

## **Policy Implications for South Africa as a result of Quantitative Easing and Monetary Policy Normalisation**

*(3 751 words)*

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## 1. Introduction

“The lesson of history is that you do not get a sustained economic recovery as long as the financial system is in crisis” (Bernanke, 2009). This was the response given by Ben Bernanke, the then Chairperson of the United States Federal Reserve Bank (the Fed), to a question posed to him concerning how long the negative effects of the 2008 Global Financial Crisis would remain. He emphasised the importance of stabilising the financial system before any sustained economic recovery could be observed.

It is within this context, that Reserve Banks globally introduced quantitative easing (QE) following the Global Financial Crisis. With nominal interest rates almost at 0%, the Fed had to resort to unconventional monetary policy mechanism to spur economic growth. The afore-mentioned resulted in the Fed adopting various strategies of QE between the periods 2008 to 2014 (Wall Street Journal, 2014). During January 2015, the European Central Bank (ECB) announced its own programme of QE (The Economist, 2015).

Quantitative easing refers to unconventional monetary policy whereby Reserve Banks aim to influence asset prices and thereby economic output when nominal short term interest rates are near zero (African Development Bank, 2014). According to Vahey and Oppenheimer (2014), the aim of QE is to reduce long term interest rates and ease lending conditions. The rationale is that this will translate into lower long term borrowing cost and serve as incentive for business to borrow money for capital expansion.

Quantitative easing is, however, not without risk. Excess liquidity can artificially inflate asset prices and may lead to various asset bubbles (Joyce, Miles, Scott and Vayanos, 2012). In addition, with nominal interest rates near zero in developed markets, developing markets have seen significant portfolio inflows due to higher nominal interest rates they offer (African Development Bank, 2014).

South Africa, as a developing nation, has seen significant inflows of portfolio funds from developed markets since the start of QE. According to the National Treasury (2014), net capital inflows into South Africa’s bond market increased from R7 billion in 2007 to R26 billion in 2013; reaching a high of R92 billion in 2012 (National Treasury, 2015).

It is anticipated that the Fed will begin to normalise monetary policy this year with the first interest rate increase expected in the latter part of 2015 (New York Times, 2015). Such action will reduce the risk adjusted rates of return investors receive from investing in developing markets as opposed to developed markets. Should this rate reduce significantly, capital flows to emerging markets may reverse with investors preferring “safe haven” investments. Another substantial risk faced by South Africa is a scenario where investors decide to sell their current holdings of emerging market debt. This will create an excess supply of both Government debt and the currency which may lead to a sharp depreciation of the currency and a fall in the price of Government bonds.

This paper will aim to identify the most appropriate policy decisions South Africa can follow to ensure that the possible negative consequences from rising interest rates in the United States and quantitative easing currently undertaken by the ECB are minimised.

The remainder of the paper is organised as follows: Section II discusses the rationale for quantitative easing and why it was the chosen policy tool for both the Fed and ECB. Section III will analyse the effect the Financial Crisis had on South Africa. Section IV will put forth various policy options South Africa can implement to minimise the possibly negative consequences stemming from monetary policy normalisation in the United States. Finally, Section IV will conclude the paper.

## **2. Why quantitative easing as the chosen policy tool?**

The concept of quantitative easing was first introduced in Japan in 2001 in an attempt to revive the country’s ailing economy and fight deflation (Spiegel, 2006). According to Blinder (2010: 475), the policy undertook to maintain the overnight interest rate near zero percent and to maintain it at this level until inflation recorded a positive year-on-year increase. To achieve this, the Bank of Japan bought Japanese government bonds in an attempt to create excess reserves within the Japanese banking system (Blinder, 2010: 475). The reasoning was that such action would motivate the private sector to increase its demand for long term borrowings as a result of lower yields on longer dated government bonds combined with excess holdings of reserves by banks. Higher borrowings by the private sector would ensure

increased spending and therefore increase inflation. The Bank of Japan ended its programme of QE in 2006 (Blinder, 2010: 475).

The unconventional monetary policy action of QE stayed dormant for two years following conclusion of Japan's QE programme. It was only after realisation that the negative effects of the 2008 Global Financial Crisis had the power to destroy the US financial system that the Fed implemented its own QE programme.

Following recognition that the collapse of the United States housing bubble and the subsequent defaults of sub-prime mortgages would be more severe than initially assumed, the Fed started cutting the federal funds rate (Edmonds, Jarrett & Woodhouse, 2010). The aforementioned was done in an attempt to stabilise the economy and the financial system. The first of these cuts took place on 17 August 2007 when the Fed cut the federal funds rate from 6.25% to 5.75%. Subsequently, the Fed lowered the federal funds rate on 6 different occasions between September 2007 and October 2008, lowering the rate from 5.25% to 1% (Edmonds, Jarrett & Woodhouse, 2010). The last cut came in December 2008 when the Fed lowered the federal funds rate from 1% to a range of 0% to 0.25%.

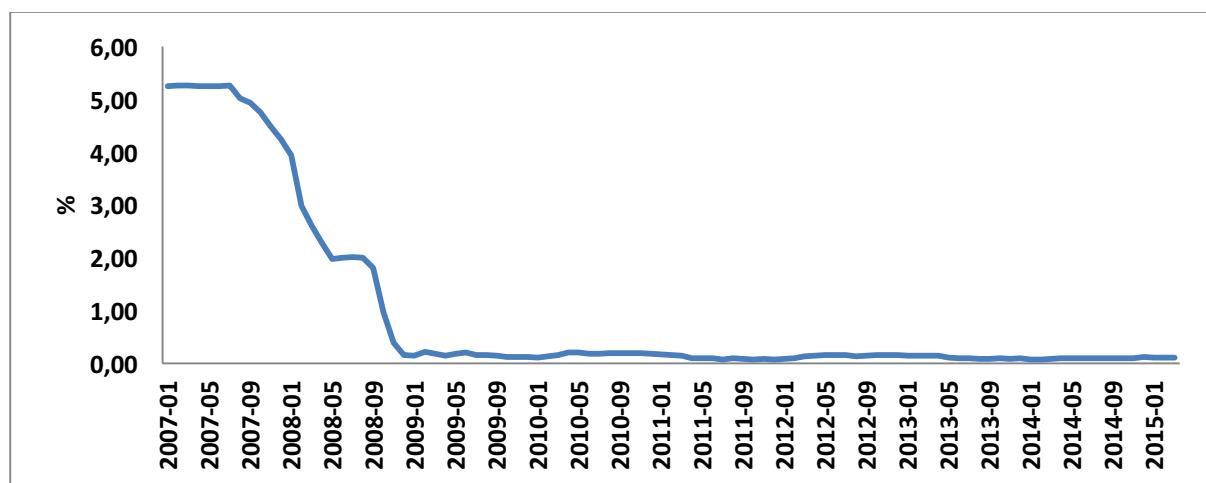


Chart 1

Federal Funds Rate, 2007 to 2015

Source: Federal Reserve Bank, 2015

The federal funds rate form part of the Fed's open market operations and is set by the Federal Open Market Committee (FOMC). The federal funds rate is the rate which banks charge each other for overnight loans (Financial Times, 2010). Banks are required, by law, to maintain a certain amount of cash reserves as a percentage of their assets. Banks that do not have sufficient cash at the end of a business day

can borrow from a bank with surplus reserves. The Fed influences this rate by adjusting the reserve requirement. By lowering the reserve requirement, banks have excess cash available that do not have to be kept in reserves, effectively reducing the federal funds rate by increasing the supply of reserves. However, with the federal funds rate almost at 0%, the Fed had to resort to unconventional measures in an attempt to stimulate the United States economy.

Quantitative easing in the United States was implemented in stages over the period 2008 to 2014. These stages become known as QE1, QE2 and QE3. QE1 focused on the Fed purchasing mortgage-backed securities (MBS) mainly from government backed enterprises (Krishnamurthy & Vissing-Jorgensen, 2011: 11). QE2 focused on the Fed purchasing mainly long term Treasury securities issued by the United States Treasury (Krishnamurthy & Vissing-Jorgensen, 2011: 23). QE3 also referred to as QE infinity, involved the Fed purchasing approximately \$85 billion worth of MBS and Treasury securities on a monthly basis.

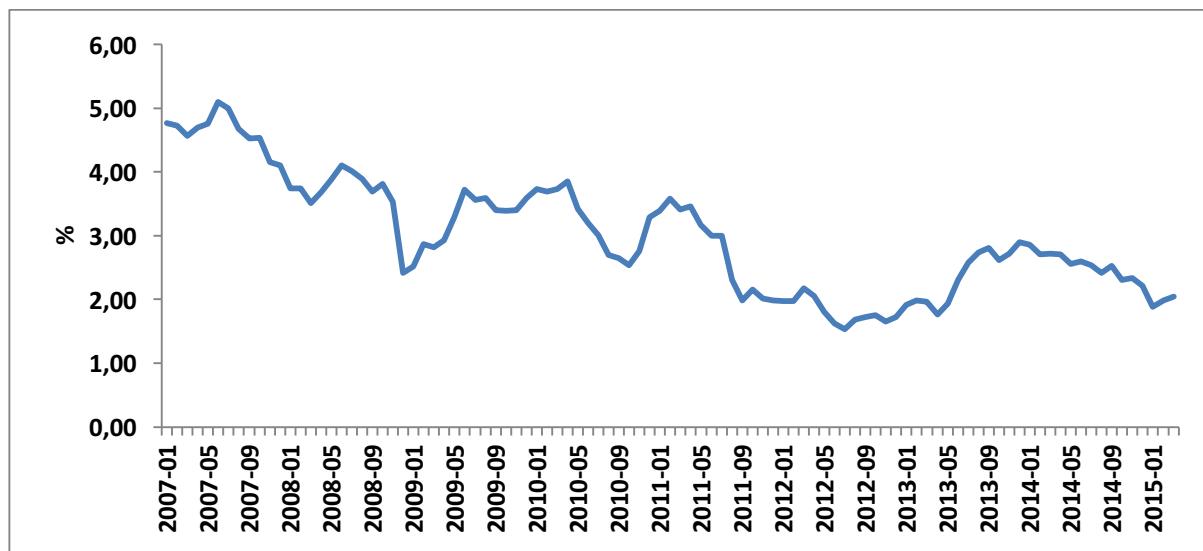


Chart 2

Yields on 10 Year US Treasuries, 2007 to 2015

Source: Federal Reserve Bank, 2015

According to Palley (2011:3), there is a limit on how Central Banks can utilise short term interest rates to stimulate economic activity. Once short term nominal interest rates go to 0%, conventional monetary policy becomes ineffective. Quantitative easing is then utilised as a policy mechanism to influence long-term interest rates and asset prices. Chart 2 shows the movement of the yield on 10 Year US Treasuries over the period 2007 to 2015. Yields declined from 4.76% in January

2007 to 2.04% in March 2015. However, the direct contribution QE had in lowering yields remain a contentious issue that have been greatly debated (Fratzscher, Lo Duca & Straub, 2012: 7).

Palley (2011:3) puts forth various channels through which QE can influence economic activity. Firstly, by purchasing long-term Treasuries, the Fed assist in lowering long-term borrowing cost compared to short term interest rates (which is effectively at zero). This provides an incentive for businesses and consumers to borrow long term money at lower interest rates. Secondly, increased liquidity in the economy can be directed to the equity market. Thirdly, the aforementioned channels results in increased demand for bonds and equities, thereby increasing their prices. This leads to capital gains for the holders of those assets. Lastly, economic activity can be stimulated through an expenditure acceleration channel. If consumers and businesses anticipate higher future inflation, they may bring future spending forward in an attempt to avoid higher future prices.

The path to monetary policy normalisation in the United States started in October 2014 when the Fed announced the end of its large scale asset purchase programme (Wall Street Journal, 2014). However, the Fed assured market participants that short term interest rates will not be increased until a sustained recovery in the United States economy has been observed (Federal Reserve Bank, 2015). Two key economic indicators utilised by the Fed to measure sustained economic recovery relates to inflation and unemployment.

The goal of the Fed is to maintain long-run inflation at a level of 2% with unemployment at 5.0% to 5.2% (Federal Reserve Bank, 2015). Although Chart 3 and Chart 4 depicts that, at the end of 2014, both inflation and unemployment was recorded below and above the Fed's optimal level respectively, Janet Yellen, the Chair of the Fed, highlighted in March 2015, that economic conditions may improve to such an extent that the first rate increase in the United States since 2006 may occur in the latter part of 2015 (Federal Reserve Bank, 2015).

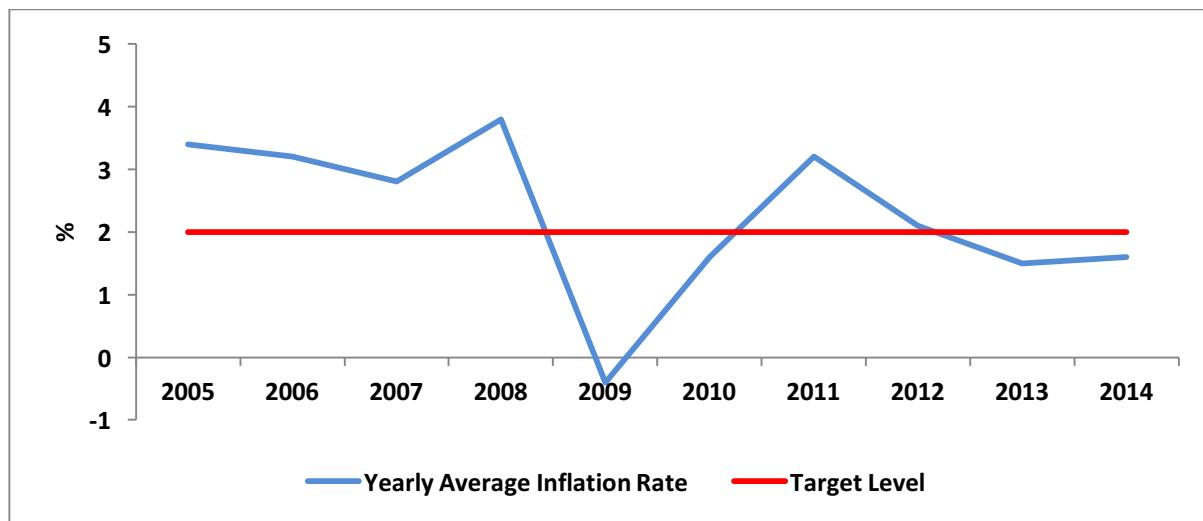


Chart 3

Average Yearly Inflation Rate for the United States, 2000-2014

Source: US Inflation calculator, 2015

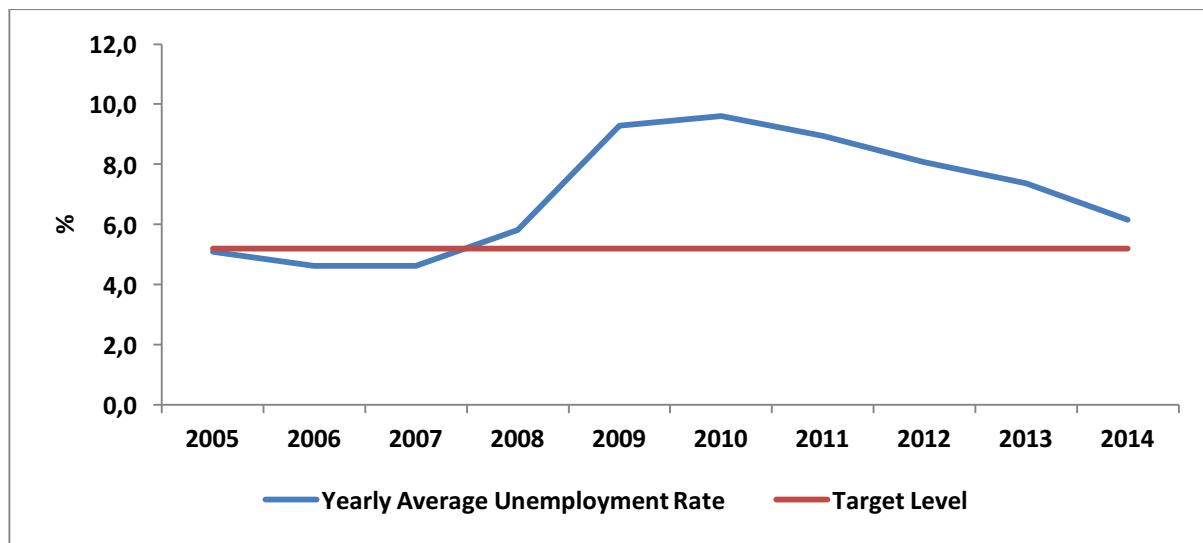


Chart 4

Average Yearly Unemployment Rate for the United States, 2005-2014

Source: United States Department of Labour, 2015

In contrast to an outlook of possible sustained economic recovery in the United States, the picture across the Atlantic looks bleak. Chart 5 depicts the average yearly inflation rate for the European Union (EU) for the period 2005 to 2014. After inflation recorded a low of 0.3% in 2009, the figure picked up to 2.7% in 2011. However, as a result of the negative fall-out from the European Sovereign Debt Crisis that started in 2009, inflation fell to 0.44% in 2014 (European Central Bank, 2015). Market participants believe that the EU is at risk of falling into a deflationary environment.

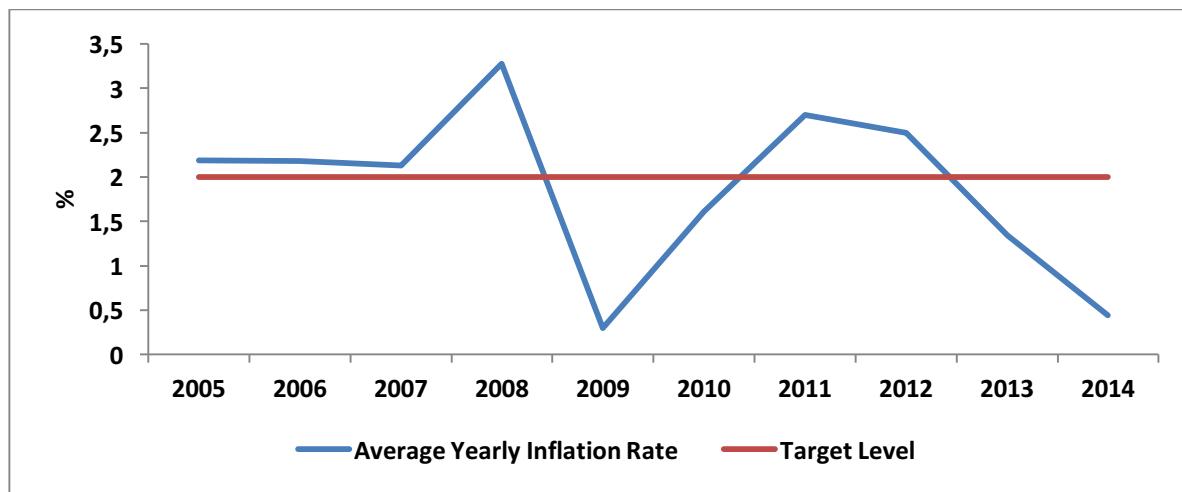


Chart 5

Average Yearly Inflation Rate for the European Union, 2005-2014

Source: European Central Bank, 2015

According to Laxton & Decressin (2009), deflation can negatively affect economic activity in the following ways. Firstly, deflation results in collateral underpinning loan agreements to lose value whilst the debt that has to be repaid remains unchanged. This phenomenon is known as debt-deflation. When a consumer buys a house, that house is used as collateral for the loan agreement. If house prices decline due to a deflationary environment, and the consumer defaults, the financier will not be able to recoup the full value of the loan agreement. In addition, the value of consumers' debt also increases in such an environment. Secondly, should nominal wages be rigid downwards and not decrease with decreases in prices, real wages will increase. This may lead to significant job losses. Lastly, aggregate demand might decrease if there are expectations of lower future prices. The rationale is that the prospect of lower future prices will lead economic agents to postpone current spending for future spending, which in turn may reduce prices even more and further subdue economic activity.

Apart from the risk of deflation, the EU is also struggling with anaemic economic growth. Economic growth in the Eurozone, following the end of the double dip recession in 2013, has not been able to increase back to levels seen after the 2009 recession. Economic growth recorded an increase of only 0.885% in 2014. The prospect of weak economic growth, combined with the risk of deflation, prompted the ECB to introduce its own QE programme during January 2015 in an attempt to revive the economies of the Eurozone (The Economist, 2015).

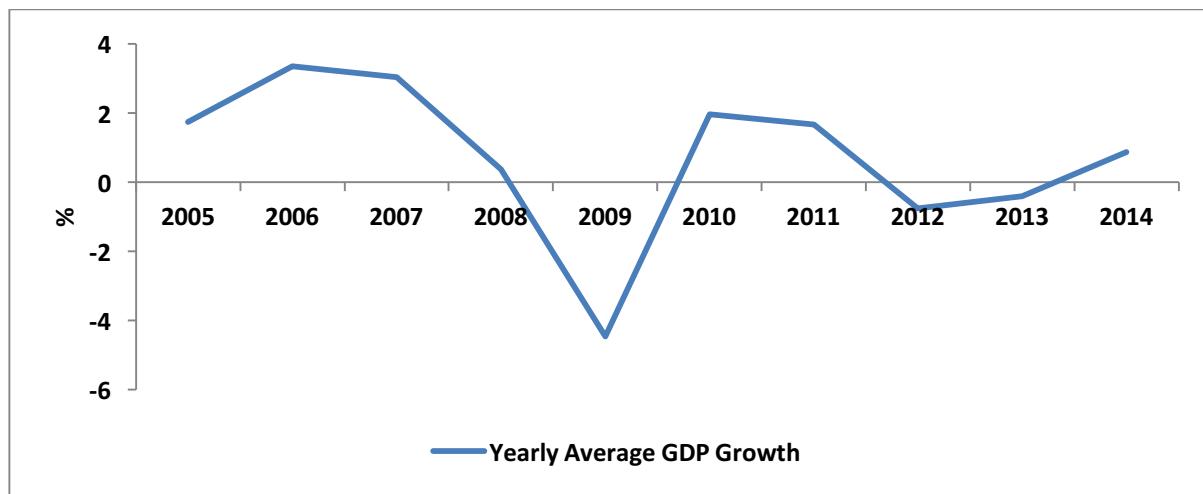


Chart 6

Average Yearly GDP Growth Rate for the European Union, 2005-2014

Source: European Central Bank, 2015

The ECB's expanded asset purchase programme aims to inject approximately €60 billion a month into its economy until at least September 2016. The programme altered the ECB's asset purchase programme that had already been in place by making provision for the purchasing of Government bonds (The Economist, 2015). The ECB pledged to keep the programme in place at least until inflation reaches its goal of 2%. At conclusion of this programme, the ECB may add €1.1 trillion of additional assets to its balance sheet.

### 3. How South Africa's fiscal landscape changed following the Great Recession

To better understand the policy implications for South Africa as a result of QE and monetary policy normalisation in the United States and the Eurozone, one has to look at how South Africa's fiscal landscape changed as a result of the Great Recession. Prior to the 2008 Financial Crisis, South Africa's economy grew at an average rate of 5% for the period 2005 to 2008 whilst the National Treasury recorded a budget surplus amounting to 1.1% of gross domestic product (GDP) over the same period. In addition, government debt as a percentage of GDP had declined to 23.2% (National Treasury, 2015). Government's focus was on reducing inflation and the current account balance.

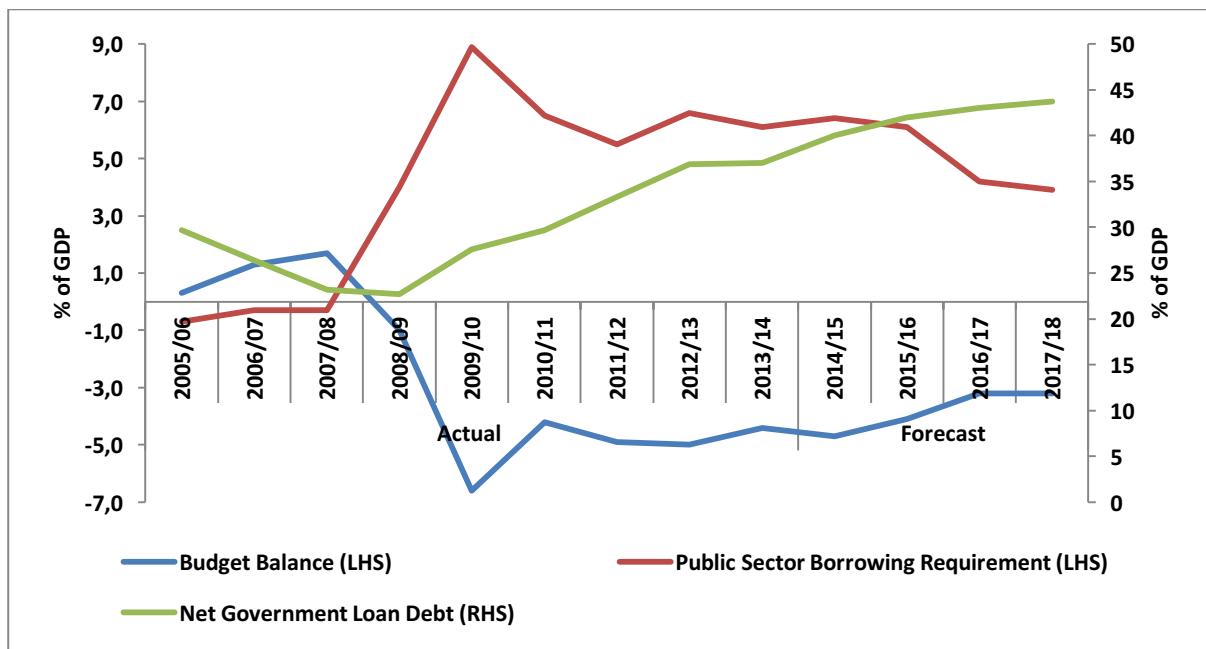


Chart 7

Fiscal Indicators for South Africa for the financial years, 2005/06-2017/18

Source: National Treasury, 2008-2015

When the crisis hit South Africa in late 2008, Government's fiscal position was strong enough to allow for policy provisions set forth by Keynes in the 1930s, i.e. countercyclical fiscal spending. According to Lane (2002: 5), from a Keynesian perspective, public expenditure should compensate for the reduction in expenditure by the private sector. Such spending will ensure that aggregate demand does not reduce significantly and keep the economy in recession. As a result, South Africa's budget balance declined to a low of 6.6% of GDP in the 2009 fiscal year and government debt increased to 40% of GDP in the 2013/14 fiscal year (National Treasury, 2009-2014). Monetary policy was also very accommodative with the South African Reserve Bank (SARB) reducing the repo rate to 5% and keeping it below 6% since 2009 (South African Reserve Bank, 2015).

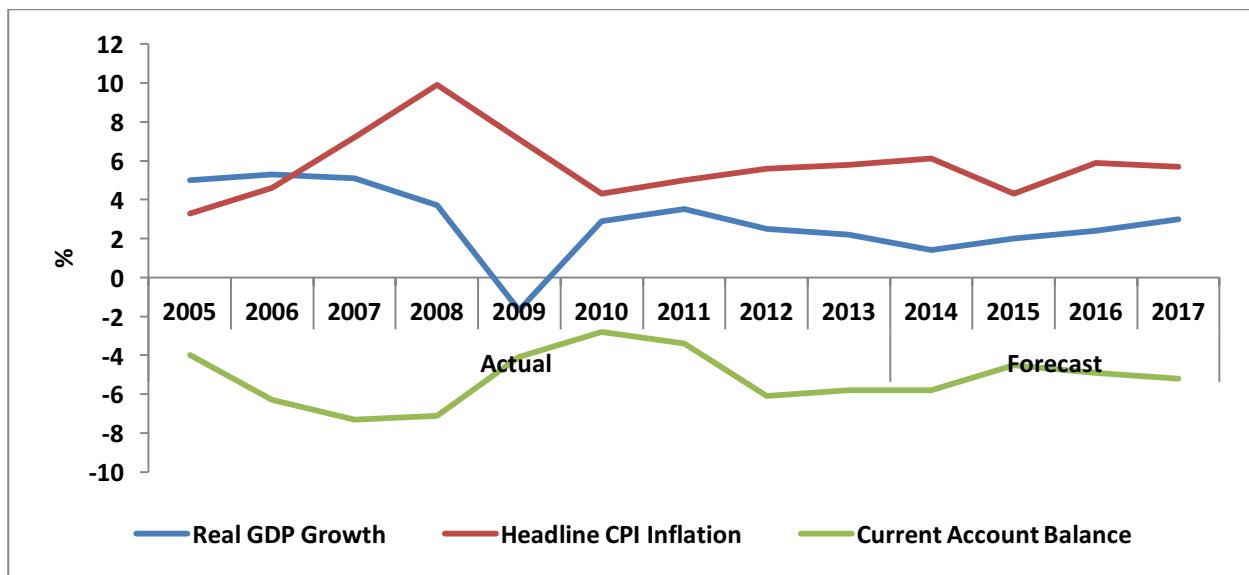


Chart 8

Economic Indicators for South Africa, 2005-2017

Source: National Treasury, 2008-2015

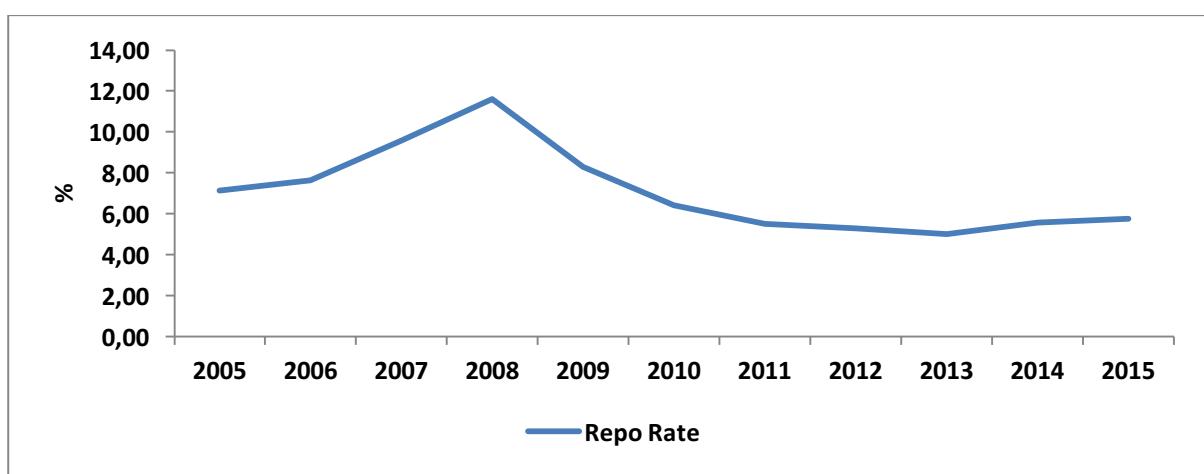


Chart 9

South African Repo Rate, 2005-2015

Source: South African Reserve Bank, 2015

With National Treasury issuing more sovereign bonds to finance its fiscal deficit and quantitative easing making liquidity more easily accessible than ever before, the ownership of South Africa's sovereign bonds changed significantly since 2009. Residents in developed countries were looking for investments that offered higher yields than what was on offer in developed markets. As a result, non-residents are now holding more of South Africa's sovereign bonds than ever before (National Treasury, 2014). Chart 10 indicates that bond holdings by non-residents increased from 13.8% in 2009 to 36% in 2014 with nominal holdings amounting to

approximately R450 billion. According to the National Treasury (2014), the risk associated with bond holdings by non-residents are manageable. Should non-residents become net sellers of Government bonds, local investors would purchase such bonds. The reason for this is that greater supply of Sovereign bonds will decrease bond prices and therefore the yields offered by such bonds will increase. However, the increased interest cost would need to be quantified. Debt service cost is already the fastest increasing item on the national budget, amounting to 3.1% of GDP in the 2014/15 fiscal year (National Treasury, 2015).

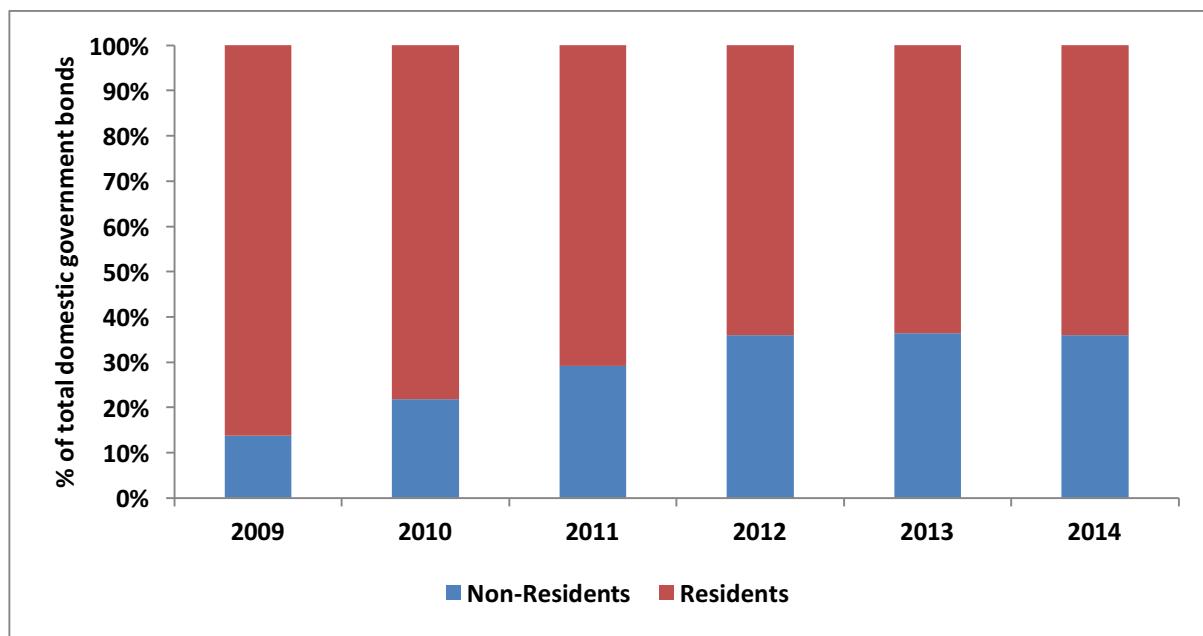


Chart 10

Ownership of domestic government bonds for South Africa, 2009-2014

Source: National Treasury, 2015

#### 4. What can South African policymakers do to survive normalisation

It was back in 2013 when the investment bank, Morgan Stanley coined the phrase “fragile five”. The term refers to the five most economic vulnerable developing nations struggling with twin deficits, i.e. current account and fiscal deficits (Bloomberg, 2015). South Africa was grouped together with Brazil, India, Indonesia and Turkey. The article by Bloomberg (2015) states that South Africa has yet to implement any significant economic reforms aimed at structurally changing its economic landscape.

The aforementioned is filtering through into South Africa’s sovereign credit ratings. South Africa is currently rated BBB- with a stable outlook from Standard and Poor’s;

Baa2 with a stable outlook from Moody's Investor Services and BBB- with a negative outlook from Fitch Ratings (Trading Economics, 2015). These places South Africa's sovereign ratings very close to the sub-investment grade rating category.

The importance of South Africa maintaining its investment grade credit rating from international rating agencies cannot be stressed enough. According to White (2010), institutional investors, such as pension funds, are legally required to invest only in investments with an investment grade credit rating. In addition, South Africa was included in the prestigious Citibank World Government Bond Index (WGBI) in October 2012 (National Treasury, 2014). Considerable flows resulted from this inclusion as fund manager's benchmark their investments against this index (National Treasury, 2014). However, one condition of inclusion is that a country maintains investment grade credit ratings from Standard and Poor's and Moody's. Should South Africa be downgraded to non-investment grade by these two rating agencies, capital flows to South Africa's bond market could reverse with a sell-off by current bond holders not impossible.

It is therefore imperative that South Africa implement structural reforms that will ensure sustained economic recovery and growth for the country whilst maintaining its investment grade credit ratings. This will ensure that when the Fed starts to raise interest rates, the risk adjusted return investor obtain from investing in South Africa is not further diminished by weak credit fundamentals. During a speech at the University of Cape Town in March 2015, the First Deputy Managing Director of the International Monetary Fund (IMF) highlighted various reforms South Africa could undertake to maintain and even improve its credit quality. Firstly, enhanced implementation of the National Development Plan (NDP) should be a top priority for Government. The NDP provides a long term plan for South Africa up to 2030. Among the goals are reducing unemployment and inequality. These two factors are critical if South Africa is to address its socio-economic problems. Secondly, removing infrastructure bottlenecks and dealing with the chronic electricity shortfalls are important if South Africa wishes to remain internationally competitive. Due to the electricity shortage, South Africa's economic growth for 2015 was revised down to 2% from 2.3% by the IMF. Thirdly, ensuring reform of the labour market is undertaken that balances maximum employment of workers whilst also protecting the right of employees and employers. It is estimated that South Africa lost 13 million

workdays due to strike action in 2014 (Fin 24). Lastly, fiscal consolidation should be undertaken as a matter of urgency. Chart 7 indicates that South Africa's fiscal position has significantly deteriorated since 2009. Ensuring that South Africa remains on a path of fiscal sustainability will go a long way in appeasing both investors and rating agencies.

Monetary policy also has an important function to play in ensuring that South Africa is prepared for monetary policy normalisation in the United States. As interest rates rise in the United States, the risk adjusted return non-residents obtain in investing in South Africa is diminished. By increasing the repo rate, the SARB can ensure that the risk adjusted rate remains appealing to non-residents. However, such action will most likely be influenced by local economic developments such as future inflation prospects and economic growth.

In addition, legislative changes could also be enacted to counter monetary policy normalisation. Such legislative changes are capital controls and prescribed investments. According to Neely (1999), capital controls refers to intervention in the foreign currency market and is designed to restrict or redirect capital account transactions. Prescribed investments refer to legislation that requires pension funds to allocate a certain amount of their investments towards certain financial instruments such as government bonds. Capital controls could assist in ensuring that the currency is protected should non-residents decide to sell-off a significant portion of South African sovereign bonds whilst prescribed investments would ensure that local demand for sovereign bonds remain. Although the latter would be artificially created and may therefore distort prices. The long term negative effects of such changes could possibly outweigh the short term benefits derived.

## 5. Conclusion

Since the onset of the 2008 Financial Crisis, monetary policy across the world has been extremely accommodative. The Fed increased its balance sheet to over US\$4 trillion in order to avert a total collapse of its financial system and ensure sustained economic recovery (Federal Reserve, 2015). Seven years after the Fed introduced its QE programme, the Eurozone realised that creating excess liquidity may be the only solution to its economic woes. However, whilst the ECB is undertaking its own version of QE, the Fed is considering tightening its loose monetary policy regime that

has been in place since the onset of the Crisis. The first interest rate hike in almost 10 years could follow in the latter half of 2015.

Developing countries, possibly the main beneficiary from loose monetary policy in developed countries, now face significant risk from interest rate hikes in the United States. South Africa saw significant increases in portfolio inflows since QE began in the United States. Non-residents now hold more local sovereign bonds than ever before. Going forward, the South African Government will need to satisfy foreign investors that South Africa remains a good investment, even with interest rate hikes in the United States reducing the risk adjusted return they are able to earn.

The aforementioned can be achieved by ensuring that South Africa maintains its investment grade credit rating and undertaking much needed economic reforms. Such reforms, such as the NDP, should aim to reduce unemployment and inequality and improve infrastructure aimed at accelerating economic growth. Failing such, Government can introduce legislation and capital controls aimed at protecting the value of the currency and ensure that Government can continue to fund its fiscal deficit. However, the negative consequences stemming from such action might be more devastating than allowing the global economy to correct itself following monetary policy normalisation.

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