one would like to be treated and virtue in life is to acquire education and to work hard. There is a proverb in East Asia: *“it is a shame on your family not to work”*. South Africa needs a value system similar to Confucianism – intangibles according to Naidoo where respect and trust exists amongst the different social partners.

Capitalistic principles must be amplified. Since Deng Xiaoping implemented market orientated reforms in China in 1978, the economic growth and development in China was spectacular. Although the economic liberalization process began slowly, the results without any doubt are extraordinary. The Chinese leaders in the early 1990s convinced the previous president of South Africa, Nelson Mandela, to change the ANC policy from nationalization to privatization. Privatization was settled amongst other matters in the GEAR strategy. Nationalization of mines or any other sector of the South African economy should not and must not be nationalized – the proof of success of privatization can be observed in China.

Labour cost in comparison to East Asian countries must decline or what should happen in practice is that the annual increase in labour cost must decline significantly. The wage levels relative to productivity are significantly higher in South Africa than in other emerging countries. As long as the South African labour cost exceeds the labour costs of East Asia, South Africa will be a net importer from East Asia. Unless this disparity is addressed and corrected, strategies of the Department of Trade and Industry will lack success. South Africa will also continue to experience a deficit on the current account of the balance of payments which is financed through volatile

portfolio investments. This continuous deficit (another structural problem) brings about questionable portfolio investments to create balance of payments stability.

The power of labour unions should be downgraded. The power and the role of labour unions in East Asia are negligible. The power of labour unions and the high South African labour cost goes hand in hand. COSATU is known for their militancy and to pursue their goals they chose the strategy of radical reform. A key attribute of this radical reform strategy was the process of multiparty negotiating forums. The ideas of radical reform were institutionalized during 1995 when NEDLAC was established. This forums empowered the unions to shape macroeconomic policy and affect the country as a whole, therefore broader than pure labour union issues. The workers could express their political support through their membership of the ANC while at the same time get their labour demands addressed via their COSATU membership.

Various countries in East Asia have benefited from outsourcing across shores, therefore called off shoring. India is dominant in software work and China is dominant in manufacturing. Various reasons exist for off shoring for example to enter into new markets or to overcome domestic regulations, but it occurs mainly where sections of production processes are transferred to countries where ample and cheap labour is available. Off shoring reduces the cost of production, creates ample opportunities for research and increase productivity. South Africa is involved with customer call centers, but off shoring with other African economies should be promoted to more sectors of the South African economy.

To reduce the cost of production and to create job opportunities in rural areas, sections of production processes must be outsourced to family dwellings. The author experienced in Thailand that factories assemble products or do quality control on products that are manufactured in family dwellings in rural areas. The same vehicle that delivers the applicable material for a specific process collects the manufactured or semi manufactured product on the same trip. South Africa should implement such a process to create jobs in rural areas which simultaneously reduce the cost of production. It also reduces the problem of urbanization.

Skills development begins as early as a solid foundation for pupils in basic education. The access for pupils in schools has improved, but according to tests amongst

emerging countries, the quality of education in South Africa compares miserably. The cognitive skills levels of intakes of tertiary institutions are deplorable. In East Asia the school education is worth following and focused on technology. Tertiary institutions furnish degrees in technology and factory workers apply for work as graduates. The education system in South Africa needs an overall restructure and refocus to supply correctly equipped candidates at tertiary institutions to fill the demand of industry. The previous technicons has also to refocus on technology studies again and not to expose themselves in the field of universities and studies in social sciences.

Article 1: The Challenge of South Africa to Reduce its High Unemployment

The population growth does not stabilize because the South African authorities opened the northern borders beginning of 2009 to allow people of northern African countries to pour into South Africa. This change of policy caused the unemployed pool to escalate in South Africa. The northern borders must be closed to stop the poor and unskilled citizens of Africa to increase the unemployment pool in South Africa.

According to the 2010 national budget R165 billion or 18% is budgeted for education (the biggest item in the budget) for the fiscal year 2010/11. The education figure for the 2012 national budget amounts to R207 billion or 20% of total expenditure. The government pours billions of Rands into the coffers of education, but the standard of education does not improve. Policy authorities must choose the rectification of the education system at schools as another objective function to provide tertiary institutions with proper qualified candidates. The shortage of qualified candidates in various scientific fields in industry will thus be addressed.

The investment in human capital needs to be addressed. A wage subsidy for youthful workers that target the unemployed group that is in transition between school and work should be the only grant to the unemployed youth. Such a wage subsidy system in collaboration with the rectification of the education system should reduce the big pool of unskilled workers.

BEE policies should be scrapped. This philosophy of government discourages new investment and only benefits the black elite as Mr Moeletsi Mbeki call them. Regardless of the economic failure of this policy, a BEE Council was inaugurated on

the 4th of February 2010 to accelerate the process. The living standards of the unemployed masses do not benefit from this policy.

Article 2: Labour Union Voices in South Africa and Arguments to Scrap Inflation Targets - a Historical and 21st Century Debate

Prudent monetary policy and the maintenance of financial stability in South Africa in the long term should stay intact regardless of the criticism of COSATU. Monetary policy based on economic theories should be the norm and monetary policy should not be changed according to an ideology or misconceptions about economic principles of labour unions.

Article 3: BRICS Currency Volatility: Confusion or Indecision

Macro prudential ratios for example liquidity ratios which differentiate according to currencies or reserve requirements with different maturity dates, is useful to reduce the impact of capital surges. The management of macro prudential policy together with conventional monetary and fiscal policy measures is proposed to reduce the negative impact of capital surges. Such a policy also helps to reduce systematic risk in the financial sector.

A new reserve currency is proposed. The BRICS are likely to support reforms that should create a more stable international environment, based on a stable currency not linked to deficiencies of debt or any kind of historical perceptions. A new currency of some kind, an idea that dates back as far as the breakdown of the Bretton Woods system, can help to improve international currency stability.

Article 4: To Reduce Inflation: New Application of Old Theories

The interest rate spectrum in all the BRICS countries is higher than in the developed economies. All the BRICS countries experienced capital surges because of their higher interest rate spectrum. A new inflation index is proposed to reduce the negative impact of capital surges in the South African economy as a step in the direction to reduce the high interest spectrum of South Africa relative to developed economies.

Article 5: The Counter-cyclical Challenges of Fiscal Policy in South Africa

Government has to revert back to Keynesian and other fiscal policy theories. Government expenditure should be redesigned. Unproductive current expenditure should be reduced and productive capital expenditure should be increased. The rising government debt creates the risk of holding increasingly large amounts of government bonds nationally and internationally. The government must arrest the trend of a growing government debt that needs to be financed. South Africa cannot afford lower credit ratings of credit institutions and higher risk premiums on future government bonds issues that will increase the debt even more.

The government began some years ago to pay out social grants to children of poor families. In the 2010 national budget (Department of National Treasury, 2010), R89 billion rand is allocated to this portfolio and the grant was extended from 16 years to 18 years. These grants send the wrong signal to communities, because the opportunity avails for more children to be conceived to qualify for grants. It also casts a shadow over the development of any entrepreneurial skills and creativity to find a job because government looks after the people. A gradual reduction in social grants is proposed. The government should also activate conditions to the receipt of social grants. Such attached conditions will reduce adverse labour market effects.

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ADDENDUM

The main objective of this research was to explore the application of policies that influence the economic outcomes of South Africa. Five probable answers to the vast number of questions regarding sustainable growth were addressed. Various reports were highlighted regarding the different structural problems in the South African economic and political environment.

Policy is about social choices to pursue certain objectives. Complex relations exist amongst policy objectives. Policies were tested against theory and international best practices mainly in East Asia and BRIC countries. In this addendum empirical research done about the five different questions are highlighted to support findings and recommendations of this study about the relation between sound economic policies and sustainable growth in South Africa.

Article 1: The Challenge of South Africa to Reduce its High Unemployment

This article stated the problem of weak sustainable economic growth and high unemployment that prevails in South Africa. This article analyzed macroeconomic policies and sought methods from international best practice to increase economic growth. Various structural problems exist in South Africa that hampers sustained growth and the reduction of unemployment. Various policy adjustments are needed to rectify this major problem.

The various structural problems identified in ASGISA and the NGP must be addressed by government and principles of East Asian success stories should be incorporated in the South African economy. Fundamental policy changes are needed in the South African economy. Empirical research regarding growth and unemployment is debated that supports findings and recommendations as reflected in article one to create sustainable growth and to reduce unemployment in South Africa.

Kingdon & Knight (2001) examined the impact of the household unemployment rate and the household informal employment rate on the perceived quality of life and poverty of households in South Africa. This research examined the extent to which unemployment can be classified as voluntary or involuntary. The researchers posed

two broad questions, namely why do the unemployed not enter self-employment, therefore are they prevented by barriers to entry? Secondly, why do the unemployed not enter wage employment, therefore are they deterred by their own unrealistically optimistic wage expectations?

The real question was whether the available set of options was so limited as to render unemployment involuntary for practical and policy purposes. The research also tried to establish how satisfied households are with the way they live. The research established by means of questionnaires that the unemployed are substantially disadvantaged relative to the informally employed citizens of South Africa.

Regarding the first question why the unemployed do not enter self-employment, various reasons are supplied. It is possible according to this research that formal-work aspirations, greater effectiveness of search from the unemployed than from the informally employed state, and access to non-earned income are important reasons why some people choose to remain unemployed. The evidence of much greater deprivation associated with unemployment than with informal sector employment suggests against the idea that much unemployment in South Africa is voluntary. The research suggests that barriers to entry into the informal sector are a powerful factor in explaining high unemployment.

Regarding the second question, the hypothesis that the unemployed have unrealistically high wage aspirations was inconclusive. Although about half of the jobless had reservation wages that were higher than the wage they could reasonably expect in wage employment, it is doubtful that many of these were voluntarily unemployed. The reported reservation wages were unreliable guides to the nature of unemployment. Various reasons were supplied, namely people appear often to report the wages they hope to obtain in the formal sector (which are possibly also the wages they regard as fair) rather than the minimum they would accept. Furthermore, lack of information about the labour market because people are living in remote areas, lack of education, or lack of previous work experience or ignorance about their market worth are contributing factors.

Wakeford (2003) addressed certain unemployment relationships. Wakeford analyzed the long-run co-integrating relationship between productivity, real wages and

unemployment. Furthermore, this research addressed the dynamic relationships amongst these variables as well as directions of causality of these variables. The key findings of this research are summarized in the next paragraphs.

Firstly, there was strong evidence of a structural break in 1990, which seems to have affected the level of employment. This structural break fed through into other variables such as per worker wages and productivity. This evidence is substantiated by various economic and policy factors as well as by other empirical work. Secondly, real wages, productivity and unemployment have all risen rapidly since 1990. A long run co-integrating relationship exists between real wages and productivity for the period 1983 to 2002, but unemployment was apparently not connected to the other two variables. There is also strong evidence that productivity and real wages are co-integrated in the period 1990 to 2002. In the long run, a 1% rise in productivity is associated with an approximately 0.58% rise in real wages. The econometric modeling matches the preliminary analysis of growth rates, in that real wages have not kept pace with productivity gains in the long run.

Thirdly, the unemployment rate behaved in a manner inconsistent with the theory underlying the specification of the wage curve equation. The econometric results show that unemployment is divorced from the long-run equilibrium between real wages and productivity. According to this research it seems clear that in the South African labour market, the high rate of unemployment has little or no effect in terms of restraining real wage growth. Conversely, real wage increases cannot be blamed for raising the level of unemployment. This study provides evidence for the insider-outsider model of the labour market, in that it appears as if the unemployed have little effect on wage rates.

Fourthly, according to the econometric evidence certain directions of causalities were established. Real wages impact on productivity negatively but productivity has no effect on real wages. Furthermore, productivity has a weak autoregressive pattern but real wages lacks this altogether and lastly, adjustment to equilibrium occurs through both wages (negatively) and productivity (positively). Lastly, given the economy's slow growth performance over the decade up to 2002, the rapid rise in productivity (and average real wages) reflects in large part the sharp decline in employment levels. South Africa's productivity performance should not therefore be looked at in isolation

of the employment trend, which indicates the job-shedding nature of economic growth in this country over the decade up to 2002. The results proved that productivity has grown faster than real wages for that decade. As a result, labour's share of gross output has been shrinking.

Mlatsheni & Rospabe (2002) analyzed the youth unemployment problem in South Africa. The main causes of youth unemployment have been widely studied in the economic literature and can be classified in two groups, namely whether unemployment are analyzed from a macroeconomic or microeconomic perspective. Factors that influence youth unemployment from a macro perspective are aggregate demand, youth wages, the size of the youth labour force and the lack of skills among youth. If the argument of wages is incorporated, evidence suggests the effect of minimum wages on youth employment is often found to be significant.

The microeconomic theory puts forward other explanations to youth unemployment. The theory of human capital for example differentiates individuals by their schooling and training investment and accounts for some of the differences in productivities between young people and more experienced people. Young people with low education and experience will go through more difficulties to find employment. Factors such as education and experience play an immense role, but factors such as family background and location also play an important role. Youth unemployment also results from imperfect information on the labour market. The theory of job search and the theory of job shopping also explain high youth unemployment. This research concentrates on the microeconomic causes of youth unemployment in South Africa, addressing the issue of the individual determinants of wage employment and self-employment.

This research studied the differences in opportunities for both wage employment and self-employment between the youth and older participants seeking work. The decomposition analysis indicated that large amounts of the differences in employment of youth and older participants are attributable to disparities in observable characteristics such as experience and education in the case of wage employment and family characteristics in the case of self-employment. The latter is also likely to be greatly influenced by differences in access to credit.

The research of Mlatsheni & Rospabe (2002) also focused on differences in the incidence of unemployment within the young population, namely race and gender. With regard to racial differences in employment, it was found that a significant proportion of the difference in African and White youth wage employment is unexplained by observable characteristics and is likely to reflect some hiring discrimination from the employers. In the case of self-employment differences, it can be entirely attributed to differences in observable characteristics of the two races. The gender analysis revealed strong evidence of discrimination against women in both wage employment and self-employment.

Lack of education also plays a major role in the probability of finding a job. According to this research it appears that the majority of African youth either suffers from deficiencies in education (early exit out of the schooling system) or because of a lack of skill recognition from the employers. If youth unemployment is analyzed in a broader respect, whole societies suffer as there is a link between youth joblessness and serious social problems such as drug abuse, vandalism and crime.

Mlatsheni & Rospabe (2002) made certain recommendations to reduce the structural problem of youth unemployment. Firstly, the informal sector should be developed and SMMEs should be encouraged. Secondly, the education system should be better aligned to the labour market. This could be achieved through students being offered internships at private companies, government bureaus and non-government organizations. Thirdly, policies and programmes should also be implemented to ensure that youths refrain from early exit from the schooling system.

The world experienced a revival of interest in the 1980s and 1990s in growth theories (Barro, 1996). The initial interest centered on endogenous growth theories, in which the long-term growth rate was determined by government policies. In subsequent models that were developed, technological progress generated by the discovery of new ideas was highlighted as the only way to avoid diminishing returns in the long run. In models that followed, empirical work on growth across countries and regions has received its main inspiration from the older, neoclassical model, as extended to incorporate government policies. The neoclassical model's central idea of conditional convergence received strong support, namely that poorer countries grow faster per

capita once one holds constant measures of government policy and initial levels of human capital.

Theories of basic technological change are important to explain why the world as a whole and more specifically, the economies at the technological frontier, can grow in the long run. But these theories do not determine the relative rates of growth across economies; that is, with the relations studied in cross-country or cross-region statistical analyses. An empirical framework by Barro (1996) was derived that embodied the idea of conditional convergence as an extended version of the neoclassical growth model. The convergence property is derived in the neoclassical model from the diminishing returns to capital. Economies that have less capital per worker (relative to their long run capital per worker) tend to have higher rates of return and higher growth rates.

The convergence is conditional because the steady state levels of capital and output per worker depend in the neoclassical model on the propensity to save, the growth rate of population, and the position of the production function that may vary across economies. The empirical findings for a panel of around hundred countries strongly support the general notion of conditional convergence. For a given starting level of real per capita GDP, the growth rate is enhanced by higher initial schooling and life expectancy, lower fertility, lower government consumption, better maintenance of the rule of law, lower inflation, and improvements in the terms of trade.

It is no surprise that the results according to the empirical research of Barro (1996) proved that East Asian countries are on the high growth list. East Asian countries that reflected the best growth results are South Korea, Malaysia, Singapore, Thailand, Hong Kong and Taiwan. The results of South Korea was the best because of high educational attainment, strong economic rights, low government spending, low fertility, high investment, and low inflation. The high-growth list also has substantial representation in South America, namely Peru, Argentina, Chile, Paraguay, Guyana, and Ecuador. A key factor of these countries is macroeconomic stability.

On the low-growth list, thirteen of the twenty countries are in Sub Saharan Africa. Factors that caused low growth and slow convergence are weak enforcement of property rights, low school attainment, high fertility, low life expectancy, no political

freedom, high government consumption, moderately high inflation and virtually no investment. According to this research a few steps should be implemented to address the low growth, namely to cut tax rates and nonproductive government spending or to eliminate harmful regulations. There is no evidence according to this research that increases in infrastructure investment and research subsidies should increase the low growth rate in Africa.

Lewis (2001) examined the economic challenge in the years since 1994 to generate sustainable growth, job creation and poverty reduction in South Africa. The underlying message was that the economic challenge that South Africa faced will not be solved by “quick fix” solutions. To create sustainable growth demanded concerted initiatives across a range of issues that reflect the underlying dependencies and “interconnectedness” of the economy.

In this research an economy-wide computable general equilibrium (CGE) model was developed that permitted the researchers to assess the impact of different policy measures or economic conditions on the economic performance of the South African economy. The South African CGE model belongs to a class of models that have been applied to different studies in developing countries, for example research regarding trade strategy, income distribution and structural change. This type of model makes it particularly suitable for looking at the potential links between policies and performance. CGE models simulate the functioning of a market economy, including markets for labor, capital, and commodities and provide a useful perspective on how changes in economic conditions will likely be mediated through prices and markets.

In this research conducted by Lewis (2001), the emphasis was not on macro stabilization concerns, but on fundamental issues of growth determinants. Policy options were analyzed empirically and a number of conclusions and policy directions emerged:

- It remains critically important for South Africa to maintain credible and consistent macroeconomic policies;
- Prudent fiscal and monetary policies are necessary, but certainly not sufficient. Equal progress is needed on the agenda of structural reforms that were outlined in GEAR, but not fully addressed;

- Structural features of the South African economy exacerbate the growth and employment challenge. Foremost among these features is the unparalleled dualism of the economy that results in the co-existence of a modern economy next to underdevelopment and persistent poverty;
- Very high unemployment levels means that the incidence of unemployment is not confined to small pockets, but that unemployment is found across the economy;
- Analysis of growth opportunities and job creation should start with the recognition that different production activities and technologies involve different patterns of labour and skill intensity;
- No individual policy can provide a “quick fix” to the growth problem, but change in a number of policies can create momentum towards growth. One imperative that is needed, is to improve the investment climate;
- Targeted investment incentive schemes should be approached with caution. International evidence proved that such schemes fail to attract expected new capital and are often costly and result in resource misallocation. Policies should be directed towards efforts to improve the overall business climate;
- FDI should be encouraged. A stable source of long term finance can be provided, but technology transfer and international market access associated with strategic partnerships with industry can be developed;
- The SMME sector in South Africa appeared to be underdeveloped because of constraints such as inadequate demand, limited access and high cost of capital and weak support and procurement programs from government. Government should implement programmes to increase access to finance and address skills shortages that exist;
- Labour market flexibility is cited as a critical concern in South Africa and job creation among unskilled and semi-skilled labour are constrained by rising real wages. Initiatives should be implemented to enhance flexibility and market efficiency;

- Improved labour market flexibility is not enough; efforts must be implemented by government to augment the skills base of the labour force. Resources and more aggressive efforts need to focus on enhancing the employability of the unemployed;
- Employment subsidies could provide another means to encourage job creation. Large schemes can have an impact whilst be affordable. Such schemes also provide a means to encourage private sector to meet training requirements and expand the skills base;
- Rural development must be accelerated. Infrastructural investment must be targeted, technical assistance must be improved and administrative difficulties associated with land reform must be reduced to yield improved results;
- Trade liberalization must be accelerated. A program of tariff reforms must be implemented and the number of different rates must be reduced;
- Preferential trade agreements within and beyond Africa generates gains to South Africa and must be promoted. Integration initiatives in SADC should be accelerated;
- A pro-growth reform scenario is developed in this research which can increase GDP by one per cent on condition that the skills shortage is addressed; and
- The economic impact of the HIV/AIDS pandemic demands attention. This pandemic has a major impact on productivity, private consumption, government expenditure and government financing patterns. Greater attention should be given to government spending programmes (for example health, education and welfare) influenced by the pandemic as well as the budgetary process to finance such programmes.

Article 2: Labour Union Voices in South Africa and Arguments to Scrap Inflation Targets - a Historical and 21st Century Debate

This article stated the need for monetary stability. Regardless of the continued criticism of COSATU against monetary policy (and government policies in general), the need of a stable financial environment is a necessary foundation for economic

growth. COSATU has a different viewpoint than government regarding interest rates and policies to reduce unemployment. COSATU criticizes the strict application of IT by the monetary authorities and regularly call for a review of the inflation targeting policy framework in South Africa.

The vision of SARB is very clear, namely to achieve and to maintain price stability. The main focus of SARB is to create a stable financial scenario and not to create employment. Various populist statements by COSATU lack basic economic reasoning. If the inflation rate continues to increase because the causes of inflation are not addressed by the monetary policy makers, the poor will be hurt by high and unsustainable prices in the long run. Empirical research regarding IT is debated that supports findings and recommendations to create a stable financial environment in South Africa.

Inflation targeting is a popular monetary regime among industrialized and developing central banks. However, there is little cross-country comparative information about commonalities and differences in monetary policy implementation and results across inflation-targeting countries (Schmidt-Hebbel & Tapia, 2002). This research presented the results of a survey on monetary policy conducted among the world's twenty central banks that target inflation at time of writing in 2002. Survey responses highlight operational features of monetary policy implementation, the ways monetary decisions are made and communicated to the public and the models on which monetary policy decisions and macroeconomic forecasts are based. The research also reports the dynamic simulation effects of monetary policy changes on output and inflation reported by individual central banks.

Monetary policy as far as IT is concerned differ in how central banks design and implement their policy goals and instruments, in how they conduct their policies as well as in the way how they communicate their policy results with the public. Policy differences across countries tend to narrow as a result of active exchange of country experiences and policy practice among IT central banks. But central banks are still far from converging in the way they adopt IT. The question is therefore, how far?

This question led the researchers to send out, in early 2001, a questionnaire to central banks of seventeen countries that are identified as inflation targeters. The list included

Australia, Brazil, Chile, Canada, Colombia, the Czech Republic, Israel, Korea, Mexico, New Zealand, Peru, Poland, South Africa, Sweden, Switzerland, Thailand, and the United Kingdom. The questions that comprise the survey fall into four broad themes: inflation target implementation features; simulations of dynamic effects of monetary policy on output and inflation; content and public impact of inflation reports, and conduct of monetary policy meetings and decisions.

Very diverse countries joined the group of central banks that adopted inflation targeting, comprising both industrialized and developing economies. As widely documented, industrial countries have tended to adopt IT at low initial inflation rates, while developing countries have used IT successfully in bringing down their high initial inflation rates toward low stationary levels. IT country experiences however show large diversity regarding the form of IT adoption (partial or gradualist, as compared to fully-fledged or big-bang), the speed of stabilization under IT and their overall structural conditions. However, they share the success in meeting their targets and achieving stabilization at moderate output costs proof of which is that no country has renounced IT to date of this research (Schmidt-Hebbel & Tapia, 2002).

IT is still a creature of many faces. Central banks follow a common general approach to monetary policy, but they show large differences in the way they design and operate IT. This fact previously documented by various other researchers, is confirmed in this research. Significant cross-country differences are observed regarding the main design features of IT, including inflation target measure, range, level and time horizon.

The results suggested that output effects are more intense, and take place at shorter lags, than inflation effects of monetary policy. No clear pattern of correlation between intensity and lags of effects and country development levels could be established. But, is there a relation between response lags and the time horizons of inflation targets? Indeed, in several countries where inflation response lags (defined as the quarter at which 50% of the total inflation effect is attained) are above 1 year, inflation targets are not defined for annual horizons but for open periods or rolling windows (Australia, Chile, and the United Kingdom). Countries that rely on annual targets typically exhibit a response lag of inflation that falls within 4 quarters.

Using country responses was straightforward to calculate simple cross-country correlation coefficients for output and inflation responses. The correlation between the size of output and inflation effects was large (0.58) and significant (Schmidt-Hebbel & Tapia, 2002). This suggests that monetary policy affects more strongly inflation when output is or has been affected more intensely. However, the simple correlation coefficient between the speeds at which output and inflation effects are observed (i.e., the correlation between the length of output and inflation response lags) is smaller (0.27) and only marginally significant. Finally, correlations between response size and speed are not significant for output, and are negative and only marginally significant for inflation.

In summary, dynamic simulation effects of monetary policy differ significantly among countries. Important differences are observed regarding size, speed, and persistence in the

response of output and inflation to a monetary shock. What lies behind country differences? At least three factors explain this phenomenon (Schmidt-Hebbel & Tapia, 2002). First, countries differ in macroeconomic structures, including the extent of wage and price indexation, market competition and openness, development level, cyclical position and distance from stationary equilibrium conditions.

A second explanation can be found in the policy reaction function incorporated in the model. Changes in the policy rate after the first quarter are ruled by a policy function, typically a variation of a simple Taylor rule. The relative weight attached to output and inflation deviations, the inclusion of other variables (like the exchange rate), and the degree of inertia embedded in the function and the neutral interest rate will be relevant for the dynamics of policy rates and, through them, of inflation and output. Thirdly, models differ in their assumptions, properties, complexity and possibly overall quality.

In conclusion, this research focused on the practical implementation of inflation targeting regimes and covered three broad issues: the way inflation targets are defined, the way central banks perceive the effects of monetary policy and the several dimensions of transparency within monetary policy regimes. This research has highlighted that inflation targeting regimes differ significantly in their operational

characteristics; there are differences in the estimated effects of monetary policy, a result which combines different structural characteristics in the economies and important asymmetries in central banks' models and the degree of transparency differs between countries.

Various countries adopted inflation targeting as a framework to conduct monetary policy. Various empirical analyses have been done to verify the emergence of any trade-off between inflation and output. The justification for the dissemination of IT is that countries with this monetary regime have been successful at reducing inflation (De Mendonca, 2007). De Mendonca investigated the relation among inflation, interest rate, unemployment and economic growth in empirical research done for fourteen countries with explicit IT. Various countries were included in South America and Europe, as well as countries like Canada, Israel, Korea and New Zealand.

The results of the research denoted that the adoption of IT is a good framework for reducing inflation. IT contributes to diminishing interest rate spectrums in most countries without economic growth costs. The research however proved that a trade-off emerged between inflation and unemployment.

The main reason for adopting IT was the reduction of inflation and this research proved that central banks were capable to assure price stability. These success stories improved the credibility of central banks because this monetary framework contributed towards a stable macro-economic environment. If a stable macro-economic environment exists, then economic growth can be promoted in the longer term which can reduce unemployment (De Mendonca, 2007).

Article 3: BRICS Currency Volatility: Confusion or Indecision

This article analyzed various tactics available to authorities in BRICS countries to reduce exchange rate volatility and therefore the negative impact of the 2008 financial crisis on growth. It also analyses protectionist measures by exchange rate authorities relative to the artificial management of exchange rates. Central Banks in the world reacted differently to mitigate the risks in emerging markets. There exists no uniform strategy for all countries to reduce the destabilization of short-term capital surges. Policies applied are normally some kind of mix between reserves accumulation,

adjustments in either the fiscal and monetary stance as well as the strengthening of the prudential framework.

The appropriate policy response to a capital surge depends on a variety of specific circumstances in various countries. The stage of the business cycle and the prevailing fiscal policy and monetary policy all play a role when policy measures are analyzed for implementation. Countries with relative high current account deficits are for example more vulnerable to a sharp reversal of capital surges. Furthermore, a policy of resistance to nominal exchange rate appreciation is in general not effective to prevent a real appreciation and has often been followed by a sharp reversal of capital inflows. Empirical research regarding exchange rate volatility is debated that supports findings and recommendations to create a stable financial environment in South Africa.

Rose (1996) examined exchange rate volatility. The main motivation of this research was to examine the nature of the relationship between fixed exchange rates, independent monetary policy and perfect capital mobility. In other words, this empirical quantification examined the trade-offs between exchange rate stability, monetary divergence and capital mobility. In this econometric examination the nature of these trade-offs were examined with monthly observations for twenty-two countries from 1967 until 1992. The data used included a large number of different exchange rate regimes ranging from clean floats to tight pegs. The data set also included a wide range of observations regarding capital mobility, including countries with tight regulations as well as countries with developed financial markets with few regulations.

The historical trade-offs between fixed exchange rates, independent monetary policy and capital mobility were examined. Statistically significant evidence was not found of an obvious trade-off between fixed exchange rates, independent monetary policy and capital mobility. There are theoretical reasons why the three phenomena may not be mutually incompatible, especially in the short run. Probable reasons are short-run price stickiness and imperfect international asset substitutability. Rose (1996) stated that official exchange rate policy have a significant effect on exchange rate volatility even after taking into account macro-economic phenomena. This fact constituted

evidence that exchange rate volatility is influenced by micro economic phenomena as examined and analyzed in other empirical research.

According to Aron *et al.* (1997) the real exchange rate is characterized by considerable volatility. The real exchange rate is influenced by the role of fiscal-, monetary-, exchange rate- and trade policies; the effect of terms of trade shocks and the shifts in capital flows which reflect South Africa's volatile political cycle over many years. When authorities have to deal with large capital flows, a trade-off emerge between allowing the exchange rate to appreciate, thus having a negative impact on the competitiveness of exports. On the other hand to sterilize these effects, the Reserve Bank induces losses. Events have shown that the management of capital flows in a more internationalized economy presents a formidable challenge for South Africa's policy-makers.

The research done by Aron *et al.* (1997) presented a formal definition and estimation of the long-run and short-run influences in a model for the real exchange rate in South Africa. The model is done on a quarterly basis, for the period 1970:1 until 1995:1, the final quarter being the last quarter of a long-standing dual exchange regime. Co-integration methodology and single equation error correction models were employed to investigate simultaneously both the short-run and long-run equilibrium determinants of the real exchange rate in South Africa. The co-integrated equilibrium was obtained from a theoretical model of the real exchange rate which used a macroeconomic balance approach that focused on the requirements for achieving internal and external balance simultaneously.

Based on a theoretical model setting out the determinants of the real exchange rate, the evidence on the quarterly evolution of various fundamental variables expected to influence the real exchange rate in South Africa were examined. The variables that were examined are trade policy, long-run and short-run capital flows, foreign exchange reserves, government expenditure and productivity growth differentials.

The determinants of the real exchange were analyzed in the research, but the question of management of the exchange rate remains. Adhering to nominal and real exchange rules is simply too rigid. The research of Aron *et al.* (1997) indicated that the real

exchange rate is not constant over time, but responds to changes in a range of fundamentals and shocks to the economy. If for example the differential between South Africa's inflation rate and the OECD average remains, this differential suggests that a fall in competitiveness should take place if the nominal exchange rate is assumed held fixed. It is crucial to bring down inflation, otherwise a large depreciation will be called for in several years' time. It is a necessary condition that the Reserve Bank should have sufficient reserves to be able to defend the nominal rate against large changes due to speculative attacks (though its ability to do so is limited).

Berger *et al.* (2000) tested the exchange rate regime choice with data for sixty five non-OECD countries covering the period 1980 until 94. Few questions in international economics have aroused more debate than the choice of the proper exchange rate regime. Questions are for example why have some developing countries adopted a fixed exchange rate regime, while other countries have opted for flexible exchange rate systems? Or, why do countries change from one system to another? The actual question to ask is whether the countries that pegged their currencies made the right choice?

In various surveys on exchange rate systems towards the end of the 1990s a downward trend in the number of pegging countries was recognized. One of the main arguments was that a flexible exchange rate system has advantages from a political-economy point of view. The switch to more flexible systems lowers the political costs of exchange rate changes according to various studies.

The research done by Berger *et al.* (2000) focused on the possible diminishing economic advantages of peg systems. The model integrated the advantages of flexible and fixed exchange rates. The model also fits in with modern literature on exchange rate regimes that emphasizes tradeoffs between credibility and flexibility. In this literature it is stressed that a flexible regime allows a country to have an independent monetary policy, providing the flexibility to accommodate domestic and foreign shocks. Modern literature also states that a fixed exchange rate regime reduces the degree of flexibility but imparts a higher degree of credibility.

This empirical research suggested that a more volatile foreign economy can be an argument in favor of a fixed exchange rate regime once similarities in the business cycles

in both countries are taken into account. The reason for such results is straightforward because under fixed exchange rate systems, the pegging country not only loses the ability to stabilize domestic shocks, but it will also import monetary policy of the country to which it pegs. For a sufficiently large and positive correlation of shocks, a higher level of foreign output variance will support the choice of a fixed exchange rate regime because foreign monetary policy is targeting the same real shocks that haunt the home economy. The empirical results based on panel data for sixty five non-OECD countries covering the period 1980 until 94 support the theoretical model quite well. The variance of output growth at home and in potential target countries as well as the correlation between home and foreign real activity, and the level of central bank independence in the pegging country are powerful and robust predictors of exchange rate regime choice.

Determinants of possible exchange rate choice were analyzed. Berger *et al.* (2000) analyzed firstly credibility. A benevolent government should be more inclined to choose a pegging regime if *ceteris paribus* the pegging country's inflationary bias is high relative to the inflationary bias of the foreign country. Volatility was analyzed as second determinant. Whether pegging will be less or more attractive if *ceteris paribus* the variance of the home country's or the foreign country's output shock is increasing depends on the correlation of both shocks and the model's parameters. Higher volatility at home or abroad works against a fixed exchange rate regime. The reason being that under fixed exchange rates the pegging country not only loses the ability to stabilize domestic shocks, but it also imports a monetary policy that reinforces rather than compensates such shocks. Correlation was analyzed as third determinant. Imported stabilization is also behind the conjecture that fixed exchange rates are more advantageous if, *ceteris paribus*, the correlation between the home country's and the foreign country's output shocks are large.

In the model developed by Berger *et al.* (2000) a simplified case was analyzed, namely a fully flexible exchange rate system versus an irrevocably fixed nominal exchange rate system. Results suggested that in a more volatile foreign economy, a fixed exchange rate regime is favored once similarities in the business cycles in both countries are taken into account. The results of the model supported findings of other research that there are no general rules as to the optimality of an exchange rate regime. The decision to peg or not to peg varies over time with political and economic circumstances that change.

Some caveats were in order when the model was developed as some of the problems that plague the literature on the consequences of exchange rate regimes have affected the results. Literature pointed out that most research classify studies following the countries' official description of the exchange rate (typically the one they report to the IMF). However, differences between *de jure* and *de facto* regimes may be substantial. Furthermore, it is assumed that the regimes were sustainable in the period under consideration and that duration is assumed to be immaterial.

In the research done by Berger *et al* (2000) the first issue were taken into account. The results confirmed that *de jure* choices are not on paper only, as these choices matter for actual behavior. The second issue was only partly been taken into account, namely that the researchers analyzed whether a wrong policy choice has affected actual exchange rate volatility. The results suggested that mistakes in institutional choice indeed mattered; the standard deviation of the nominal exchange rate of countries that did not fix their exchange rate is higher than that of countries that made a choice in accordance with the theoretical model that was developed.

Article 4: To Reduce Inflation: New Application of Old Theories

This article stated the dilemma of monetary policy authorities in BRICS countries. Capital flows to emerging markets displayed dramatic shifts since the 2008 financial crisis. The financial crisis of 2008 influenced the international economic environment in many ways. Since the financial crisis monetary policy authorities had to look broader than inflation stability and have to address financial instability as well. Monetary policy authorities therefore have to apply a new mix of policies. New combinations of policies are in uncertain territory and the probable outcomes as well.

Various negative consequences developed for example BRICS countries that experienced capital surges because of very loose monetary policy in developed economies. Other challenges are escalating government debt and very high unemployment. The solution to reduce the negative impact of capital surges lies with inflation management in each BRICS country. The reasons why international investors invest in South Africa and other BRICS countries are of an exogenous nature. Existing policies can only influence the outcome, but cannot address the source of the investment. Empirical research regarding monetary policy is debated

that supports findings and recommendations to reduce capital volatility and to create a stable financial environment in South Africa.

Clarida *et al.* (1999) investigated literature on monetary policy rules. Optimal monetary policy depends on the degree of persistence in both inflation and output. The degree of inflation persistence is critical since this factor governs the output/inflation trade-off that policy makers face. The research also proved that gains from making credible commitment may emerge even if the central bank is not trying to push output above its natural level. The implications of frictions such as imperfect information are also considered in the application of monetary policy.

Optimal monetary policy embraces inflation targeting in the sense that it calls for gradual adjustment of the optimal inflation rate. The implication for the policy rule is that any central bank should adjust the nominal short rate more than one-for-one with expected future inflation. Central banks should adjust the nominal rate sufficiently to alter the real rate and therefore aggregate demand in the direction that it offsets any movement in expected inflation.

According to the research done by Clarida *et al.* (1999) a number of key results emerged that is also supported by other literature on monetary policy:

- To the extent cost push inflation is present, there exists a short run trade-off between inflation and output variability;
- Optimal policy incorporates inflation targeting in the sense that it aims for convergence of inflation to its target over time;
- Under the optimal policy rule, in response to a rise in expected inflation, nominal rates should rise sufficiently to increase real rates;
- The optimum policy call for adjusting the interest rate to perfectly offset demand shocks but perfectly accommodate shocks to potential output by keeping the nominal rate constant;
- If the central bank desires to push output above potential then under discretion a suboptimal equilibrium may emerge with inflation persistently above target and no gain in output;

- Appointing a central bank chairman who assigns a higher relative cost to inflation than society as a whole, reduces the inefficient inflationary bias that is obtained under discretion;
- If price setting depends on expectations of future economic conditions, then a central bank that can credibly commit to a rule faces an improved short run trade-off between inflation and output;
- The globally optimal policy rule under commitment has the central bank partially adjust demand in response to inflationary pressures;
- With imperfect information, stemming from either data problems or lags in the effect of policy, the optimal policy rules are the certainty equivalent versions of the perfect information case;
- Large unobservable shocks to money demand produce high volatility of interest rates when a monetary aggregate is used as the policy instrument;
- Parameter uncertainty may reduce the response of the policy instrument to disturbances in the economy; and
- If there is more cost associated with small departures of output from target than with small departures of inflation, then an opportunistic approach to disinflation may be optimal.

Mitchell-Innes *et al.* (2007) analyzed the relationship between expected inflation and nominal interest rates during the period 2000 until 2005 which coincides with the formal adoption of inflation targeting in South Africa. The researchers investigated the Fisher hypothesis that nominal interest rates move one-to-one with expected inflation. If such a scenario is applicable, then the real interest rate stays unaffected. Cointegration and error correction models were used to test the short-run and long-run Fisher hypothesis. The results proved that monetary policy has an influence on the real long-term interest rate. This result has positive implications for general economic activity which confirms the credibility of the inflation targeting framework in South Africa.

The Fisher hypothesis is important for a number of reasons and enjoyed widespread empirical support. Firstly, the real rate of interest plays an important role in the growth of any economy, savings and investments, as well as trade and capital flows through its influence on the exchange rate. Secondly, evidence from research suggests that nominal interest rates can be used to determine future inflation expectations. Thirdly, the Fisher hypothesis is a critical factor of consideration by the South African Reserve Bank and other central banks in the implementation of monetary policy. If a long-run Fisher link be established between interest rates and expected inflation, it means that the real interest rate is not affected by monetary policy, but instead determined by real economic factors.

The empirical results according to Mitchell-Innes *et al.* (2007) indicated no statistically significant long-run relationship between expected inflation and nominal short-term interest rates. This result is consistent with the expectation under an inflation targeting regime. The results proved that the real long-term rate of interest has not remained constant since inception of the IT regime. Therefore, the monetary authority in South Africa has actually influenced the real long-term rate of interest. The results further imply that changes in inflation expectations do move in the same direction as the nominal long-term interest rate. The results proved that the inflation targeting regime in South Africa is credible and also the success it achieved to lock in inflation expectations into the target range.

Cecchetti & Groshen (2000) discussed how optimal monetary policy is affected by differences in the combination of shocks an economy experiences and the rigidities it exhibits. If nominal rigidities and economic shocks do not exist, monetary policy would be irrelevant. Policymakers should incorporate the understanding gained from research on rigidities and shocks into both their policy actions and the design of monetary institutions. Shocks can be predominantly real, affecting relative prices, or primarily nominal, affecting the general price level. Economic shocks may also be big or small, frequent or rare. Similarly, some nominal rigidities are symmetrical, affecting both upward and downward movements equally, while others are asymmetrical, restricting decreases more than increases. This research reviewed trends in the conduct of monetary policy against the different types of shocks and

rigidities. Theoretical and empirical literature on shocks and rigidities were analyzed regarding different dimensions of monetary policymaking.

An important aspect of monetary policy is the ability of policymakers to control inflation. In order to control or manage inflation in a country, it is of the utmost importance to measure it correctly. A primary difficulty associated with the measurement of inflation is to identify the presence of considerable amounts of noise. The challenge for policymakers is to address short term inflation changes. To address such inflation changes, the sources of noise must be identified. Transitory movements in price indices are often attributable to clearly discernible events.

According to Cecchetti & Groshen (2000) three different types of noises can be distinguished in measured inflation indices. Firstly asynchronous price changes are identified. Inflationary price changes are not uniform. Different prices adjust at different times because nominal price adjustment is costly and adjustment costs differ across products. Secondly, incomplete adjustment to real shocks is identified. Relative price changes can temporarily affect measures of inflation even if prices are not associated with a nominal shock. If prices are rigid downwards, then upward price movements occur before the compensating downward adjustments. Another example is the variation in petroleum prices which has widely divergent effects on the prices of different consumer goods.

Thirdly, flaws in seasonal adjustment are identified. Consumer price indices are normally measured on a monthly basis and inexact seasonal adjustments add noise to inflation measures. Firms with high costs of adjustment will limit the frequency with which they change prices. Various adjustment techniques must be implemented to remove normal seasonal fluctuations from the monthly numbers.

A common strategy used to estimate core inflation is to systematically remove certain components of the price indices. It is standard procedure in the United States to remove food and energy prices, both of which appear substantially more volatile than prices of other goods and services. The rationale for this monetary policy behavior is that short-term movements in these prices stem from rapid adjustment to frequent real shocks that are often reversed. Such price changes contain substantially less information about the long-term trend and are accordingly removed.

Cecchetti & Groshen (2000) addressed real and nominal economic shocks as well as rigid response of prices and wages. The implications for monetary policy as a result of these occurrences are summarized. Firstly, theoretical models were developed to measure trend inflation. Such models are more efficient and timely measures of core inflation than commonly used indexes that systematically exclude certain components such as food and energy. Secondly, the research suggested that inflation is very difficult to control accurately, especially at short horizons. Therefore in designing policy schemes, many central banks and governments adopted narrow inflation targeting bands.

Finally the question of how to select an optimal inflation target was addressed. It was found that when prices adjust infrequently, inflation distorts price signals and leads to resource misallocations. It was also found that if wages and prices are rigid downward, some amount of inflation facilitates adjustment to real shocks. There are however two important caveats. First, if labor productivity increases on average, there is room to reduce the inflation target. Second, the optimal rate of inflation depends on the mixture of shocks and rigidities to which an economy is subject. Furthermore, a long-run steady rate of low inflation implied fewer nominal shocks and puts pressure on price and wage setters to reduce rigidities. Therefore, the optimal rate of inflation may both differ across countries and evolve over time.

Article 5: The Counter-cyclical Challenges of Fiscal Policy in South Africa

This article stated the dilemma of government debt above the international norm for developed countries. This article also analyzed the rising government debt of South Africa. The global financial crisis created challenges for fiscal policy authorities in the world. The negative effects of the global crisis could not be resolved through the application of one policy. Policy makers applied inter alia counter cyclical fiscal policy. High government debt neutralizes the sustainability of the stimulatory stance of fiscal policy. The fiscal balances on average paint a bleak picture for advanced countries relative to the emerging economies.

Debt levels also soared in South Africa. The main cause for the increase in South African government debt is a soaring wage bill and escalating social grants. The actual capital expenditure continuous to decline as a percentage of total expenditure

whilst the compensation of employees and social expenditure increases. This soaring debt caused by incorrect spending policies, neutralizes the desired effect of a sound counter-cyclical policy. The government must arrest the trend of a growing government debt that needs to be financed. Empirical research regarding fiscal policy is debated that supports findings and recommendations to avoid lower credit ratings of credit institutions and higher risk premiums on future government bonds issues that should increase government debt even more.

Asiedu (2005) examined data for twenty two countries over the period 1984-2000 to examine the impact of natural resources, market size, government policies, political instability and the quality of the host country's institutions on foreign direct investment (FDI). This research also analyzed the importance of natural resources and market size vis-à-vis government policy and the host country's institutions in directing FDI flows.

Factors that rank very high on the list of obstacles that have a negative impact on foreign direct investment (FDI) to Africa are corruption, macroeconomic instability (which includes inflation and exchange rate risk), investment restrictions, political instability, financing constraints and weak infrastructure. Other factors that also feature are crime, tax regulations, cost of doing business and labour (unskilled and unrest) that constrain FDI. The relationship between FDI and these countries' characteristics has been compiled from four surveys (Asiedu, 2005). The first survey referred to was the *World Business Environment (WBE) Survey* of 2000 conducted by the World Bank for eighty countries. The second survey referred to was the *World Development Report (WDR)* of 1997 conducted by the World Bank for sixty nine countries. The third survey referred to was the *World Investment Report (WIR) Survey* of 2000 conducted by the United Nations Conference on Trade and Development (UNCTAD). The fourth survey referred to was the *The Center for Research into Economics and Finance in Southern Africa (CREFSA) Survey* of 2002 conducted amongst eighty one companies in SADC.

The research done by Asiedu (2005) examined the determinants of FDI to Africa. The main result is that countries that are endowed with natural resources or have large local markets will attract more FDI. The results also indicate that macroeconomic stability, good infrastructure, low inflation, an efficient legal system, an educated

population, minimal corruption and political stability promote FDI. These results suggest that countries that have small markets or countries that lack natural resources can attract FDI by streamlining their investment framework and improving their institutions.

These findings are consistent with the reports of multinational companies that operate in the region. The results have several policy implications. Firstly, it suggests that FDI in Africa is not solely driven by some exogenous factors and that small countries or countries that lack natural resources can obtain FDI by improving their institutions and policy environment. Secondly, multilateral organizations such as the IMF and the World Bank can play an important role in facilitating FDI by promoting good institutions in countries in Africa. The results also suggest that regional economic cooperation may enhance FDI to the region. There are various reasons why regional cooperation can enhance FDI. Regionalism can promote political stability by restricting membership to democratically elected governments and regionalism permits countries to coordinate their policies. Another advantage of regionalism is that it expands the size of the market and therefore makes the region more attractive for FDI.

Increased FDI does not necessarily imply higher economic growth. Various empirical studies and literature studies examined the relationship between FDI and growth. Various studies conclude that FDI enhances economic growth in Africa under specific conditions, for example when the host country's education exceeds a certain threshold, when domestic and foreign capital are complements, the openness of a country or if the country has a well-developed financial sector. According to Asiedu (2005) many African policymakers believe the lessons from East Asia or Latin America do not apply to them because their situation is different. African leaders can learn from each other and from success stories from fast growing economies on other continents.

Ghatak & Sanchez-Fung (2006) investigated fiscal policy sustainability in Peru, the Philippines, South Africa, Thailand and Venezuela. Standard unit roots and co-integration analysis were used in competing methodologies amongst the referred countries. A fiscal policy reaction function indicated sustainability as surplus adjustments in response to higher debt to income ratios.

Fiscal policy sustainability is fundamental to secure growth. Developing countries are prone to fiscal imbalances. Many developing countries find themselves in unsustainable fiscal positions and are forced to request assistance from international financial institutions. Such financial assistance is normally subject to fiscal budget restraining policies and structural economic adjustments.

The benchmark method to measure fiscal sustainability involves an intertemporal analysis. For fiscal policy to be sustainable every deficit should be financed by a future surplus. The standard equation for testing a government's budget surplus intertemporal sustainability can be written as (Ghatak & Sanchez-Fung, 2006):

$$R = \lambda + \delta G + \varepsilon$$

The hypothesis that was tested were that ε is stationary and that $\delta = 1$. The economic implications of these hypotheses are that government's expenditure (G) and revenue (R) move together in the long run. If $\delta = 1$ all public expenditure will be financed by revenue and public debt will not be growing without bound.

The research done by Ghatak & Sanchez-Fung (2006) found that the benchmark condition for the government's budget surplus was not binding in all the countries that were analyzed. Debt dynamics that were analyzed indicated that corrective measures were put in place to revert non-sustainable trends in debt to GDP ratios. The evidence from the research indicated that sustainability in Thailand was robust. In contrast, the results for the Philippines and South Africa were mixed and the results for Peru and Venezuela were weak.

Since the referred research of Ghatak & Sanchez-Fung (2006) the non-sustainable trend in debt to GDP ratio in South Africa worsened. Government deficits must be balanced with future surpluses. Whenever the budget goes into deficit, new debt must be issued. In years that follow, interest and principal on that debt will come due. Even if taxes in years to follow are sufficient to cover spending on government programs, new debt must be issued, not only to replace the old debt which comes due, but to cover the accumulated interest on the original debt. If taxes never exceed spending, debt will grow forever without bound as an infinite interest load accumulates as a consequence of previous year's deficits.

The United States of America has reached a legal ceiling to issue new debt in 2012. Various countries in Europe experienced debt restructuring in 2011 and 2012 because of previous year's uncontrolled expenditure. South Africa has some leg room to issue new debt, but the pace of expenditure exceeding income after the financial crisis of 2008 is troublesome. As countries reach legal debt ceilings or pay an interest premium on new issues, the outcome of such high debt to GDP ratios restricts sustainable growth.

Lora & Olivera (2006) assessed the effects of total public debt (external and domestic) on social expenditure worldwide and in Latin America. Fifty countries for the period 1985 until 2003 were included in the research. The following questions were addressed. Are social expenditures (as a share of GDP and as a share of total public expenditure) affected by changes in public debt ratios (over GDP), and in what direction? Is this effect due solely to the changes that occur in public debt service payments (as a share of GDP) when debt changes, or does the stock of debt has an effect of its own?

The most important finding of the research by Lora & Olivera (2006) was that higher debt ratios do reduce social expenditures, as popular opinion holds. This effect comes mostly from the stock of debt and not from debt service payments. This fact indicated that debt displaces social expenditures not so much because it raises the debt burden, but because it reduces the room for further indebtedness. The results suggested that governments worldwide typically react by reducing total expenditures and increasing total revenues by an amount beyond the increase in interest debt payments. In such processes, social expenditures are hit disproportionately hard, as social expenditures are sensitive not only to changes in total expenditures but also to the direct impact of the stock of debt.

The effects of public indebtedness on social expenditures are an issue of concern for politicians, social activists and the public at large. Latin America is different in some respects. The adverse effects of debt and debt-interest payments are significantly stronger in Latin America which makes defaults more beneficial to social expenditures.

Lora & Olivera (2006) concluded that multilateral lending is not a solution to continue or to increase social expenditures. On average in the developing world, loans by multilateral organizations have an additional adverse effect on social expenditures. Such loans impose further discipline on total expenditures. Also in line with popular wisdom, defaulting on debt obligations does help increase social expenditures on average in the developing world. The main policy conclusion of this research was that the best way to protect social expenditure is to avoid over indebtedness.