

A REGULATIONIST APPROACH TO SOUTH AFRICA AND A CRITIQUE OF INFLATION TARGETING

A thesis submitted in partial fulfillment of the
Requirements for the degree of

**MASTER OF COMMERCE
(FINANCIAL MARKETS)**

at

RHODES UNIVERSITY

by

RYAN MICHAEL JONATHAN BAX

January 2010

ABSTRACT

Since the 1970s, the international economic system has become prone to the volatility and undue effects associated with booms and busts. This forty year period spanning the present has exhibited restrained growth and repressive economic development. Critical changes to the system are presented by the transition from “Fordism” to the post 1970s neoliberal regime and the globalization of world markets. Underpinning this transformation is an ideological shift towards free market capitalism and the adoption of “reduced form” market models. These “reduced form” models appear to hinder economic sustainability as their grounding in economics fails to account for real economic activity.

This thesis aims to provide a more holistic perception of sustainability, one that provides a sound basis on which to develop sustainable economic policy. The Regulationist Approach presents the requisite understanding of economic sustainability required within this research. The inclusion of economic, historical and socio-political fields of research proposes a wider understanding of the political economy and sustainability.

The application of the Regulation Approach to the South African economy illustrates many problem areas that require attention. The examination found that firstly, aggregate demand in the South African economy was unsustainable due to the debt driven nature of demand under the asset price bubble of the mid to late 2000s. Secondly, aggregate supply also proved unsustainable as government is failing to provide any substantive

growth within important sectors of the economy such as education and the provision of general services.

Furthermore, the adoption of inflation targeting in South Africa poses a barrier to sustained economic growth as it focuses singularly on price inflation. The “reduced form” model of inflation targeting fails to account for market failures and a number of vital indicators of sustainability most notably, debt levels and asset prices. The inclusion of these indicators, and financial stability more generally, are found to provide a more holistic and sustainable approach to macroeconomic policymaking.

*Make your own notes.
NEVER underline or
write in a book.*

CONTENTS

Chapter One: Introduction

1.1. Problem Statement	Page 7
1.2. Inflation Targeting, Inflation, and Bubbles	Page 8
1.3. The Regulationist Approach	Page 18

Chapter Two: The Regulationists and Sustainability

2.1. Introduction	Page 20
2.2. Origins of the Regulationists and their affinities with other traditions	Page 20
2.3. Post World War Two Period and the Regulationist Framework	Page 22
2.4. Persistent Stagnation	Page 30

Chapter Three: A Regulationist Approach to South Africa

3.1. Introduction	Page 50
3.2 South Africa's position in the world economy	Page 50
3.3 Economic growth from 1994 to 2009 and the Regulationist Approach	Page 51

Chapter Four: Conclusion

Page 66

References

Page 69

Index of Acronyms

ALSI	All Share Index
BEE	Black Economic Empowerment
BESA	Bond Exchange of South Africa
BIS	Bank for International Settlements
CAD	Current Account Deficit
CF1	Co-ordination Failure One
CF2	Co-ordination Failure Two
CPI	Consumer Price Index
CPIX	Consumer Price Index excluding mortgage interest rates
FDI	Foreign Direct Investment
GEAR	Growth Employment and Redistribution
GDP	Gross Domestic Product
IMF	International Monetary Fund
JSE	Johannesburg Securities Exchange
LTCM	Long Term Capital Management
MIDP	Motor Industry Development Programme
MOF	Ministry of Finance
MPC	Monetary Policy Committee
NCR	National Credit Regulator
NEDLAC	National Economic Development and Labour Council
OPEC	Organization for Petroleum Exporting Countries
R&D	Research and Development
SARB	South African Reserve Bank
US	United States
USSR	Union of Soviet Socialist Republics
WTO	World Trade Organization

ACKNOWLEDGEMENTS

I would like to thank my supervisors, Mr. David Fryer and Mr. Ebrahim Seedat for their invaluable contribution to this thesis. Furthermore, without my family this thesis would not have been possible, and I therefore owe them much gratitude.

Chapter One: Introduction

1.1. Problem Statement

Since the 1970s, international economic growth and development has been relatively volatile and often described as unsustainable (O'Hara, 2003 and Brenner, 2006). The frequent growth of asset bubbles throughout the international economy in the post 1970s period raises questions of sustainability within economic policy. Underpinning this economic climate is a shift in ideology towards free market capitalism. The evolution of economic thought and its affect on policy has thus altered the global economic environment. In particular, "reduced form" (Aglietta, 1970) models have come to dominate macroeconomic policy-making and the "inflation targeting" framework is the primary example.

Within this contextual framework inflation has emerged as the prominent indicator of economic sustainability. Important aspects of inflation concern, firstly, the common disadvantages associated with it, and secondly, inflation as the chief indicator of economic unsustainability. The latter point suggests that inflation has become the measuring rod by which the success of economic policy is determined. "Inflation targeting" has thus taken on a central role in maintaining low and stable price growth in order to maintain economic sustainability.

According to the inflation targeting framework, if inflation is above the band, it indicates that the economic growth path is unsustainable. In this instance central bankers raise interest rates to curb the expansion. Unlike the works of critics such as Stiglitz (2008), inflation targeting is not as rigid as previously thought, as is explored later in Chapter One. Drawing attention to the narrow focus of inflation aims to reveal how it diminishes attention to other macroeconomic indicators such as debt levels and asset prices. These have been historically proven to be more effective indicators of sustainability.

This thesis explores the explicitly holistic “Regulationist School” approach which is in contrast to the “reduced form” macroeconomic models underlying current inflation targeting models. It asks whether such an approach can form the basis of a more efficient framework for macroeconomic modelling thereby making policy more sustainable.

Important to the current research are questions of whether inflation is harmful. Has it come to be perceived in this way because of inherent expectations concerning inflation targeting? These expectations imply that when inflation rises, central banks cause interest rates to rise also, thus inhibiting distribution and growth. A key contention of this research, however, is that it is not *inflation* that is the fundamental problem, rather the ensuing heightened *interest rates* that slow growth.

The research does not conduct any form of econometric analysis for the following reasons: it points out something obvious that has not been explored, and that, at this stage, it is not clear *how* an econometric exercise would proceed. Reasons for such are discussed in Chapter Three.

1.2 Inflation targeting, inflation, and bubbles

As a consequence of its perceived importance organisations such as the Bank for International Settlements (BIS) and the World Bank prescribe price stability. An inflation-targeting regime therefore became key to maintaining “good economic practices”. Formulated in New Zealand in 1990, the success of this regime saw it integrated into twenty-eight other economies throughout the 1990s. The South African Reserve Bank (SARB) adopted inflation-targeting as its monetary policy framework in 2000. It stipulates a target band for headline inflation of between three and six percent (Burger and Marinkov, 2008: 2). Inflation levels outside of this target band are considered unsustainable, and hence, cause interest rates to shift.

By 2003, South African inflation had entered the stipulated target band and economic activity was considered to be sustainable. The South African economy could therefore

proceed along a path of higher growth provided that price inflation remained within the targeted levels. A higher growth rate would, of course, be desirable for socio-economic reasons. The repurchase rate was reduced from 13.5 percent in the fourth quarter of 2002 to seven percent in the second quarter of 2005. Real GDP reached a maximum growth rate of 5.5 percent in the second quarter of 2006, which was still 0.5 percentage points less than the optimum six percent real growth rate sought by the government to alleviate poverty (South African Reserve Bank, 2006b: 5).

In the second quarter of 2007, however, the inflation rate breached the sustainable target band limit of six percent causing the SARB to hike the repurchase rate. The repurchase rate went from seven percent in the second quarter of 2006 to twelve percent in the fourth quarter of 2008 (South African Reserve Bank, 2009b). Over this period of time the inflation rate continued to rise: by the third quarter of 2008 headline inflation, as measured by the Consumer Price Index excluding mortgage interest payments (CPIX), had reached 13.6 percent. Economic growth in nominal terms declined from 5.5 percent in the second quarter of 2006 to one percent in the first quarter of 2009 (South African Reserve Bank, 2009a).

Retrospectively examining and analyzing the “bubble period” in South Africa helps to illustrate some of the major factors contributing to the unsustainable growth of price inflation and the asset price bubble in 2007: beginning in early 2003 lending increased stimulating consumption expenditure and investment. Credit extensions grew by 25 percent per annum, while household debt as a percentage of disposable income reached 76.5 percent (Mboweni, 2006a). Similar trends were seen in the US during the expansion of the late 1990s as US household debt as a percentage of disposable income reached 129 percent by the second quarter of 2006 (Weller, 2006).

In the case of the US, the purchase of US dollar denominated assets by the Chinese and Japanese (Arrighi, 2003) has since financed their debt, whereas South Africa has been forced to finance its debt through capital inflows, the creation of credit and growth. The significance of these countries’ differences is discussed later. For South Africa, a

negative consequence of the increased consumption has been the decrease in savings within the economy. The savings to GDP ratio declined to 13% in the first quarter of 2006, which is the lowest level since 1946. The possible absence of a savings culture combined with low interest rates appear to be significant factors in driving household savings into negative figures (Laubcher, 2006: 3).

After the first quarter of 2003, South Africa's Current Account Deficit (CAD) deepened, reaching 7.8 percent of GDP by the end of 2008. The South African CAD is predominantly financed by foreign portfolio investment on the Financial Account (Mboweni, 2005: 1). The inflow of short-term investments is a direct result of deregulation in the financial sector (Wolfson, 2000: 372). Both the development of financial derivatives and the deregulation of the Johannesburg Securities Exchange (JSE) and Bond Exchange of South Africa (BESA) have fuelled increased speculation of short-term investments consequently raising the real possibility of economic instability. The link that holds the process together is fragile: it relies on the actions of agents that control the flow of capital. This is further exemplified with the US case as it precariously depends on the political compliance of dollar holders (Japan and China in particular) and being "too big to fail".

The JSE grew significantly over the five-year period leading up to 2008 becoming the seventeenth largest international equity market in 2007 (South African Reserve Bank, 2007a; 43). The progression and confidence inspired by equities can be seen in 2005 when JSE listed companies raised R82.2 billion in nominal terms, a 95 percent increase from the R42.1 billion raised in 2004 (South African Reserve Bank, 2006a: 45).

The JSE secondary market, like the primary market, also exhibited high levels of confidence: annual turnover rose from R28 billion in early 2003 to R240 billion in late 2007 (South African Reserve Bank, 2007a: 43). Between the second quarter of 2003 and the second quarter of 2008 the JSE All Share Index (ALSI) soared by 338 percent in real terms, as illustrated in figure 1 (Thompson Data-Stream), while the average price to

earnings ratio increased from nine percent in 2003 to 17.5 percent in 2006 (South African Reserve Bank, 2006b: 45-46).

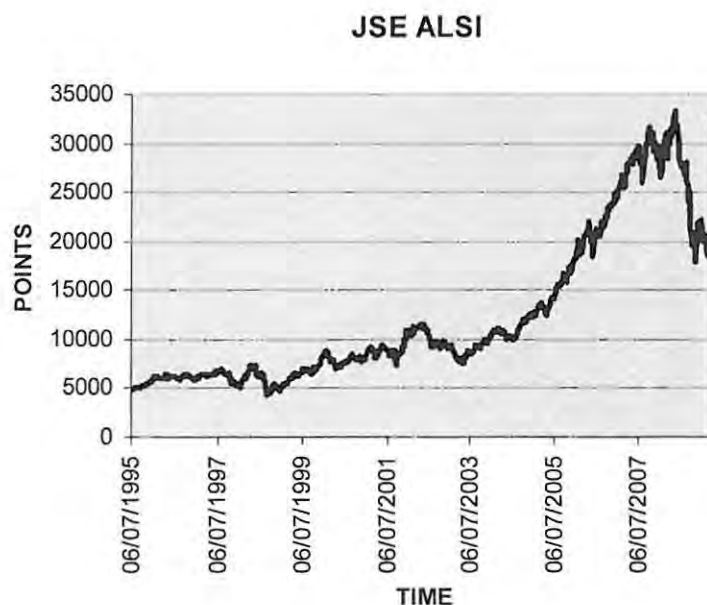


Figure 1

Source: Thompson Data Stream (2009)

Contributing greatly to the demand for equities has been the purchase of shares by non-residents of South Africa: foreign purchases constituted 21 percent of all shares sold on the JSE during 2006, R73.7 billion in nominal terms (South African Reserve Bank, 2007a: 43). These figures are liable to fluctuate strongly depending on confidence within global markets, as was seen to be the case in mid-2007 when the US experienced the sub-prime crisis. Uncertainty generated by credit markets, and by the US credit crunch in particular, caused the JSE ALSI to decline by 13 percent on 17 August 2007, although it rebounded by month end (South African Reserve Bank, 2007b: 41). Nevertheless, the JSE proceeded to subside over the following twelve months, reaching its lowest point in November 2008. The decline was short-lived, however, since between November 2008 and September 2009 the JSE ALSI has risen 36 percent, illustrating similar trends to other emerging markets (South African Reserve Bank, 2009a: 44).

During the same period real estate sales and prices increased in real terms. The annual real rate of change in house prices accelerated to 25 percent in late 2004 (South African Reserve Bank, 2006a: 45). This was partly attributed to an easier lending environment combined with the effects of the wider international boom. Apart from South Africa, twenty-three other nations including Vietnam, India, Russia, and China, to name a few (Seeking Alpha, 2009), experienced housing bubbles during the mid to late 2000s (Seeking Alpha, 2009). Real estate bubbles were also evident in the housing indices of most developed nations, the most notable being the US, United Kingdom and France.

This phenomenon exemplifies the globalised nature of housing market bubbles and the importance of real estate as an asset class. In addition, these housing bubbles appear to correlate strongly with growth and confidence in the US economy. As will be discussed in Chapter Two, it appears that growth sourced in the US economy, particularly during the 2000s is subject to high volatility and unsustainability, fostering uncertainty of long-term sustainability within these markets.

Had South African policy makers accounted for the above economic indicators, these unsustainable trends would have been noticeable prior to 2006 when monetary policy began to lose its control. These indicators showed signs of unsustainable growth long before the inflation rate breached the upper limit of the target band.

The negation or failure to respond to such indicators is neither a new nor an isolated phenomenon, but is prevalent throughout history. Some examples one may consider are the Dutch Tulip mania of 1636-37, the infamous US Wall Street Crash of 1929, the Japanese housing and stock market bubble of the 1980s, the more recent Dot-Com bubble in 2000, and the 2007 US housing bubble, each to be discussed in turn.¹ The historical recurrence of asset price bubbles indicates two primary factors, firstly, the persistent failure of economic agents to learn from past mistakes, and secondly, that markets fail to

¹ Of great interest to the history of booms and busts are the South Seas and Mississippi bubbles of 1719 and 1720, respectively. These two examples struck at the heart of finance and economics and therefore indicate the importance of financial stability.

function efficiently. A brief outline of the above expansions will also indicate the recurring relegation of vital variables that play a role in determining sustainability.

Probably the most stark and fascinating of bubbles is the previously mentioned early seventeenth century Tulip mania in Holland. According to Sykes (2003: 198), the peak of the boom lasted only two months, a very short and volatile period by any comparison. Within this period the prices of specific tulips escalated by over 1,000 percent. The soaring price of tulips is evident in the example of a variety of tulip called *Generalissimo*: this bulb, bought for 95 Guilders, was valued at 900 Guilders two months later.

Investors' ability to leverage tulip investments through purchases made on credit and margin contributed to bubble prices (Sykes, 2003: 201). Due to the consistent positive price growth, credit-screening buyers of contracts was negated as defaulting appeared to pose no serious threat (Sykes, 2003: 199). As a result credit became heavily over-extended, leaving many tulip investors heavily in debt.

The market crash came suddenly and without warning: according to the record of one trader a tulip selling for 5,000 Guilders fell to 50 after the crash. Investors, especially those that had bought on credit or mortgaged their properties lost unduly; a substantial proportion of Dutch wealth had been eliminated instantaneously at the hands of the bubble (Sykes, 2003: 201). The high debt levels and unsustainable asset prices were crucial to the growth of the bubble and its ensuing demise, a trend that can be seen in many financial crises.

The Wall Street Crash of 1929 is the largest of the twentieth century market bubbles. Between 1928 and the crash in late October 1929, the Dow Jones index escalated from 240 to 390 points (White, 1990: 73). Brokers' loans and foreign banks enabled the explosion of credit during the bubble phase, and this permitted colossal purchases on the New York Stock Market. Debt created by brokers' loans alone rose from 130 in early 1928 to 210 index points by the crash in 1929, a 61 percent increase (White, 1990: 75). By September of 1929 total market capitalisation had reached \$89.7 billion.

As in the case of most financial market crashes, the event was unforeseen by investors as they believed prices would continue to rise. While many reasons have been proposed to explain why the crash occurred, there does not appear to be consensus among scholars. When the market began to slip, panicked investors began selling on October 24, what is now referred to as Black Thursday: 12.9 million shares were traded. As news of the event spread, 16 million shares were traded on Black Tuesday, October 29. Over the six day period the Dow Jones lost 39 percent while market capitalisation fell by \$30 billion causing the Dow Jones index to plummet (Klein, 2001: 326). Those investors that were highly leveraged incurred critical losses, while widespread panic triggered mass default and banking failures. In similar fashion to the Tulip example, debt enabled the growth of equity prices to reach unsustainable levels, eventually leading to an unwarranted financial crisis.

The Japanese market crash of the 1980s is not as clearly delineated as the US market crash. This example is something of a conundrum as the bubble expanded at a time when the real economy was stagnating. Possible reasons for the recession in Japan are discussed in Chapter Two, but the strong yen combined with reduced interest rates in the mid 1980s are considered factors for the bubbles' growth (Itoh, 1994: 40). Beginning in 1980, the Nikkei 225 stock index rose from 6,000 to 39,155 points by late 1989 (Itoh, 1994: 40). Similarly, between 1980 and 1991, the prices of real estate rose by over 100 percent, causing frenzy in the residential and commercial property markets (Hoshi and Kashyap, 2004: 6).

A central cause for the crash is suggested by Hoshi and Kashyap (2004: 40), who propose that it was brought about by the Bank of Japan raising interest rates from 2.5 to six percent in 1990. By the third quarter of 1990 the Nikkei 225 index had fallen 50 percent, and by 2003 had been reduced to 8,000. The housing market followed a similar trajectory, falling 45 percent from the height of the bubble (Hoshi and Kashyap, 2004: 6). It also appears that the growth of Japanese equity and real estate in the 1980s was created on debt, mostly sourced in the US and funneled through portfolio investments. These

created the underlying contradictions to sustainability in Japan (Hoshi and Kashyap, 2004, and Itoh, 1994).

The recurring theme of financial over-exuberance ending in financial crisis and destitution continues into recent history, as exemplified by the Dot-Com and US housing bubbles of 2000 and 2007, respectively. The Dot-Com and housing bubbles are discussed in greater depth in Chapter Two. As transpired in the examples discussed above, debt and asset prices were central to the ensuing collapse. This brief historical evaluation of “booms and busts” suggests two points: firstly, that financial sustainability is imperative to economic sustainability; secondly, that market models in many cases do not function efficiently. This raises concerns over modern economic thought and the way economics is practiced. Inflation targeting is one such model that will be discussed.

Underlying inflation targeting is the philosophy that markets “work” (Loayza and Soto, 2002: 4). This neoclassical insight proposes that once price inflation is maintained at a stable and low level, markets will work efficiently to allocate resources. As demonstrated by the above discussions, however, it appears that markets do not work as prescribed, thereby casting doubt over the inherent benefits of inflation targeting. Inflation targeting is singularly concerned with achieving a set inflation index target, and does not account for other macro-economic variables that, as demonstrated, are important to economic sustainability (Kahn, 2008: 125). The adoption of inflation as the primary indicator of economic sustainability gives the false impression that alternative indicators, such as debt and asset prices, are not as critical to economic sustainability as price inflation. An indepth discussion of inflation targeting will be conducted in Chapter Three.

Price stability is perceived to be particularly important for a number of reasons. The reasons alluded to are those posed by central bankers, namely those trained in the neoclassical discipline. These will be followed by alternative motivations that shed light on other serious concerns. Firstly, inflation erodes the value or purchasing power of money, thereby reducing the ability of money to procure goods and services. Secondly,

investors are concerned with rising inflation as it has a direct consequence for real returns on investments. When inflation rises, real returns decline, and in doing so cause an outward flow of capital towards markets with lower inflation and higher real returns. This phenomenon is related to interest accruing on savings; as inflation rises, the real interest rate earned declines, reducing the prospect of relying on savings. Thirdly, inflation poses a substantial limitation to agents earning fixed incomes as they will see their purchasing power decline (Bank of Canada, 2009).

Discussion of reasons such as these reveals the importance of low and stable prices to the efficient functioning of an economy. Included in the discussion, however, are issues that raise concerns for sustainable economic activity that has its origins in the political and financial sectors. As previously noted, low inflation stimulates the inflow of funds into investments in the pursuit of high real returns. Where this becomes problematic for South Africa is that these flows are dominated by essentially volatile, short-term portfolio investments. These flows contribute towards volatile asset markets and ineffective monetary policy. Although bankers concentrate on price stability to generate investor certainty/confidence, the high level of flows during periods of low and stable inflation often generate asset market bubbles that end in economic and financial disaster.

Food price inflation, although critical to food security and the well-being of the country's population, is not without its risks, particularly the political risk posed by disgruntled consumers. Although high food prices affect all consumers, it is most detrimental to the poor, and in a South African context they make up a substantial percentage of the population. When food price inflation threatens food security and survival, consumers may react with public disturbances and begin opposing the ruling political party. The importance of food and its pricing to South African citizens is reflected in its relatively heavy weighting of 15.68 percent within the CPI (Statssa, 2009: 3).

Another reason why inflation is perceived to be harmful to economic growth stems from the inherent expectations associated with inflation targeting. This results from the expectation that when inflation increases it is assumed that the Reserve Bank will

increase the repo-rate (interest-rates) to gain control of price increases. These expectations are seen more readily within the investment sector than any other since, when interest rates rise, investment and consumption expenditure slow due to stricter lending conditions. The eventual outcome of these factors is systematic and simultaneous declining growth.

Inflation targeting has also been criticised for curtailing growth in developing nations as contractionary monetary policy is adopted to contain inflation growth. The higher interest rates simultaneously restrain employment expansion and the wider developmental goals of developing countries (Stiglitz, 2009). Opponents of inflation targeting have claimed there to be unconvincing evidence concerning the negative impact that inflation has upon real variables (Ghosh, 2006).

In the current international regime of economics there appear to be two chief forms of economic sustainability. The first is the unsustainability of growth associated with rising inflation, and the second is noted as the unsustainability of growth as impacted by financial crises (Farrell, 2009). These two forms of unsustainability do not necessarily occur simultaneously, however, they are both integral elements of a sustainable and efficient economy. Furthermore, the question these forms raise is whether one is more vital to economic sustainability than the other.

Further debate arises over whether inflation outside the targeted band is a greater impediment to growth than a financial crisis. This can be seen in the example of late 2007 when financial crises had a substantial downward effect on growth that lasted for many subsequent quarters. This is in contrast to the relatively negligible drawbacks experienced by South Africa from the second quarter of 2007 by mild inflation outside the target band. This begs the question whether an alternative indicator, or set of determinants, should be considered as a more reliable indicator of sustainability.

1.3. The Regulationist Approach

The aim of this discussion is not to discredit low inflation as a valid policy objective, but instead to state that there are other aspects of the economy that are vital to economic sustainability. As noted earlier, debt and interest rates are an influential catalyst in asset market bubbles and general economic instability. As noted by Borio and Lowe (2002), Clarida *et al.* (2000), Chadha *et al.* (2003) and Kontonikas and Montagnoli (2006), debt and asset prices are central to economic stability and sustainability. The narrow modern framework in which sustainability is perceived negates these crucial problems of sustainable economic growth.

It is evident, then, that an alternative, holistic approach to addressing sustainability and its associated variables is required. The objective is not to focus on how the variables may be included into the model inductively, but to understand the workings of the economy, and how the variables influence sustainability.

In order to move closer to a systems-based approach to sustainability, the Regulation School is utilized. The Regulation School methodology is an all-encompassing approach that attempts to generate a wider understanding of how a given economy functions (Husson, 2001: 6). To achieve this outlook the approach draws research from a broad spectrum of disciplines as discussed in Chapter Two. By doing so, the approach develops a holistic understanding of the political economy.

Central to the Regulationist methodology is that economic systems function according to a given “mode of regulation”. These modes of regulation determine whether a system will be sustainable or not. According to the Regulationist approach a sustainable system is one where the “modes of regulation” develop a “regime of capital accumulation” (Brenner and Glick, 1991: 47). A successful regime of accumulation occurs firstly, when aggregate supply (production) and aggregate demand (consumption) are in long term equilibrium and secondly, when real growth is achieved for a prolonged period. (O’Hara, 2003: 21). The Regulationist’s identify phases of economic development (regime of

accumulation) through various periods of history. These phases can be described as prolonged periods of high growth, interspersed with occasionally protracted periods of stagnation and conflict.

Of particular interest to this thesis is the argument proposed by O'Hara, (2003) and Brenner, (2009), among others that since the fall of Fordism in the 1970s, a new sustainable regime of accumulation has not emerged. The insufficiency of mainstream economic thought through its narrow perception of sustainability contributes to this problem. In addition, the current policy regime of the wider international community fails to consider the broader questions of political and environmental sustainability. Environmental sustainability, although important, is outside the scope of this study.

As such, this study will be structured as follows: Chapter Two examines the Regulation Approach under Fordism to attain a concrete understanding of the approach and its concepts. The approach is used to derive a holistic and encompassing understanding of sustainability. Chapter Three analyses the South African economy using the Regulation approach to understand the directionality of its policy. The paper will subsequently conclude and give recommendations.

Chapter Two: The Regulationists and Sustainability

2.1. Introduction

An alternative approach to the current narrow perception of economic sustainability should include concerns such as global capitalism and broader questions of sustainability. The Regulation School approach attempts to address these larger questions of economic sustainability by considering other contributing factors, and therefore lays a firm basis on which to develop an understanding of sustainability.

Although the aim of the Regulationist school of thought is to develop a holistic approach, there is a tendency for tentative conclusions to be drawn as not all the available literature is consulted. The argument posed in this thesis, however, is that attempting a broad approach is necessary and important since narrow and specialised approaches tend to be sterile and restricted through being less informed by a holistic understanding.

The chapter will therefore proceed to discuss the following issues: section 2.2. the origins of the Regulation approach and its benefits, section 2.3. the 1945 to 1970 period referred to as Fordism, and section 2.4. the collapse of Fordism and whether a post-Fordist “regime of accumulation” has emerged.

2.2. Origins of the Regulationists and their affinities with other traditions

Mainstream economic thought since Adam Smith evolved through the establishment of “grand theories” (Brenner and Glick, 1991: 46), which aim to encompass all possible variables. These grand theories are a deduction of one’s understandings of an economy which are then applied to the real world. Furthermore, it is assumed that these single sets of laws are comprehensive and remain valid throughout time.

Aglietta (1976: 9) deplores the failure of economic doctrines to provide a reasonable account of historical economic events, as well as to represent sociology in economic

relations. More specifically, this failure encompasses the inability of existing thought to interpret conflicts within the economic structure. The Regulation school, on the other hand, makes use of historical analysis to attain a more comprehensive understanding of the economic environment. Aglietta (1976: 11) thus rightly observes that any application to economic growth and development that negates history “leads to a conception of time that renders dynamics a mere variant of statistics”.

Although many academics’ thoughts or literary contributions are not explicitly associated with the Regulation School, they employ historical methods of analysis that are consistent with the approach. The Regulationist approach is, therefore, not a separate approach *per se*, but an integrated process of organising thought. The approach also has affinities with other schools of thought. Although the Regulationist approach is underpinned by Marxist thinking, it holds many similarities with Neo Classical and Keynesian inspired thought.

At the heart of the mainstream thinking is the reliance on equilibrium between aggregate demand and supply. This condition is critical to sustained growth within orthodox thinking, as it is within the Regulationist school of thought. The Regulationists extend this understanding by locating it within a holistic and systems-based framework. The School proposes a method of fiscal and monetary regulation that sustains economic equilibrium according to both the Keynesian and Neo Classical schools, although this method is based on a deep understanding of the social and political needs of the economy ((Brenner and Glick, 1991: 47).

The Marxist thought underpinning Regulationist thinking is shared with that of market failure as developed under Neo Classical and New Institutional Economics (Akerlof, 2002). Huang (2002) exemplifies this thinking by focusing attention on “co-ordination failures” within developing economies. Marxist inspired thinking, in Arrighi and Brenner, develops the social and historical context of the international economy. Developing this broad historical context further as well as providing an alternative understanding is Wade’s (2008) *regime shift* ideology. This ideology will be

contextualized and discussed below. It may be seen that Regulationist thinking is not greatly divergent from mainstream thought. It is an extension of such as it aims to construct a long-term plan of economic growth and development, which is grounded in a wider understanding of the economy.

2.3. Post World War Two Period and the Regulationist Framework

In this section the Regulationist approach is illustrated using Fordism in the US. Alternative regimes and methods of the approach are also demonstrated through their application to two post-World War Two examples – Sweden and Japan. Since literary and research sources of the Regulation approach have been discussed, attention is now focused on the methodology and terminology of the approach.

When Aglietta (1976) examined the US economy, he noticed that real economic growth had been maintained for over twenty years. Such a lengthy growth phase is of interest to the Regulation School as the Marxist thought that underlies the approach proposes that capitalist structures are inherently contradictory and plagued by crisis (Husson, 2001). In other words, the Regulationists sought to examine why capitalism *did not* fail given the fundamental contradictions underlying capitalism. The Regulationist question echoes Akerlof's (1970) speculation why markets do not fail in the context of asymmetric information. As a result extended periods of sustainable growth and development became known by Regulationists as a "regime of capital accumulation".

Constituting a regime of capital accumulation as noted in Chapter One, are sustainable "modes of regulation" of both aggregate demand and aggregate supply (Brenner and Glick, 1991: 47). Aggregate demand and supply are required to balance each other thereby fostering a climate for sustainable economic growth and development. Within the US economy, between 1945 and the late 1960s, there were differing factors on both the demand and supply sides that contributed to the Fordist regime of accumulation. Here, multiple factors contributed towards a sustainable mode of regulation of aggregate demand.

Firstly, the payment of “efficiency wages”, a wage payment that is above the market clearing level, created distinct increases in wages. The logic behind paying efficiency wages is the wage-productivity nexus: that higher wages encourage greater productivity (Swenson, 2002: 250). According to the American Management Association in 1935, a 15 percent wage increase could yield a 25 percent rise in productivity. Henry Ford famously said that his five dollar a day wage “was one of the finest cost cutting moves we ever made” (Swenson, 2002:57). The prevalence of “welfare capitalism” was also particularly important to the US economy as employers paid out numerous benefits, such as health, pension and unemployment, to workers. In addition to these basic benefits employees received lifestyle benefits such as access to sports, cultural, and entertainment facilities (Swenson, 2002: 27).

The benefits that efficiency wages, and other employee welfare benefits, contributed to capital were far greater than could have been achieved using conventional methods. The threat of being fired and earning higher wages generally improved overall productivity. Methods such as the “drive system” also made it difficult for employers to implement “assembly line” and other techniques that required reliable semi-skilled workers. In the efficiency wage scenario employee benefits reduced turnover costs because employees were content with the high wages. This reduced the costs associated with employee turnover and training. Additionally, large corporations with large research and development commitments fear disclosure of their secrets to competitors by disgruntled employees (Swenson, 2002: 27). The heightened worker productivity and profits earned by capitalists thus led companies to willingly offer the highest industry-wide wage possible.

Aglietta (1976) argued that capital was distributed through higher wages and transfer payments. The outcome was that higher wages sustained a larger aggregate demand, while rising productivity sustained aggregate supply and high profits. According to Aglietta (1976), the wage regime was an underpinning factor of both the demand and supply modes of regulation of the Fordist period. By contrast, Brenner and Glick (2001: 92) contend that this growth in consumption is incapable of explaining the profits

accruing in the post-World War Two period. Rather, they attribute the rise from economic depression in the 1930s not to the New Deal, but to the vast expenditure and investment on arms prior to World War Two (Brenner and Glick, 1991: 92-94).

Field (2003), counter's Brenner and Glick's claim, however, by proposing that the mass-consumption and production of the Fordist period was an outcome of the technological advancement gained between 1929 and 1948. Although plagued by high unemployment, the Great Depression of the 1930s displayed technological and organizational advances exceeding any other period of the twentieth century. During the 1930s Research and Development (R&D) expenditure more than doubled in real terms, and R&D laboratories spread throughout US industries (Field, 2003: 1406). The result was a significant rise in multifactor-productivity thereby encouraging higher real wages. The heightened investment, ensuing higher wages, and supply side developments, gave momentum to both aggregate demand and supply side growth.

Investment during 1956-1973 exhibited growth rates exceeding 22 percent per annum which was double the rate of economic growth over the same period. From this comparison it appears that the high levels of investment by US industries during the Fordist era were as much a contributing factor as consumption expenditure in maintaining aggregate demand (Brenner and Glick, 1991: 94).

Linked to the benefits of high productivity accruing from high levels of aggregate demand, certain other factors contributed towards a sustainable "mode of regulation" of aggregate supply, since sustainable aggregate supply was required to keep pace with the booming aggregate demand of the period. One of the contributing factors was science; Braverman (1974: 156) states that science was the last social property, after labour, to contribute towards capital. According to Braverman (1974), the systematic application of scientific knowledge in the production process emerged in Germany in the nineteenth century. Education was central to Germany's advancement: by the 1870s Germany had produced the most advanced tertiary educated graduates of science and technology. As a

result German production became the most advanced and often, the most profitable (Braverman, 1974: 161).

Although the Americans had begun to 'endogenise' technology in the late nineteenth century, it was the immigration of many German scientists to the US with the rise of Nazism in Germany that really bolstered its growth within US industry (Field, 2003). Over the period 1929 to 1933 employment within R&D increased by 72.9 percent, while the period from 1933 to 1940 saw R&D employment triple (Field, 2003: 1406). The surge in scientific knowledge caused a substantial increase in R&D investment expenditure. During this phase American industry with its improved productivity and profitability surpassed German scientific advancement and industry.

A critical aspect of Fordism was the emergence of the "welfare state" which evolved to 'shore up' Fordism. Many social and economic weaknesses that could not be resolved at lower levels of co-ordination were corrected by measures implemented at the national level through welfare state policies. The "Keynesian welfare state" complemented the US industry's welfare capitalism under Fordism. The role of the welfare state was to restrict shortfalls in aggregate demand through the provision of expansionary fiscal and monetary policy. US government expenditure focused on maintaining and expanding the vital structural areas of infrastructure and education. Another advantage of this system was the implementation of legislation such as the Taft Hartley Act of 1947 which maintained labour and social relations on the industrial level (O'Hara, 2003: 21). These were essential in maintaining an efficient and productive labour system.

Contributing to enhanced international and national economic stability was the establishment of the Bretton Woods institutions in 1945. The Bretton Woods agreement established a set of Keynesian-type institutions that functioned on an international level. Like the welfare state, the Bretton Woods institutions emerged to counteract weaknesses at lower levels of co-ordination. The purpose was to aid smooth functioning of national economies and help maintain the gold standard (Murphy, 2008: 157). Through fixed exchange rates, financial support via its institutions – namely the World Bank and the

International Monetary Fund (IMF) – in conjunction with the lower levels of co-ordination, a “regime of accumulation” developed known as Fordism (O’Hara, 2003: 21).

Although many compelling criticisms are directed at the Regulationists, the main concept (the balance between aggregate demand and supply) is uncontroversial. Much of the literature discussed above is concerned with individual elements of demand and supply (such as whether consumption or investment was the main driving force of aggregate demand in the post-war period). The following discussion reinforces the importance of balancing aggregate demand and supply in the macro-economy.

It is useful to apply the Regulationist approach to Japan and Sweden in the post - World War Two period for the following reasons: firstly, Japan and Western Europe are an important aspect of the US-centric world system in which the Bretton Woods system was consolidated. Secondly, according to Murphy (2008: 158), Japan had contributed substantially to the eventual fall of the Bretton Woods system in the 1970s. Lastly, these countries illustrate that the US-style system was not the only sustainable regime attainable under capitalism. In contrast to the US economy, the Swedish and Japanese economies pursued alternative methods in the quest for superior economic growth. The critical concern raised by such examples is the method by which Japan and Sweden attained the balance between aggregate demand and supply: the Japanese approach was to balance aggregate demand and supply through export revenue, while Sweden relied on the Social Welfare State.

According to Locke (2005: 3), Japan’s system is a centrally planned capitalist economy that defies the principles of neoclassical economics. Understanding the Japanese economy requires a holistic view of its procedures and conventions as individual aspects fail to reflect its systems-based nature. The key to the Japanese approach is that apart from being an economic system, it is one of political economy.

Coordinating the aggregate supply side of the Japanese economy is the overarching role of the Ministry of Finance (MOF). Although centrally planned, the economy is capitalist;

the difference lies with the MOF maintaining a strong hold on the flow of capital, the element that provides the state with the ability to manage economic expansion. The strong relationship between banks and the MOF create an environment where banks obey the state, and the state's main aim is to provide cheap credit to industry to improve its long-term productive capacity (Locke, 2005: 6).

Enhancing the stability of this system is the "kieretsu" ownership structure. In essence, Japanese corporate entities consist of one company and the other member companies maintain ownership of one another. Profits do not accrue to individual stockholders, but are instead either dispersed among its many employees in the form of higher wages, or reinvested in plant and equipment (Locke, 2005: 5).

Critical to the abundance of low cost credit in Japan is the high proportion of savings to GDP (Christiano, 1989). Instead of confiscating wealth as actively followed in Communist nations, the Japanese sought to restrict consumption through regulation as the residual would constitute greater savings. The surplus funds this creates then flows to a number of government regulated banks that divert the finance towards industries demarcated as "vital" to achieving political and economic objectives (Locke, 2005: 7). Importantly, the MOF only intervenes at the highest levels, leaving banks and private business to perform their functions unhindered. As a result the investment to GDP ratio in 2008 was approximately 25%, which is substantially larger than found in most Western capitalist nations (CIA, 2009b).

Furthermore, in the classic Japanese system, employees were trained by a company and remain employees until retirement. While there has been some erosion of the system, it starkly contrasts the hire-and-fire systems in the West. The advantage of the Japanese system being that it aligns the interests of both worker and company (Locke, 2005: 12). "Lifetime employment" in conjunction with sophisticated technology and low-cost finance enable Japanese industries to produce advanced products that compete successfully in international markets. These contributing factors have created a sustainable mode of production of supply within the Japanese economy.

On the demand side, however, the constrained aggregate demand of Japanese consumers after World War Two meant that manufacturing required an outlet, one dominated by export demand. Export demand for Japanese goods has been central in the growth of its industries and balance of payment surpluses. In order to meet growth objectives the Japanese economy established a very strong outward industrialised manufacturing sector that generates large export earnings. The Japanese economy, through its mercantilist trade restrictions and capital controls, managed growth rates in excess of those attained in the US and elsewhere (Murphy, 2008: 158). External demand for Japanese manufacturing balanced aggregate demand and supply forces allowing for sustainable long term capital growth.

Turning to the Swedish example, one can see that alternative methods for achieving a sustainable balance between aggregate demand and supply are possible. The social democratic direction of the Swedish state reveals an active and central role for the state within the economy. The Swedish Social Democratic State is sustained by the high tax rate that has averaged almost 50 percent of GDP since the 1960s (Esping-Andersen, 2005: 4). The consistent flow of government expenditure on public projects and the advancement of the Swedish populace in terms of skills and Education sustain aggregate demand.

A critical factor determining the growth and sustainability of Swedish aggregate supply is the nationalized bargaining of wages. Towards the beginning of the twentieth century the Swedish labour unions crumbled under pressure exerted by employer organizations. Swenson (2002) argues that the mass lockouts enforced by businesses on a multi-industry level disciplined organized labour. The forced adoption of "solidaristic" wage practices in Sweden thus aided the competitiveness of Swedish industries. Solidarism is the practice of paying wages below the market clearing level. For solidarism to succeed business had to enforce its practice on an industry-wide level and issue fines to prevent efficiency wage payments (Swenson, 2002: 75). The outcome of solidarism was the reduction of production costs and the generation of greater profits.

Because efficiency wages were disapproved in Sweden, instances of “piece work” or “performance pay” arose within certain industries such as manufacturing (Swenson, 2002: 79). Piece work can be likened to efficiency wages due to the associated benefits of productivity and efficiency, although it is strictly a performance-oriented payment. The application of piece work and labour practices in preventing worker “poaching” and unfair practices created a positive climate for mass production as costs were minimized (Swenson, 2002: 30-31).

Continuing with this practice, as of 2002 Sweden has been recognized as a leading contributor towards R&D and remains third on the Technology Achievement Index (Desai *et al.*, 2002: 103). In 2008 real R&D expenditure as a percentage of GDP amounted to 3.6 percent and contributed to by both government and private enterprise (Forskning.se, 2008: 4). The advancement of technology and machine manufacture particularly in manufacturing and other industries has subsequently increased productivity, having the effect of reducing production costs.

The end product of R&D expenditure by Sweden has been that it has emerged as a producer of competitive products that sustain export earnings and thereby maintains a surplus on the trade account (CIA, 2009c). The increased competitiveness of Swedish products combined with higher profits established a sustainable mode of regulation of aggregate supply. The balance between sustainable modes of regulation of aggregate demand and supply enables the sustainable accumulation of capital within the Swedish economy. Institutions acting in the economy are modulated according to the objectives of the Swedish social state, thereby promoting sustainable growth and development.

The comparative study of these national economies illustrates that balancing aggregate demand and supply was paramount to the growth of Japan and Sweden and not just to Fordism in the US. It also demonstrates that sustainable modes of regulation and regimes of capital accumulation are possible when confronted by such divergent policies and circumstances. It is clearly seen that sustainable regimes of accumulation are not solely determined by technological and other conditions, as mainstream economists purport, but

instead to policy choices. Neither of these decisions are constrained to the state, but include business and labour.

2.4 Persistent Stagnation

According to Wade (2008), the fall of Fordism in the early 1970s constituted an international economic “regime shift”. Emerging out of this shift was a regime centred on globalization, deregulation and privatization commonly known as neo-liberalism. The advent of neo-liberalism in the post-1970s has been plagued by what Brenner (2003: 7) refers to as the “persistent stagnation”. This period of persistent stagnation, lasting until 1993, was characterised by a lack of dynamism within developed economies with investment, employment and growth steadily declining. Furthermore, a succession of financial crises and recessions had reduced economic stability within the international economy during this period (Brenner, 2003: 7).

By 1965 the contradictions within Fordism began to emerge with the main problems underlying both aggregate demand and supply. Aglietta (1976: 99-100) traces the first reason of the crisis to falling wages which deepened the divide between profits and the ability of the working class to sustain aggregate demand. The result was an unsustainable mode of demand regulation. Aglietta (1976) proposes the second reason was to be found in declining productivity of the period: the formation of labour, as supported during Fordism, reached a barrier or maximum point of productivity growth thereby limiting the expansion of surplus-value.

Aglietta (1976) substantiates this point of view further by suggesting that Taylorist time-and-motion studies,² job fragmentation, shopfloor reorganization, and the introduction of new manufacture procedures of the period could not advance at the then-current level of technology. In addition, the use of production-line manufacturing systematically “deskilled” labour forces to the point where they were incapable of contributing to the

² Taylorism (also known as scientific management) was an attempt to increase the productivity of workers through the use of strategic time and energy saving methods (Littler, 1978).

“on-the-line” technical innovations critical to productivity advancement (Brenner and Glick, 1991: 97). The culmination of these factors created modes of regulation of demand and supply that were incapable of growth, and, therefore, appeared unsustainable. The social relations at work within the production process became central to the socio-technical character in which the crisis of productivity arose.

In opposition to Aglietta’s (1976) points is Brenner’s (2003) central claim that the collapse of Fordism came from the existence of “over-supply” and “over capacity” in the international economy. He attributes these problems to a number of occurrences that played out over the period extending from 1945 to the present. Firstly, and most critical, is the promotion and development of laggard nations³ (also termed “uneven development”) in the post-World War Two period by the US. These laggard nations consisted of the post World War Two Japan and Germany, while South East Asia, Brazil, India and China emerged at later stages between the 1970s and 2000. Paradoxically, by the 1970s the development of laggard nations had revealed itself to be an underlying contradiction to future growth in the US, as products emanating from laggard nations began to dominate markets previously controlled by US producers. With the loss of their initial competitive advantage, US industries’ rates of return decreased (Brenner, 2006: 41). In response to these setbacks US manufacturing reduced prices to below full cost, slowed the growth of wages, and invested substantially in advanced equipment and plant (Brenner, 2006: 105).

The establishment of Japan and Germany as high-volume exporters by the 1970s had not yet troubled the world economy with over-supply as this only became a critical concern towards the turn of the century (Murphy, 2008; 157). What did arise by the 1970s, however, was substantial competition against US goods and industry. The lower wages offered by US industry in response to reduced returns was not without its disadvantages: it appears to have negatively affected sustainability. Firstly, shrinking real wages diminishes long-term aggregate demand and this, in turn, drives down prices. Secondly,

³ A laggard is a nation that lags behind in capitalist development but, through high levels of investment and growth, proceeds to surpass developed economies (Brenner, 2003: 91).

lower wages negatively impact on aggregate supply as lower wages frequently slow productivity growth. The effect within industries is the reduced ability to sustain growth leading to diminished economic growth.

Indirectly related to the actions discussed above, but nonetheless attributed to stagnation was the fall of the fixed exchange rate regime in 1973.⁴ The floating exchange rate system enabled the US to leverage their export competitiveness. The substantial devaluation of the dollar against the mark and yen, by 50 and 28.2 percent respectively between 1969 and 1973, to maintain the value of the US dollar against gold caused investment, productivity and profits in the US to rise. The zero-sum nature of exchange rate movements meant that Germany and Japan would suffer declining profits and investment. Although US profits had been restored, the crisis continued to develop beneath the façade of an equally shared burden between these countries (Brenner, 2006: 123-124, 137). The manipulation of the US dollar's value became a decisive tool for the US in its pursuit of sustained competitiveness.

The failure of Keynesian policy towards the late 1970s as a result of stagflation, growing deficits on the balance of payments, and over capacity, led to its fall. The emergence of conservative policy in 1979-1980 under US President Ronald Reagan came about from a political and ideological shift. "Reaganomic" policy, of which monetarism was a component, took the form of reducing corporate taxation while increasing unemployment and the liberalization of markets to improve profitability (Panitch and Gindin, 2005: 110). In attempting to balance the budget, high interest rates combined with fiscal austerity led to the phenomenon of "shakeout" economics. "Shakeout" is a very important concept, and will be discussed later in greater detail.

⁴ A number of reasons have been forwarded as contributors to the fall of the gold-dollar standard. Brenner (2006: 120-123) associates this problem with the deepening costs of the Vietnam War in the 1960s and 1970s combined with contractionary monetary policy. The immense strain that contractionary policy was having on political interests eased as Nixon adopted expansionary policy in the mid-1970s. With spreads between US, Japanese and European interest rates widening, capital exited the US causing the capital account to fall into deficit. Further aggravating the problem was a trade account deficit created by low export earnings that resulted in a disastrous balance-of-payments deficit. The ensuing devaluation of the dollar placed the gold standard in jeopardy, consequently resulting in its abandonment in 1973 (Brenner, 2006: 120-123).

Brenner (2006: 32-33) points out that two major factors contributed to the extended, persistent stagnation of the post-Fordism era, namely the failure of capitalism, and government regulation to restore profitability via the elimination of excess supply and over-capacity. In the scenario of over supply profits tend to fall thereby creating knock-on effects such as reductions in investment, wages and employment. Brenner, like the Regulationists, therefore perceives capitalism as a contradictory system. The only method by which capitalism may restore production to normal levels is via shake-out. This phenomenon is most notably the result of deep recession or depression whereby high cost, low profit companies are forced to close (Brenner and Glick, 1991: 14).

From the perspective of rational agents, high cost, low profit companies existing in an environment of over-supply resist exiting the market. Such companies can only realise the benefits of their tangible and intangible assets within their line of expertise or production. Entering alternate markets would eliminate any benefits associated with past experience, while increasing sunk costs. Consequently, the low profit margins stimulate investment into more efficient production methods, in turn contributing to over-supply. The problem associated with low profit margins is that it does not deter new entrants as was witnessed with the entrance of laggard countries such as Mexico, Brazil and those of South East Asia. The low-wage labour of these nations enabled their products to undercut the prices of existing foreign producers (Brenner, 2003: 34).

Falling profits in the US and international economy may be attributed to co-ordination failures in the international economy. Huang (2002: 540) suggests one of these failures to be the inability of capital in developing countries to bring in the gains that are associated with investment in industrialised nations. He proposes two reasons for this shortcoming, namely Co-ordination Failure One (CF1), and Co-ordination Failure Two (CF2). CF1 is a case where investment levels are lower than optimal due to market imperfections such as asymmetric information. CF2 results when government fails to co-ordinate the entry of new firms and the direction of new investment, which, in turn, causes returns to be sup-optimal (Huang, 2002: 540).

The contractionary policy under Reagan succeeded in controlling the stagflation, however, because US spending had markedly declined, it threatened a collapse within the international economic environment. In response Reagan reverted to Keynesian tactics to divert the economy away from recession. Once again, the US balance of payments fell into deficit although the high interest rates stimulated mass inflows of Japanese and international capital causing the US dollar to appreciate (Brenner, 2006: 16).

The inflow of liquidity arising from the high interest rates bolstered US finance but had the effect of reducing manufacturing's competitiveness. Reagan was forced to devalue the US dollar in 1985, which became known as the "Plaza Accord". Supporting the Plaza Accord was legislation such as the Omnibus Trade and Competition, and Structural Impediments Acts of 1988 and 1989 respectively (Arrighi, 2003: 16). These legalities had the simultaneous actions of raising trade restrictions over imports and opening export markets. The culmination of increased export growth encouraged by the devalued US dollar, lower production costs associated with limited wage growth and improved returns to capital in the post-shakeout era, revived US profits along with investment and production. In a similar fashion to the restoration of profits in the early 1980s, however, the Plaza Accord had not resolved the underlying problems at hand, but had instead shifted Japanese and German profits to American producers (Brenner, 2006: 127).

Although the Plaza Accord of 1985 had a detrimental effect on the Japanese economy, the pegging of East Asian currencies in the early 1990s against the devalued US dollar improved their export competitiveness. The liberalization of many East Asian economies at the time also allowed for large capital inflows. Japanese industries, having failed to gain any significant share in US markets under the strong yen, thus invested substantial capital into South East Asian economies where the returns on capital were high. The lowering of US interest rates and the increasing additions to liquidity in the international economy contributed to continuous inflows of capital to the South East Asian region causing over-capacity and over-supply to rise (Brenner, 2001: 33).

The zero-sum nature of these dollar devaluations placed unprecedented strain on the Japanese and German economies as their export earnings declined significantly. The Peso Crisis of 1994 and the US's attempt to salvage the Mexican economy weakened the US dollar causing the Japanese economy to stall. To prevent the Japanese economy falling into recession the US initiated an artificial strengthening of the US dollar. This policy initiative in 1995 became known as the "Reverse Plaza Accord" (Wade and Veneroso, 1998: 10). Strengthening the dollar was achieved by reducing Japanese interest rates and by having Japan purchase large amounts US dollar-denominated securities (Brenner, 2001: 32).

The resulting sharp devaluation of the yen and ensuing appreciation of the US dollar under the Reverse Plaza Accord greatly reduced South East Asian competitiveness. The rising competitiveness of Japanese exports undercut those from East Asia thereby drying up export earnings and capital inflows (Brenner, 2001: 33): Thai exports registered zero growth for the year 1996, while the Thai stock market fell 20 percent. Foreign direct investment also plummeted causing economic stagnation. The effects of the strong US dollar reverberated through East Asia causing balance of payments deficits and bankruptcies within Korea and its neighbours (Wade and Veneroso (1998: 10). In response, East Asian industry stepped up investment with the aim to reduce costs and raise profits. The result was increased over-capacity and over-supply (Brenner, 2001: 34).

As foreign investment slowed in 1997 the incidence of speculative attacks on the currencies of East Asia rose. The intense crises that ensued as a result of these attacks caused panic-stricken investors to withdraw their funding from heavily indebted companies. The capital outflow caused a run on East Asian currencies, while the inability to maintain the value of these currencies led to their de-pegging from the US dollar. The increased incidence of default combined with that of highly devalued currencies also escalated the debt crises. The IMF intervened by providing bailouts to the afflicted countries in order to slow the crises, however, the currency crises of these nations gave rise to increased debt costs on the US dollar denominated loans provided by

the IMF. This, in turn, caused heightened default and the situation to worsen (Tan, 1999: 8).⁵ The situation further deteriorated precipitating financial plight in Russia and Brazil (Wade and Veneroso, 1998: 11).

As a consequence of the above crises, institutions established since the 1970s as well as the adoption of neo-liberal policies under the conservative counterrevolution (namely floating currencies, trade and capital market liberalization) appear to have contributed towards heightened international economic volatility (O'Hara, 2003: 35-40). The ability of the US to manipulate the dollar's value reduces the certainty of aggregate demand (capital and export inflows) within these export-oriented economies.

Emerging from this period and following on from the Plaza Accords is the Bretton Woods Two system. This is a non-ratified convention whereby the countries of East and South East Asia perform dollar transactions with the aim of stabilizing the dollar's value. This is evident in large purchases of US dollar denominated bonds and assets by Japan and China, effectively maintaining an over-valued dollar and so allowing for sustained export earnings in Japan, China and South Korea, among others (Murphy, 2008: 158).

The devaluation of the yen and German mark in 1995 under the Reverse Plaza Accord had once again threatened US manufacturing growth because much of their earnings were export based. The increased competition from Japanese and German producers placed downward pressure on profits. But more importantly the South East Asian crisis of 1997-1998 closed these markets to US exporters, further pressurising earnings and profits (Brenner, 2001: 35).

Countering the low returns in manufacturing was the inflow of Japanese capital during the Reverse Plaza Accord, which created an environment of low interest rates and intensified portfolio investments. The abundance of liquidity generated by the inflow of foreign reserves eased the borrowing environment thereby boosting equity returns. By

⁵ The approach of the IMF appears to have been an attempt to create "shakeout" within South East Asia. Varying reasons for this approach are offered, although of interest is the opportunity that US corporates had when faced with distressed South East Asian businesses.

1996 the US economy began to regain momentum: the bulging wealth effect created by the bull market in the US caused a substantial rise in domestic expenditure. The confidence inspired by the stock market created a climate of deepening debt which further stimulated the expansion of equities. The rising consumption as a result of the inclining wealth effect raised manufacturing profits and investment (Brenner, 2001: 35).

Following this 1996 upward trend, the 1997-98 crises in South East Asia contributed to a decline in US manufacturing. The decreased purchasing power of South East Asia, caused by the economic and financial crash, lowered US manufacturing exports and earnings. Falling earnings and lack of confidence in manufacturing in the US triggered a fall in equities thereby threatening the continuation of the boom. By mid-1998 US equities had fallen 20 percent resulting in a large proportion of less developed nations falling into recession. The Federal Reserve Bank (hereon referred to as the Fed), not allowing the boom to slow, provided a bail-out of the Long Term Capital Management (LTCM) hedge fund. A general consensus emerged within the market that the Fed would not allow the equity market to fall, furthering confidence in equities. Following this event US equity "sky-rocketed" creating further growth and confidence in both the US and international economies (Brenner, 2001: 35).

By 1999 US growth was primarily motivated by rising debt levels rather than fundamental signs of growth in the real economy. The rising income of US households stimulated import growth while the export markets, which the US had relied on, were facing recessionary circumstances thus worsening the current account deficit. The growth of US consumption created in the stock market successfully pulled East Asia and Europe away from recession. Growing import demand in the US was therefore a central factor of increased earnings in East Asia, thereby stimulating profits and investment. In essence, the private debt financed expenditure sourced in the US, made possible by the Fed's reassuring stance on the stock market (which Brenner refers to as "stock market Keynesianism"), substituted the traditional Keynesian stimuli of the past (Brenner, 2001: 36).

Rising debt in the US sustained aggregate demand through heightened consumer expenditure and investment. The increased value attached to equities is vital to aggregate demand in the US as illustrated above. The US's role as consumer of last resort stimulates economic growth in the major exporting economies of Asia and Western Europe (Brenner, 2002: 36). In periods of economic recession, as frequently caused by financial collapse, US aggregate demand falls precipitating recessions in these export economies.

O'Hara (2003) argues that the US economy's debt-financed consumption during the 1990s constituted an unsustainable mode of regulation of demand. The growth of the short business cycle during the 1990s boom was based on financial overextension rather than fundamentals. Over this boom-phase household liabilities exceeded disposable income, reaching 107.89 percent in 2000 (O'Hara, 2003: 30-31). An inflated bubble of "smoke and mirrors" became the driving force of economic growth, not the real economy. In Brenner's (2003) view, the emergence of bubbles in the US and international economies *defines* the post-Fordist mode of regulation on the whole, and not only the period in mention. It therefore appears that the mode of regulation of aggregate demand is unsustainable as it relies too heavily on volatile relationships between the US and the Far East.

Throughout this boom-phase investment in plant and equipment by numerous economies had continued to rise which had the effect of pushing up over-capacity and over-supply in the world economy. According to Brenner (2004: 62), much of the investment during the boom and bubble was "misallocated": the investment sourced its major outlet in high technology, both internal and external to manufacturing, with the tendency to increase over-capacity without significantly improving productivity (Gordon, 2000). Between 1997 and 2000 non-financial corporate profits fell by 25 percent due to the recession within export markets (Brenner, 2004: 62).

O' Hara (2003: 25) contrasts Gordon's observations by stating that supply side inefficiencies are not caused by inherent deficiencies in the technological style. Rather,

they are a result of firstly, over-investment in relatively inefficient production and, secondly, the channelling of funds to the financial sector. O'Hara develops strong links with Brenner's contention of over-capacity in his analysis of the US economy. The critical factor, according to O'Hara (2003: 25), is the problem of over-capacity in both traditional manufacturing and information and communications technology. Incentives provided by government and heightened aggregate demand facilitated by increased debt levels have encouraged businesses to expand their production capacity through increased R&D expenditure. The production benefits and profits associated with such R&D are met by diminished returns, causing costs to rise (Gordon, 2000: 52).

The main outcome of this problem is the increased flow of funds into the financial sector. According to O'Hara (2003) and Gordon (2000), the combination of the short business cycle in the latter half of the 1990s and its ensuing close with the Dot-Com crash was a major factor in raising productivity during the period. The underlying contradiction to this productivity growth is that once the upswing unravels, productivity slows. Arrighi (2003: 65) confirms this trend by suggesting that the relatively high returns offered by finance justified the shift from manufacturing to financial assets. The ability to re-allocate investment away from the real sector and earn high returns in the financial sector typically leaves real sectors, such as manufacturing, struggling. An example of how large manufacturers cope is that of Porsche which generates a large proportion of its income through financial speculation (Hughes, 2009). In turn, the growth effects of financial assets have enabled manufacturing to stay above water, yet its growth prospects remain uncertain. The asset market boom on which these returns have been attained is unsustainable, however, and shall be discussed below.

Related to expanding debt expenditure and the provision of bailouts is Brenner's (2003) concern of shakeout. Providing financial assistance to unsound companies furthers the problem of over-capacity and over-supply as this does not allow for company liquidations and the ensuing shakeout. Furthermore, debt-sourced expenditure has allowed abnormally high levels of aggregate demand thereby allowing the entry of new producers that further strains the problem of over-capacity. Brenner's argument is that since the

1960s the US has not allowed many of the high-cost, low-profit companies that afflict the world economy to fail. There are many reasons for this practice, some of which concern unemployment and international economic collapse – as seen during the Great Depression of the 1930s – and political interests. According to Brenner (2006), the over-capacity of the international economy has restricted new growth which has the ability to produce substantially higher returns to capital.

From the above discussions it is evident that the mode of regulation of aggregate supply is unsustainable. O'Hara (2003: 28) confirms this by stating that the emergent regime during the 1990s failed to provide a sustainable long-term increase in productivity. Furthermore, the continued avoidance of shake-out maintains the existing trajectory within the supply side thereby preventing any form of sustained growth within the real sector. The following discussion will emphasise the problematic reliance on debt and asset market derived growth in the US and international economies.

In July 2000 a series of financial reports illustrating the heavily reduced earnings and escalating debt of many large corporations emerged. The sharp fall in their market capitalisation reduced the ability of many companies to extend credit lines, while the growing possibility of bankruptcy pressed them to reduce their liabilities. The abundant purchases of equipment and hi-tech software products, which could not be profitably utilised, forced companies to either reduce prices or leave capacity unused. The ensuing cuts in output and capital expenditure thus forced down both wage growth and employment levels. Reduced consumption and investment as a result of lowered wages and job losses caused a drastic slowdown in the US economy by mid 2001, driving real GDP growth into negative figures from five percent at the height of the bubble (Brenner, 2004: 63).

As the US economy fell into recession import demand contracted causing the Japanese, European and East Asian economies to slow. The inability of the US to maintain its role as “consumer of last resort” forced these export markets deeper into crisis. Stimulating profits and growth in the US economy would only be achieved by raising income and

import demand. In order to do so the Fed began lowering interest rates in early 2001, only to discover that companies were against intensifying their already debt-burdened situations. The over-supply constraint and gloomy outlook over expected future profits inhibited investor confidence causing a significant fall in investment expenditure and further constraining the economy (Brenner, 2004: 65). As an example, between 2001 and 2003 real investment declined by five percent year on year, while 2.8 million jobs were made redundant in the manufacturing sector alone. According to Brenner (2004: 69), the reduced investment and employment in the manufacturing sector has been at the forefront of the crisis.

The failure of the Fed by 2003 to stimulate growth in the manufacturing sector (through low interest rates) forced business to rely on mass consumption once again. Brenner (2004: 69) refers to this outcome as a “paradoxical two-track trajectory”, whereby the manufacturing sector stagnated as a result of the wider crisis of over-supply but low interest rates enabled non-manufacturing sectors to achieve considerable growth. Escalating bubbles, deepening debt and expenditure on imports, all made available by cheap credit, created large returns and profits in the retail and financial service sectors in the US. During the period 2001-2003, however, real incomes declined by 1.4 percent thereby reducing the ability to repay debt liabilities. The Fed countered the effects of limitations to, and the sluggishness of, income by reinforcing the economy through the wealth effect – as it did during the run-up to the 2000 equity bubble (Brenner, 2004: 70).

Unable to stimulate asset price growth in the equity market, the Fed shifted emphasis to the housing market through reduced long-term mortgage interest rates. Over the period 2000-2003 the interest rates on mortgages declined from 8.29 to 5.23 percent causing a seven percent rise in house prices. The rising value of real estate raised the value of collateral, in effect offsetting the declining ability to borrow arising from diminishing real wages (Brenner, 2004: 79).

The increase in real estate prices also led to the revival of equity prices as investors required alternative outlets for speculative flows. As confidence and consumption

expenditure heightened, increased numbers of borrowers entered the market buoyed by high returns. By 2007 overall debt in the US as a ratio of GDP had reached 346 percent (Wade, 2008: 12). While US economic growth improved, the effects began to filter through to other world markets and specifically into the major export markets: Europe, the Far East and most emerging economies experienced upward growth cycles. Indeed while many economies experienced surging growth levels, they also exhibited signs of infant bubbles – as seen in South Africa and discussed in Chapter One.

It is estimated that debt alone accounted for approximately 2 percent of total US real economic growth in the period after 2000, leaving little contribution from manufacturing (Brenner, 2004: 81). The onset of the bursting real-estate bubble in 2007 and the ensuing credit crunch caused mass financial hysteria within US and world markets: plummeting asset values and a high incidence of default gave rise to banking and financial insolvencies. The resulting slowing consumption expenditure and investment of the US market created knock-on effects, pulling the world economy into recession (Murphy, 2008: 8).

In response to the financial crash and ensuing recession, the US congress accepted a multi-billion dollar bail-out aimed at American financial institutions and vehicle manufacturers (Murphy, 2008: 9-14). As in every episode of American financial crisis since the 1980s the US government has relied on Keynesian stimuli to prevent shakeout. A large proportion of the 2008 “monster-Keynesian” package was aimed directly at many of these companies that pose a barrier to increased future profits (Reich, 2009)

Arrighi (2003) presents an interesting extension to Brenner’s “uneven development” argument. Firstly, he observes that the growth of laggard nations in the post-War period was not the first time laggard nations had risen to surpass a hegemon. Previous experiences within a global context constituted the “catch-up” of America and Germany with British hegemony towards the end of the nineteenth century. Arrighi (2003: 27) develops a comparison between the long downturn of the 1873-1896 period and the persistent stagnation extending from 1973 to 1993. Although similar, the long downturn

was characterised by extreme deflation and foreign currency was subject to the metallic standard. The persistent stagnation, conversely, was plagued by spiralling inflation: the nineteenth century manufacturing environment was plagued by too much entry and too little exit, manifesting in an over-supply problem as seen with the persistent stagnation (Arrighi, 2003: 25).

Arrighi (2003) raises a second point that extends Brenner's (2003) analysis by incorporating a socio-political perspective that had previously been lacking from other analyses and introduces a variety of alternative explanations. The structure that uneven development (Brenner's contention of over-supply and over-capacity) took after World War Two was fashioned on the formation and exercise of US hegemony during the Cold War period (1945-1990). Grasping the formation of uneven development and how it contributed to the Fordist boom and the subsequent downturn requires knowledge of the institutional arrangements underlying US hegemony (Arrighi, 2003: 57).

The US asserted their economic dominance on the basis that through the New Deal they would take control of the welfare of other nations. Franklin Roosevelt (US president between 1933-1945) had idealised expectations that the New Deal would become globalised, with the aim of ridding the international system from security threats. When Truman came to Office, however, the focus shifted to the suppression of the USSR and communism which became the main thrust of US hegemony. The US domination of international money and military capabilities presented itself as the chief methods of this containment. The growth of arms capabilities consequently transformed the US from a "global welfare state" into a "warfare-welfare state" in the stand against the spread of communism throughout the South (Arrighi, 2003: 58).

The Keynesian and military expenditure of the boom period succeeded in establishing the predominance of capitalism in the international sphere. Keynesian policy spread in two essential ways: firstly, "military-Keynesianism", as it became known, constituted the re-armament of the US and its allies combined with the extensive deployment of international military bases. Such policy can be seen more explicitly in the form of the

Marshall Plan of the post-War period (Arrighi, 2003: 59). The second aspect of Keynesianism was the conventional element consisting of full employment and high aggregate expenditure. These elements of Keynesian policy prevented a global economic meltdown that may have occurred within a communist based system (Arrighi, 2003: 58).

The globalising US warfare-welfare state consciously advocated the process of uneven development within Japan and Germany in the post-War period through the re-industrialisation of their production apparatuses. The objective was to maintain a capitalist world order overseen by the US. Arrighi's (2003) point of departure from Brenner, though, is that this intent of US foreign policy planted the seeds of the Fordist post-War boom and the contradictions inherent in its demise. Ironically, declining world profits appeared to be an outcome of social and political Cold War policies established to reinforce US hegemony (Arrighi, 2003: 60).

The high growth, full employment, and sustained aggregate demand of the Fordist period initially consolidated liberal capitalism and the US position of dominance within the capitalist framework. According to Arrighi (2003: 60), the Cold War policies of the US affected economic outcomes on two major fronts: firstly, increased "horizontal" pressure emanating from the arrival of competitive laggard nations and, secondly, increased vertical pressure sustained by labour demands as a result of improved growth and liberalism as opposed to authoritarianism. These two factors combined to reduce US profits. It is thus evident that US political and economic policies were in sharp opposition to one another as the benefits of politically motivated policy caused deep contradictions within the economic sphere.

Furthermore, US hegemony in the 1970s suffered a substantive setback which had its origins in the failure of US policies throughout the South as well as falling profits. The failure of the internationalization of the New Deal meant that the South would not achieve the social and political gains proposed by the US warfare-welfare state (Arrighi, 2003: 60). The launch of industrialisation in the South in the 1970s narrowed the

industrial gap with the North. The income gap, however, remained and often widened (Murphy, 2008: 17).

Related to the breakdown in the South was the failure of the US in Vietnam. The military loss in Vietnam caused a rapid decline of the US's international credibility, and as a consequence it became more restrained in its role as "global policeman". The deterioration of US hegemony within the capitalist world order re-energised and proliferated soviet and socialistic revolutionary forces throughout the South. The exorbitant expense of the Vietnam War, exacerbated by the internal political conflict it created in the US, strengthened inflationary pressures which finally contributed to the fall of the US-centred fixed exchange rate system (Arrighi, 2003: 61).

The loss of US credibility as "global policeman" combined with the large devaluation of the dollar in the early 1970s created an environment where Third World nations adopted an aggressive stance in the negotiation of their exports. Consequently, the prices of US imports rose substantially, intensifying horizontal competition and growth of Third World industrialisation (Arrighi, 2003: 64). The critical blow to the US economy came in 1973, with the "virtual acknowledgment" of the US's defeat in Vietnam, followed by its acknowledgement that the military supremacy of the Israelis in the Yom Kippur War (1973) was unfounded (Arrighi, 2003: 64). These acknowledgements motivated the Organization of the Petroleum Exporting Countries (OPEC) to hike the oil price by a factor of four in order to protect its members against the devalued dollar. The "oil shock" of 1973 weakened profits within most industrialised nations, while a further outcome of the heightened oil price was a mushrooming of "petrodollars", most of which was held in the Eurodollar market (Arrighi, 2003: 64).

The swelling of the international money stock caused by loose monetary policy in the US and growth of "offshore" markets, such as that of the Eurodollar market, resulted in a world-wide escalation of inflationary pressures. The combined effects of US hegemonic decay and inflationary strategies culminated in a decade-long increase in monetary

disorder, spiraling inflation and the deterioration of the US dollar as a reserve currency (Arrighi, 2003: 65).

In addition, while on the one hand there was readily available liquidity, on the other hand there was a distinct lack of confidence in the real sector. This saw a torrent of capital flow offshore into the Eurodollar-type markets where it would yield higher returns. The circulation of this liquidity through the private inter-bank system increased its competitiveness against dollars issued by the Federal Reserve (Arrighi, 2003: 65). The mushrooming of private liquidity became increasingly detrimental to the US as many nations were relieved of their balance of payments constraints, thereby undercutting Washington's seigniorage privileges. Washington's seigniorage represents a substantial factor toward affording the US considerable political and economic supremacy within international finance. The growth in the dollar-denominated money stock created an environment where US banks competed in forcing credit upon nations that were frequently not considered credit-worthy (Arrighi, 2003: 66). A crisis of US hegemony and the subsequent international run-out on the dollar resulted from this damaging competition among banks in 1979-1980.

Although many factors can be attributed to the decline of US hegemony in the 1970s, it appears that the crisis of profitability was based predominantly on the increasing costs of expansionary US monetary policy during the 1970s. Encapsulating this period was a mode of regulation of aggregate demand that was unsustainable considering its debt-driven nature. Furthermore, new producers emerged in world markets such as South East Asia, China and India. Buoyed by unsustainable levels of demand, supply rose substantially causing heightened competition and reduced profits. In addition to this, aggregate demand would only be sufficient in periods of bullish asset markets and when US GDP growth is high, thus making the manufacturing sector particularly vulnerable in periods when US confidence is low.⁶

⁶ As seen in earlier in Chapter Two, US aggregate demand and the ability of the US to function as "consumer of last resort" is influenced greatly by low interest rates and the ensuing wealth effect that is generated in asset markets. In times of recession and low confidence, aggregate demand declines significantly.

Apart from the *prima facie* predicament of stagflation, the conservative counter-revolution of the early 1980s was a significant step towards the revival of US hegemony. This is the key difference between the arguments of Brenner (2006) and Arrighi (2003). The arrival of Monetarism under Reagan in the early 1980s and its accompanying heightened interest rates brought this destructive competition to an end. The high interest rates, tax breaks and *laissez faire* philosophy resulted in a sharp dollar appreciation. In essence, the US government created effective demand conditions for the accumulation of capital as opposed to competing with the large private supply existing offshore. The conservative counter-revolution in the 1980s succeeded in fending off competition that had emerged with the formation of large surpluses of private capital in the international market (Arrighi, 2003: 66). A side-effect of increased interest rates, however, was the manifestation of debt-crises in developing nations, namely those of Africa and Latin America. This effectively tightened the US grip on indebted nations thereby widening the wealth disparity between the North and South.

A critical factor contributing toward the restoration of profits in the US was the increased financialisation of industry after the 1970s. This emerged from the adoption of “floating” exchange rates which introduced volatile fluctuations on the balance sheets of multinational corporations: corporations increased their hedging and speculation of “extraterritorial markets” (Euromarkets) due to their deregulated nature and advanced services offered (Arrighi, 2003: 63). In a similar fashion, Great Britain shifted towards economic financialisation in the late decades of the nineteenth century. Faced with a similar situation to the US in the late twentieth century of over-supply (too much entry and too little exit), financialisation in Britain restored profits producing what is known as the Edwardian *belle époque* (Arrighi, 2003: 26). The rising profits generated after 1993 in the US are consistent with those attained in Britain towards the end of the nineteenth century.

Panitch and Gindin (2005: 110) support Arrighi’s (2003) political argument, by stating that the adoption of neo-liberalism in 1978-80 was a politically motivated manoeuvre intended to shift the balance of class forces. Reinforced by democratic pressures during

the 1960s, subordinated classes achieved reforms which posed as barriers to accumulation. Neo-liberal policy succeeded in weakening the institutional foundations of the social welfare state and New Deal apparatus, and strengthened those of the Treasury and Federal Reserve (Panitch and Gindin, 2005: 110). Panitch and Gindin propose that the US introduced neo-liberal economics as a means to achieve a new status: "Capitalism would operate under a new form of social rule that promised not only a revival of the productive base for American dominance, but a model for restoring the conditions for profits in other developed countries" (2005: 110).

From the events that have proceeded since the 1970s in the US, and their similarities to the hegemonic decay of Great Britain in the nineteenth century, it appears that hegemonic nations that are "caught-up" and surpassed by laggard nations tend to stagnate. Furthermore, hegemons fail to revamp institutions in a way that is compatible with continuing economic and political leadership. The eventual maturation of its own, unresolved policy contradictions results in laggard nations catching up and finally, outstripping it. As the hegemon is surpassed it resorts to unsustainable political and economic measures to maintain its stance. Such measures exercised by the US are exemplified by the Plaza and Reverse Plaza Accords, financial bail-outs, as well as military and other coercive actions taken since the early 1970s.

Overall, the actions taken by the US and other world leaders have not resolved the underlying problems of over-supply in the world economy. The reluctance of the US to shake-out inefficient production through increasing debt and financialisation exemplifies the probability that a sustainable mode of regulation of aggregate demand and supply will not be provided. If this evasion of shake-out continues to mask the cracks within the structure, it is inevitable that global instability will continue.

The overall situation of over-supply and over-capacity in world markets has the serious consequence of restricting entry by smaller emerging economies. In addition, reduced "development space" (Wade, 2003) afforded by skewed or biased multilateral organisations such as the World Trade Organisation (WTO), and imperialistic tendencies

of developed countries made manifest in trade conflicts, restrains growth and development opportunities for emerging and less developed economies. This is the situation in which South Africa, as a small, developing economy attempting to break into world markets to achieve economic growth and development, finds itself.

Chapter Three: A Regulationist Approach to South African economics

3.1 Introduction

While Chapter One focused discussion on some possible causes for the current recession in South Africa by outlining contextually specific variables in the economic boom that were ultimately unsustainable, Chapter Two addressed the general question of global economic sustainability by developing an alternative understanding of the central issues of sustainability as well as the international macroeconomic environment. This chapter aims to bring these two discussions together in order to understand the South African economic context period, 1994 to 2009. It will focus on the underlying growth and developmental forces at play within the economy by applying a Regulationist Approach and, by proxy, the issue of sustainability. The two central questions posed in this chapter are thus whether the South African economic system achieves a “regime of accumulation” according the Regulation Approach, and whether inflation targeting is a viable approach for sustained economic growth.

This chapter will commence with a brief description of how South Africa is positioned within the world economy since 1994, and will follow with an application of the Regulation approach to the South African economy. Econometric testing will not be conducted within this research as the analytic approach required for an alternative understanding of sustainability is not provided by existing research. The desired approach is the development of a model that determines sustainability without relying on an inflation-derived model, such as the Taylor Rule, as performed by Borio and Lowe (2002). Performing such a study is, ultimately, outside the scope of this study.

3.2 South Africa’s position in the world economy

South Africa is a relatively small, developing economy on the periphery of international economic activity. It maintains policy that favours export-led growth as the optimum means to achieve its goals of growth and development. The analysis of other nations in

Chapter Two, however, suggests that there is little room for South Africa to emerge as a contender in the international economy as a prime export nation.

Contributing to restricted growth and development possibilities, as well as maintaining the *status quo* of Africa, is the shrinking policy space afforded by international capitalism. The “Washington Consensus” earmarked economic practices that appear to benefit developed nations. Developing nations contain a contrasting list of goals to developed nations, such as housing, education and infrastructure development to name a few, thereby raising the need for alternative and often intensive policies. The capitalist leviathan of US politics and foreign policy, however, typically reject attempts by developing economies to adopt alternative policies in order to achieve these developmental goals. As will be revealed in subsequent discussion, it is possible to focus on certain variables or policies to improve sustainability while complying with these restrictions.

From this perspective South African policy requires an alternative method to work towards achieving sustainable economic growth and development. The Regulationist Approach will now be deployed to determine the sustainability of South African growth in the 1994-2009 period.

3.3 Economic growth from 1994 to 2009 and the Regulationist Approach

The international financial crisis starting in late 2007 has negatively impacted the South African economy: real economic growth declined by 6.4 percent at an annual rate in the first quarter of 2009, while private sector employment fell 2.5 percent in the final quarter of 2008 (South African Reserve Bank, 2009c: 6&10). To curb this downward trend, the South African Reserve Bank lowered interest rates by 500 basis points between the fourth quarter of 2007 and the third quarter of 2009.

Prior to the crash in international asset markets the economy was on an upward swing with growth and employment rising, as mentioned in Chapter One. Much of this

economic and asset price growth was stimulated by international growth and confidence as well as soaring local equities, under the influence of the US real-estate bubble, which filtered through the South African economy (Beelders, 2002). Buoyed by strong growth in equity and housing prices, local investors increased their share in these asset markets. To raise investment and gearing further, investors deepened their liabilities by borrowing. The eased inflation outlook and ensuing low interest rates provided relatively cheap credit. This period of increased investment through higher debt continued and, in so doing, pushed equities and real-estate prices higher.

The high levels of foreign portfolio investment aided the growth in South African equities, real-estate and bonds. As stated in Chapter One, portfolio investment constitutes the greater proportion of foreign investment flows to South Africa. These flows are volatile as they are determined by market expectations.⁷ Furthermore, these flows are heavily influenced by growth and confidence in US and foreign asset markets. As seen in late 2007 with the bursting US real-estate bubble, this growth was unsustainable. The burst of the real-estate bubble created panic among foreign investors, resulting in the repatriation of their funds as illustrated in the strong US dollar in the post-crash period. In late 2007, when the US equity markets experienced a substantial fall in value, the JSE ALSI simultaneously fell 13 percent (South African Reserve Bank, 2007b: 41). The market continued to decline reaching its low point in November 2009.

The liberalisation of the financial and trade accounts have increased the correlation of economic growth and volatility between the South African and international economies: when growth and confidence are low in major economies, this is generally reflected in South Africa's slower growth. Considering the economic environment discussed in Chapter Two, economic sustainability in South Africa is difficult to achieve within free and liberalised markets.

⁷ Portfolio investment is especially volatile in emerging economies as market expectations tend to contain greater uncertainty than that of developed economies (Kahn, 2009: 125).

This begs the questions whether the growth attained in the 1990s and 2000s was, firstly, planned and a product of intended strategy and, secondly, sustainable. To answer these questions, the Regulationist Approach will be applied to the South African context. The mode of regulation of aggregate demand will be explored in order to ascertain the sustainability of aggregate demand within the South African economy.

Between 1996 and 2000 the South African economy experienced turbulent spells of growth and instability. The economy could be seen to be improving after 2000 as inflation lowered and growth began to increase steadily, and starting in 2003 consumption expenditure began to escalate. Funding this consumption was a combination of factors, namely: lower nominal interest rates, expanding debt, and higher asset values. Related indirectly to increased consumption was the fall in savings: the possible absence of a savings culture combined with low interest rates may be prominent factors that have driven household savings into negative figures (Laubcher, 2006: 3).

The enactment of the National Credit Act, which took full effect in 2007, aimed to curtail the increasing consumption expenditure seen in the South African economy, while also improving banking practices. The Credit Act achieves its goals by implementing a measure of regulation that increases the restrictive covenants required to both lend and borrow. The National Credit Regulator (NCR) is the body that oversees the practice of all credit lending institutions, it specifies maximum interest rates and transaction fees that can be charged, whilst also attempting to inform borrowers of their rights (Clayton, 2006). A further factor contributing to improved regulation and stability is the implementation of the Basel II Accord, which came into effect in early 2008. The Accord aims to set new standards in the banking sector by standardizing international practices and creating a less risky banking environment (Bank of International Settlements, 2006).

Between 1995 and 2000 average real wages declined markedly but they regained some ground between 2000 and 2005. Although the average real wage started on an upward trend after 2000, its respective value remains substantially lower than the 1995 level. The

rising debt has been accompanied by steady increments in real wages, although at a substantially slower rate (Burger, 2006: 1). Unlike the Fordist mode of production of the Bretton Woods era, wages are not sustaining demand. If the rising debt is to be sustained by wages, a trend showing substantial rises in the wages of middle to high income earners is required as it is these groups that are at the forefront of consumer spending.

With the exception of 2003, exports in real terms have expanded every consecutive year between 2000 and 2008 (South African Reserve Bank, 2009b). The liberalisation of international trade has been seen to be beneficial to the export industry, thereby contributing substantially to the consumption expenditure present in the market. Exports are a vital element of sustained consumption and economic growth and this is evident in programmes such as the Motor Industry Development Programme (MIDP) that view exporting industries as vital to the growth of South African industry and foreign exchange earnings (Erwin, 2001).

Considering Johnson's (2000: 197) and Brenner's (2006) prognosis of over-capacity in the macroeconomic environment that is shared by the US-Asian trade monopoly, it seems counter-productive for South Africa to focus on outward orientation. The small scale of export operations, and the skilled labour required for its augmentation, fails to substantially correct the dilemmas of unemployment and poverty reduction. Adding to the situation is the current account deficit that stood at R125 billion in the second quarter of 2007 (Quarterly Bulletin, 2007a: 22). This raises the question whether a more inward industrialised approach, which would see the economy become more self-sustainable and less reliant on international activity, is desirable. The overall aim for economic policies is to consolidate South Africa's resources, thereby improving unemployment and future growth.

FDI increased after 2000, although it remains below the level required to fill the development gap of South Africa. Policy provides that FDI is required to fill the development gap that local investment fails to achieve. The development of financial derivatives and the deregulation of the Johannesburg Stock Exchange have introduced

increased speculation and the real possibility of financial instability. Although the economy has seen increased levels of FDI, portfolio investment has far outshone its performance. For the year 2006, portfolio investment amounted to R 144 billion, while FDI only managed a net outflow of R 2.9 billion. While alternate years show positive gains in FDI, short-term speculative flows nevertheless have outstripped these figures consistently (Quarterly Bulletin, 2007b: 24).

The divide between monetary and fiscal policy (Nattrass, 2000: 233-236), as well as the uncoordinated nature of the South African economy, are causal to the unsustainable growth achieved in the period of the 2000s. The current, minimalist government approach of GEAR relays less control to policy makers and therefore reduces co-ordinated efforts to stimulate long-term growth. This is in contrast to the strategic methods adopted in South East Asia and Northern Europe, namely Japan, South Korea⁸ and Sweden.

The lack of systemic co-ordination within the South African economy detracts from sustainable growth in the long term. The main objective is to attain growth, but there does not appear to be a firm knowledge or strategy of how to achieve this. The lack of substantial co-ordination within South African policy tends to exacerbate unemployment and unsustainable economic growth. The system requires a competent overarching body to co-ordinate flows and “know-how”. One approach, as followed in Japan, is to channel funds into the “right investments” thereby avoiding the growth of speculative bubbles and sub-optimal investments. The objective, as achieved in China, is to invest in “green-field” ventures that generate significant long-term benefits. Without long-term planning, future growth and development will be constrained, especially in situations of slow international growth. This theme continues in monetary policy through the use of inflation targeting.

⁸ See Locke (2005), Huang (2002), and Wade and Veneroso (1998) for a detailed description of the Japanese and South Korean economic systems.

The general picture that emerges from a situation such as South Africa's, is that a neo-liberal approach to market regulation leaves the economy vulnerable to the whim of speculators. Speculation contributes to the stock market and the wealth effect's tendency to fluctuate significantly in conjunction with international trends, thereby creating an air of instability within the South African economy. Asset values have been central to the growth attained recently, while real incomes and employment have not risen enough to sustain these high levels of expenditure.

The evidence suggests a development of a mode of regulation of aggregate demand, however, its future seems uncertain considering its debt-determined basis. The unsustainability created by the inability of wages to grow sufficiently in order to repay existing debts inhibits any form of sustained growth within aggregate demand. Furthermore, the wealth effect and its growth effects on the economy created within the asset markets, proved unsustainable as the US housing bubble burst, causing returns to capital to decline markedly.

Secondly, a mode of regulation of aggregate supply is required to balance aggregate demand. During the apartheid era, when sanctions were imposed on South Africa, the economy experienced negative growth rates. Much of the turbulence experienced was grounded in political problems. Investors withdrew investments resulting in large sums of capital flight that increased asymmetric information and investor uncertainty. Since 1994, when the African National Congress was elected to government and democracy was introduced to South Africa, the economy began to accumulate positive growth rates and greater confidence.

Investment expenditure over the past decade has appeared promising within the real sector: as a percentage of GDP, gross fixed capital formation has increased by seven percent from 12 percent in 2000 to 19 percent in 2007 (Mboweni, 2007: 1). Although studies have found that access to credit is not restricted in South Africa (Clarke *et al.*, 2005: 13), the low levels of savings and FDI are restricting growth to a certain degree. Due to the great need of capital in the economy, in order to aid reparation and to finance

development, the South African government does not appear to be willing to direct investment as this may constrain its flow. Investment is neither directed by industries that have the potential to become key players in the economy, thereby reducing prospects for growth in South Africa.

The South African labour system has transformed substantially since the transition from apartheid to democracy in 1994. The establishment of the National Economic Development and Labour Council (NEDLAC) in 1994 was a vital tool for planning and development of labour legislation (Fryer, 2009: 25): many of the acts lending preferential treatment to white-owned businesses have been repealed in order to improve the success rate of South Africa's previously disadvantaged race groups. Improvements, however, have been minimal, as labour market efficiency has worsened,⁹ and labour unrest, in the form of frequent strikes, has remained a characteristic of the South African economy. The inflexible labour market and its inherent instability have, therefore, placed strain on supply-side growth as efficiency is lost.

With the adoption of the neoclassical inspired GEAR Programme in 1996 the state has shifted its ideologies leading to the collapse of its proactive trajectory on labour.¹⁰ What has emerged in its place is what Fryer (2009) refers to as a "shallow corporatism" whereby narrow class interests have gained at the expense of the wider labour market. Natrass and Seekings (2005) allude to an "insider compromise" (a corporatist compromise essentially between large business and organised labour, but with the acquiescence of a co-opted state) that is at the heart of the high wage, high productivity, high profit, low employment growth path that sustains unemployment and class divisions.

Relative to nations such as Sweden that have developed labour systems to suit their economies, as mentioned in Chapter Two, South Africa has failed to establish an efficient

⁹ Hirsch (2005) claims that the South African labour market is relatively inflexible in terms of wages and the ability to fire workers. The inflexible labour market and its inherent instability have placed strain on supply-side growth as efficiency is lost.

¹⁰ By 2000 NEDLAC had been sidelined, while social labour interests had little or no say in labour market practices. Policy favoured corporate interests thereby neglecting the socially excluded and working classes (Fryer 2009).

labour market. The stratified nature of collective bargaining in South Africa fails to achieve the systematic and economic goals required to achieve sustainable growth (Fryer, 2009). Central bargaining that occurs at the top appears to provide a more efficient system that allows for co-ordinated efforts to achieve uniform results throughout the economy, as seen in Sweden. It appears that the system operated in South Africa is similar to the stratified and competition driven approach practiced in the US. This approach does not appear to bring the perceived benefits to South Africa. The high unemployment levels of approximately 40 percent (Johnson, 2009: 61) in South Africa, mixed with the recent strike season in 2009, are serious indicators of change needed in labour practices.

Contributing to the problems in the South African labour market is the distinct shortage of skilled labour: it is estimated that 70 percent of the unemployed are unskilled, thereby excluding them from any formal sector employment (Triegaardt, 2007: 5). Furthermore, the labour shortage has been negatively affected by what has become referred to as “brain drain”, the phenomenon where many skilled graduates and personnel have left South Africa to find work in developed economies such as the United Kingdom and the US (HSRC, 2009). GDP growth is set to continue to taper off as the lack of skills and productivity restrain supply-side growth.

Within the education sector, government has failed to implement policy adhering to the training and education of the poor. Although funding is available for development within education, the state lacks the capacity to plan and allocate funds effectively. Although the average working class wage in South Africa is comparatively higher than in countries such as China, the ability to attain an education is markedly reduced by comparison. Well educated and trained workers are vital to the growth and advancement of South Africa’s supply-side economy. Without education opportunities, uneducated and unskilled labour forces will have little hope of breaking into the formal sector and contributing to economic growth.

The failure of government to provide considerable development among the poor has forced the state to adopt social welfare practices. The provision of an old-age pension grant of R820, and child grant of R190 per month are examples of the benefits afforded to the poor by the state (Fryer, 2009: 18). Nattrass and Seekings (2005) have criticised the state, however, calling the provision of these grants the “outsider compromise”, whereby the state provides such benefits to the poor in order to placate them and maintain political support. Ultimately, these social benefits in turn profit the political elite as they are free to continue their narrow politico-economic interests unhindered.

At the industry level, South African industrial policy has failed on numerous fronts. Of concern is Black Economic Empowerment (BEE) legislation and the inability to control the flow of resources to ventures critical to sustainable economic and developmental growth. The buyout of major business in South Africa according to BEE policy has created an upper class of black elites (Johnson, 2009: 63), in essence substituting racial segregation of the apartheid era with economic segregation. This outcome is contrary to the goals proposed by the Reconstruction and Development Programme (RDP) that advocates the social upliftment of the poor and socially excluded.

The central idea underlying the intended coordinated flow of funds by government is to direct those capital resources towards demarcated firms that are perceived as vital to future growth. In addition, this process of coordinating capital flows aims to prevent what Huang (2002: 540) calls Co-ordination Failures One and Two mentioned in Chapter Two. The failure of government to control surplus funding in the South African economy has resulted in the formation of CF1. This is noted by the high prevalence of establishments that fail within the first two years of operation.

Policies to rectify CF1 contain direct subsidies and trade protection, making them politically defined. Once in place, these policies are difficult to remove as industry relies on them for growth within competitive markets. The drawback of CF1 policies is that they provide opportunities for new-entrants and rent-seekers, which leads to the problem of Co-Ordination Failure Two (Huang: 2002:54). In these circumstances, the failure to

co-ordinate new-entrants and business activities leads to scale diseconomies as resources are distributed among many companies. The implementation of policies to remedy CF2 requires greater policy capacity and is seen to be more expensive than CF1 policies (Huang, 2002: 54).

The problem of uncoordinated planning extends into spheres such as the provision of services and utilities. It is well known that service delivery in South Africa is particularly inefficient: such issues are clearly evident with the inadequate provision of electricity and telecommunications by Eskom and Telkom respectively. These problems dissuade FDI, widen the investment gap, and constrain growth. Much of the taxes recovered by government are also incorrectly spent or, more frequently, not utilized due to the inability of government to disseminate it. Contributing to the failure of government services is its inability to retain skilled labour in the country and thus impacting the economy – South African bureaucrats generally lack proper training and “know how” in the workplace (Johnson, 2009: 62).

From the above discussion, it appears that a notable hindrance to economic growth and development in South Africa is the insufficient weight placed upon the supply-side and lack of coordination within policy. Government has attempted to stabilize the economic climate by focusing on price stability and consequently, left the supply-side at the mercy of market forces. The failure to train the large surplus of unskilled and uneducated work force, combined with a corrupt and ineffective government, will prevent the growth of aggregate supply. It thus seems unlikely that a sustainable mode of regulation of aggregate supply is likely to develop in South Africa in the late 2000s.

Generally, neo-liberal policies are viewed as unsustainable due to the vulnerability they create within markets – the liberalised economy fluctuates incessantly due to speculative flows and the lack of centrally planned approaches to long-term growth (O’Hara, 2003). This is in contrast to the East-Asian model that functions relatively efficiently in the long-term due to the cooperative nature of planning and financing. Achieving such coordination in the South African economy would appear to be a futile exercise as the

process requires an umbrella of thoroughly thought-out policies overseen by a non-corrupt and able civil service. There does remain room for individual policies to change, however, thereby enhancing economic sustainability. Monetary policy as discussed earlier is one such policy variable that provides room for improvement.

A theme that has emerged throughout this research concerns unsustainable debt and asset price levels. Unsustainable debt and asset prices appear to be at the centre of financial sustainability. In the cases mentioned throughout this research, excessive debt and asset price growth are at the heart of asset market bubbles that frequently end in financial crisis. As mentioned earlier by Farrell (2009) and Akram *et al.* (2004) economic policymakers cannot ignore financial sustainability as the economic and social costs it creates are substantial.

3.4. Inflation Targeting

According to Palley (2002) monetary policy regimes of the past were designed to operate according to the NAIRU framework. The NAIRU framework has come under much criticism and has since become discredited as a framework for monetary policy¹¹. Due to the failures of NAIRU economists prescribed inflation targeting, a policy that negated aspects such as the labour market and the unemployment rate.

Inflation targeting is a relatively simple model theoretically. The Monetary Policy Committee (MPC) convenes to adopt a set target for inflation, which may take the form of a band or a point target. A point target implies that the monetary authorities will attempt to force the rate of inflation to converge with the said target, say two percent. Alternatively, a target band implies that the rate of inflation must be maintained within a certain operating maximum and minimum (Kvasnicka, 1997: 1). The South African Reserve Bank is mandated to preserve a target band of between three and six percent as noted previously.

¹¹ See Palley (2002) for more on NAIRU.

The monetary authority utilises the interest rate, and in the South African case, the Repurchase Rate to achieve its inflation goal. The repurchase rate is used to adjust the demand for money through the monetary transmission mechanism. According to interest rate theory, an increase in the interest rate will reduce money demand, while decreasing the interest rate will result in a heightened demand for money, *ceterus-paribus*. Any growth of aggregate demand over and above aggregate supply as created by the demand for money will cause price inflation to expand and vice-versa.

The model is forward looking and based on projections of future inflation. The inherent time lag associated with the monetary transmission mechanism means that policy decisions are affected symmetrically. The theory does not present any method of how to predict future inflation and this is left to the monetary authorities (Kvasnicka, 1997: 1)

Although such changes have been brought to light, Palley (2002) argues that inflation targeting fails to break away from the NAIRU framework. The NAIRU framework considers inflation to be a “summary statistic” of economic activity – excess demand conditions exhibit higher inflation growth, while inadequate demand conditions exhibit reduced inflationary conditions (Palley, 2002: 6). The only theoretical divergence from the NAIRU framework is that inflation targeting takes its cue from price signals, whereas NAIRU policy takes its cue from quantity signals. It can be seen that inflation targeting does not pose a radical advancement from NAIRU based forms of monetary policy and therefore retains much of the weaknesses associated with the NAIRU framework.

To overcome the narrowed theoretical underpinnings of inflation targeting, an alternative approach to its implementation and practice has evolved. The two primary approaches to inflation targeting are the rigid and flexible forms¹². Most inflation targeting nations have adopted the flexible approach as it allows greater market leverage. This method is supported by Allan Greenspan (the previous chairman of the Federal Reserve), who believes that the central bank should inject liquidity into the economy in the instance of a

¹² Rigid inflation targeting proposes that interest rates vary according to a fixed rule, while the flexible approach allows central bankers to revise interest rates according to various macroeconomic and subjective forecasts (Kahn, 2009: 126).

financial crash to stimulate a rebound (Taylor, 2005: 10). This is in contrast to an approach of taking pre-emptive steps to discourage a financial melt-down.

Although flexible inflation targeting permits bankers to make subjective decisions according to macroeconomic factors, Farrell (2009) and Akram *et al.* (2004) believe that the approach does not provide a sound platform on which to establish both monetary and financial sustainability. Akram *et al.* (2004) find that accounting for asset market developments may improve forecasting ability and stability within monetary policy, thereby reducing the prevalence of financial crises.

According to Palley (2002: 13), the reliance on inflation targeting creates an environment for the proliferation of moral hazard in asset markets. As noted throughout this paper, asset market disasters pose a substantial risk to sustainable economic growth and monetary stability. Palley (2002: 10) prescribes three possible avenues of which to pursue as a means to reigning in financial instability through monetary policy. Firstly, due to asset price inflation not being accounted for in CPI, the monetary authorities may neglect to make any changes, secondly, account for asset price inflation within CPI and thirdly, that banking and financial activities be regulated to control for distortions found in the financial sector.

The first approach is mandated by Bernanke and Gertler (2001) and is followed in most inflation targeting countries. It states that central banks should not account for asset market activity inasmuch that it affects the main goal of low and stable inflation. Any asset price distortions should be considered in the light of how they impact aggregate demand. Asset prices are therefore, only important to the extent that they impact the prediction of aggregate demand (Palley, 2002: 11).

The second approach as recommended by Goodhart (2001) is that asset price inflation ought to be reflected in CPI. This approach to monetary policy poses the problem of presenting more than one target, whilst relying on one instrument, namely the interest rate. This approach uncovers an obvious deficiency of monetary policy, which is its

restricted ability and influence within the economy. Apart from asset price inflation, there are many alternative indicators that are vital to sustainable growth within developing and developed nations.

The third approach prescribes the use of regulations and legislation to control the activities of banks and financial agents in the asset markets (Palley, 2002: 12). This form of monetary control is long standing and has been implemented throughout economic history. Financial crises resulting from misinformed banking practices have consistently been followed by new regulatory frameworks, created to prevent such crises in the future. This Neo-Keynesian approach to economics has continued to “paper over the cracks” repeatedly without producing any form of cure to the problem.

Prior to the inflation targeting regime, monetary policy accounted for many other aspects of the economy, which where individually and grouped, very important to monetary stability. Within the eclectic approach to monetary policy practiced by South Africa in the 1990s (Gupta and Uwilingiye, 2009: 2), these indicators were considered imperative to economic sustainability. This is in contrast to the inflation targeting framework where these indicators are relegated to functioning markets, according to Neo-Classical thought.

Under the eclectic approach to monetary policy in the South Africa, the Reserve Bank adopted monetary targets. The tool chosen to help achieve the set monetary goals was the discount rate. The discount rate was used to indirectly influence the demand for money much like how the Repurchase Rate is used under inflation targeting. The authorities were allowed discretion and the ability to breach targets if required (Aron and Muellbauer 2000: 9). The policy aimed to accommodate real GDP growth and inflation, although the policy method was held from public opinion.

From the early 1990s the approach was extended to include an eclectic set of indicators which included the exchange rate, asset prices, the output gap, the balance of payments, wage settlements, total credit extensions and the fiscal stance as mandated by the Treasury (Aron and Muellbauer 2000: 10).

Borio and Lowe (2002), Clarida *et al.* (2000), Chadha *et al.* (2003) and Kontonikas and Montagnoli (2006) express the need for the inclusion of asset prices within monetary policy. Borio and Lowe (2002) develop a historical analysis of asset market booms, which were associated with unsustainable levels of credit extensions and asset price growth. From their findings, they recommend that asset prices be included in monetary policy to stem the rise of asset bubbles.

Kontonikas and Montagnoli (2006) develop a backward-looking model simulating a closed economy to determine the effects of asset prices on aggregate demand. The model is an augmented version of the Ball (1999) model as it includes asset prices. The model distinguishes between fundamental valuations and real values of stocks to reflect exuberant and momentum trading, often seen in bubble circumstances.

According to Kontonikas and Montagnoli (2006: 7), the monetary authorities should account for equity price misalignments. These misalignments resulting from momentum trading have a significant impact upon aggregate demand, thereby driving up inflation. Alternatively, asset price growth accompanied by related positive growth in fundamentals ought not to be actionable (Kontonikas and Montagnoli (2006: 8). From this study, it is advised that action by the monetary authority should be undertaken when asset prices greatly diverge from their fundamental values.

The models proposed by these academics offer great benefits from including asset prices that would improve the explanatory power of monetary policy, and thereby reduce the prevalence of unwarranted economic and financial recession. Although these models are an important steppingstone in the research many of the propositions made, such as recognizing a bubble, remain unrealistic, making the implementation of such methods difficult¹³.

¹³ See Borio and Lowe (2002) for more on the difficulties of accounting for asset prices in monetary policy.

Chapter Four: Conclusion

The accelerated globalization and liberalisation of the international economy since the 1970s has introduced a highly complex assortment of interrelated forces that impact on economic sustainability. The unsustainable growth path of the South African economy in the post-1994 period has prompted an alternative critique of the political and economic environment. The approach adopted in this research is that of the Regulation School approach. The holistic understanding of the Regulation Approach allows theorists to expand on the narrow methodologies of mainstream and neoclassical economics currently practiced.

Utilizing the Regulation Approach, a wider understanding of economic sustainability within the international and South African economies is developed. Achieving this development, this study explored the mechanisms of the international economy and how these impact the wider economic goals of different nations. The findings suggest that since the late 1970s the international economy has failed to establish a sustainable regime of accumulation. In contrast to the Fordist regime, economic growth and development of the post 1970s has been sluggish. Brenner (2004) claims the heart of the problem rests in the avoidance of shakeout and the ensuing problem of over-supply and over-capacity. The failure to allow any form of shakeout has forced capital returns down, while simultaneously restricting economic investment and expansion in the real economy.

As evident in late nineteenth century Britain, US corporates also turned to finance in the post-1970s period. The loss of confidence within industry led investors with surplus funding to rely on capital markets to achieve the desired returns. The liberalisation of the financial sector permitted the unimpeded cross-border flow of capital: the returns offered by these markets outstripped the mediocre returns offered by manufacturing and heavy industry. These capital markets became the cornerstone of economic expansion and prosperity, thereby cementing their importance in economics. Aggregate demand, sourced in the US, became heavily reliant on the wealth effect generated within the

capital markets and subsequently posed the biggest threat to continued growth throughout the industrialised world.

As mentioned in Chapter Two, the circulating relationship constituting the large European and South-East Asian economies with that of the US evolved into a situation whereby US demand kept the system afloat. In the 1990s, strain on the Fed to bolster US demand caused them to stimulate capital markets by lowering interest rates. The resultant heightened consumer and investment expenditure temporarily raised profits, allowing the entry of new competitors such as Brazil, China and India. The introduction of these producers consequently caused increased over-capacity and a further reduction of profits. As in the case of every boom and bubble preceding it, the expansion of the 2000s reached a climax and finally, burst. What resulted was an international slowdown, threatening recession in major export economies.

Once again, in the post-Dot-Com bubble period under duress, the Fed reduced interest rates with the aim of raising consumption and export led growth. On this occasion, the US housing bubble took the global centre stage. As seen in late 2007 with the bursting of the housing bubble, the growth attained in the 1990s and 2000s proved unsustainable as it was based on rapid speculation engineered on low interest rates. What this history lesson suggests is that there appears to be a new trend in the politics and economics of the period. The heavy reliance on capital market derived expansions informs one of the nature of economic growth within the international economy. What this proposes is that economic growth will become increasingly volatile and inherently unsustainable on the grounds that asset market bubbles are indeterminate and unpredictable.

In addition, for South Africa to attain a modicum of sustainable growth and development, the country's policy direction requires attention in order to comply with the economy's needs. Of concern to this study is the application of inflation targeting and its associated narrow framework. As noted in Chapter Three, inflation targeting is based on the premise that markets "work", but as discussed in Chapter One and Two, it is evident that markets fail to coordinate efficiently. The historical repetition of bubble-mania illustrates

the inadequacy of the market to allocate resources effectively, thereby deploring the neoclassical doctrine.

From the stand-point that markets *do* fail, and the evidence from most of these cases that debt and asset prices reach unsustainable levels in these episodes, the question arises as to how to proceed. The application and thought processes of the Regulation approach unearth a wider requirement of sustainability. To achieve this notion an understanding of the vital variables associated with economic and financial sustainability is required.

The use of inflation as the foremost indicator of sustainability appears inadequate as this approach neglects variables vital to sustainable growth. Such variables include debt and asset prices. Apart from this problem, inflation does not present a requisite basis on which to judge or govern the wider economy as its ills are minor in contrast to the undue effects of systemic financial crisis. To enhance the explanatory power of monetary policy and inflation targeting in particular, it seems imperative to account for financial stability along with price stability.

Although research on the subject matter of including asset prices in monetary policy has been undertaken, the underlying assumptions make the prediction of bubble periods difficult, at best. Many of the assumptions posed by the models are unrealistic and hopeful. The importance of this subject and the possible advancement of models through future research make this a promising topic of interest. Much research in this field is needed to achieve a more encompassing monetary policy with the sole objective of economic sustainability.

References

- AGLIETTA, M., 1976 A theory of capitalist regulation: the US experience. London: Verso.
- AKERLOF, G., 1970. The Market for "Lemons": Quality uncertainty and the Market Mechanism. *The Quarterly Journal of Economics*. Vol. 84, No, pp. 488-500.
- AKERLOF, G., 2002. Behavioural Economics. *The American Economic Review*. Vol. 92, No. 3. pp 411-433.
- AKRAM, F, BARDSSEN, G and EITRHEIM, Q., 2004. *European Central Bank*. Exploring the Potential Conflict between Monetary Stability and Financial Stability in a Small Open Economy. [Online] Available: <http://www.ecb.int/events/pdf/conferences/akram-bardsen-eitrheim.pdf> (Accessed 5 October 2009).
- ARRIGHI, G., 2003. The social and political economy of global turbulence. *The New Left Review*. 20: pp 5-80
- BALL, L., (1999). Efficient Rules for Monetary Policy. *International Finance*. Vol. 2, No. 1, pp 63-81.
- BANK OF CANADA., 2009. *Bank of Canada*. Inflation and Price Stability. [Online] Available: <http://www.bankofcanada.ca/en/backgrounders/bg-il.html> (Accessed 7 October 2009).
- BAUMOL, W., 1999. Say's Law. *Journal of Economic Perspectives*. Vol. 13, No. 1, pp. 195-204.

BEELDERS, O., 2002. Emory University. International Stock Market Independence: A South African Perspective. [Online] Available: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=304323 (Accessed 1 January 2009).

BERNANKE, B and GERTLER, M., 2001. Should Central Banks Respond to Movements in Asset Prices? *The American Economic Review*, Vol. 91, No. 2, pp. 253-257

BANK OF INTERNATIONAL SETTLEMENTS., 2006. *Bank of International Settlement*. Basel II: Revised international capital framework. [Online] Available: <http://www.bis.org/publ/bcbsca.htm> (Accessed 7 May 2007).

BORIO, C and LOWE, P., 2002. *Bank for International Settlements*. Working Paper 114. Asset Prices, Financial and Monetary Stability: Exploring the Nexus. [Online] Available: <http://www.bis.org/publ/work114.pdf?noframes=1> (Accessed 16 November 2009).

BRAVERMAN, H., 1974. *Labour and Capital Monopoly: the Degradation of Work in the Twentieth Century*. New York: Monthly Review Press

BRENNER, R., 2001. The World Economy at the Turn of the Millennium Toward Boom or Crisis. *Review of International Political Economy*. Vol. 8, No 1, pp. 4-66

BRENNER, R., 2003. The Boom and the Bubble: the US in the world economy. London: Verso.

BRENNER, R., 2004. New Boom or New Bubble. *New Left Review*. 25, pp. 57-100

BRENNER, R., 2006. *The Economics of Global Turbulence: the Advanced Capitalist Economies from Long Boom to Long Downturn*. London: Verso.

BRENNER, R., 2009. *Brecht Forum*. Robert P. Brenner on the Crisis--Interview by Seongjin Jeong in The Hankyoreh [South Korea]. [Online] Available: <http://brechtforum.org/robert-p-brenner-crisis> (Accessed 5 October 2009).

BRENNER, R. and GLICK, M., 1991. The Regulation Approach: Theory and History. *The New left Reiview*. Vol. 1, No. 1. pp. 45-119.

BURGER, P. and MARINKOV, M., 2008. *Trade and Industrial Policy Strategies*. Inflation Targeting and Inflation Performance in South Africa. [Online] Available: http://www.tips.org.za/files/BurgerMarinkov_Tips.pdf (Accessed 1 January 2010).

BURGER, R and YU, D., 2006. *South African Reserve Bank*. Wage trends in post-apartheid South Africa: Constructing an earnings series from household survey data. [Online] Available: [http://www.reservebank.co.za/internet/Publication.nsf/LADV/C2B3236B2040DFF8422572250031AD86/\\$File/LMFArt1Nov06.pdf](http://www.reservebank.co.za/internet/Publication.nsf/LADV/C2B3236B2040DFF8422572250031AD86/$File/LMFArt1Nov06.pdf) (Accessed 6 May 2006).

CHRISTIANO, L., 1989. *Federal Reserve of Minneapolis*. Understanding Japan's Savings Rate: The Reconstruction Hypothesis. [Online] Available: <http://www.minneapolisfed.org/research/QR/QR1322.pdf> (Accessed 13 November 2009).

CHADHA, J., VALENTE, G., and SARNO, L., 2003. *Centre for Economic Policy Research*. Working Paper 4114. Monetary Policy Rules, Asset Prices and Exchange Rules. [Online] Available: http://wrap.warwick.ac.uk/1719/1/WRAP_sarno_CEPR-DP4114%5B1%5D.pdf (Accessed 16 November 2009).

CIA., 2009a. Central Intelligence Agency. World Factbook: America. [Online] Available: <https://www.cia.gov/library/publications/the-world-factbook/geos/us.html> (Accessed 21 September 2009).

CIA., 2009b. Central Intelligence Agency. World Factbook: Japan. [Online] Available: <https://www.cia.gov/library/publications/the-world-factbook/geos/ja.html> (Accessed 3 October 2009).

CIA., 2009c. Central Intelligence Agency. World Factbook: Sweden. [Online] Available: <https://www.cia.gov/library/publications/the-world-factbook/geos/sw.html> (Accessed 24 September 2009).

CLARIDA, R., GALI, J., and GERTLER, M., 2000. Monetary Policy Rules and Macroeconomics Stability: Evidence and Some Theory. *The Quarterly Journal of Economics*. Vol. 115, No. 1, pp. 147-180.

CLAYTON, C., 2006. *Personal Finance Magazine*. SA consumers find safety in new credit act. [Online] Available: <http://www.persfin.co.za/index.php?fSectionId=588&fArticleId=3274664> (Accessed 20 September 2007).

DE LA DEHESA, G., 2008. *Europarl.europa.eu*. Should the ECB Adopt a Flexible Inflation Targeting? [Online] Available: <http://www.europarl.europa.eu/document/activities/cont/200803/20080312ATT23990/20080312ATT23990EN.pdf> (Accessed 11 October 2009).

DESAI, M. FUKUDA-PAAR, S. JOHANSSON, C. and SAGASTI, F., 2002. Measuring the Technical Achievement of Nations and the Capacity to Participate in the Network Age. *Journal of Human Development*. Vol. 3, No. 1, pp. 95-122.

DESAI, A., 2003. *Monthly Review*. Neoliberalism and Resistance in South Africa. [Online] Available: <http://www.monthlyreview.org/0103desai.htm> (Accessed 13 October 2007).

DETKEN, C AND SMETS, F., 2004. *European Central Bank*. Working Paper 364. Asset Price Booms and Monetary Policy. [Online] Available: <http://www.ecb.int/pub/pdf/scpwps/ecbwp364.pdf> (Accessed 20 October 2009).

DISLAYAT, P., 2005. *Bank for International Settlements*. Working Paper 168. Inflation Targeting, Asset Prices and Financial Imbalances: Conceptualising the Debate. [Online] Available: <http://www.bis.org/publ/work168.pdf?noframes=1> (Accessed 20 October 2009).

ERWIN, A., 2000. *Mbendi*. South Africa - Automotive: Motor Vehicle Manufacturing. [Online] Available: <http://www.mbendi.co.za/indy/motr/motr/af/sa/p0005.htm> (Accessed 14 October 2007).

ESPING-ANDERSEN, G., 2005. *Maastricht Universitiy*. Social Bases of Changing Income Distrubtions. [Online] Available: http://www.governance.unimaas.nl/training_activities/seminar_series/archives_downloads/Gosta_Esping_Andersen.pdf (Accessed 12 September 2009).

ESTEVEZ-ABE, M., IVERSEN, T. & SOSKICE, D. (2001). Social protection and the formation of skills: a reinterpretation of the welfare state, in Hall, P A. & Soskice, D. (eds.) (2001). *Varieties of capitalism*. Oxford: Oxford University Press.

FARRELL, 2009. *Rhodes University*. Presentation on Monetary Policy in South Africa.

FIELD, A., 2003. The Most Technologically Progressive Decade of the Century. *American Economic Review*. Vol. 93, No. 4, pp. 1399-1413

FORSKNING., 2008. *Forskning.se*. Swedish Research: Main Financing Bodies. [Online] Available: http://www.forskning.se/download/18.5c4164d5122368e3a638000514/Research_Finance_150dpi_eng.pdf (Accessed 27 August 2009).

FRYER, D., The political economy of youth deprivation and the dysfunctional welfare regime in South Africa. Unpublished Paper. Department of Economics, Rhodes

University, Grahamstown. Centre for Study of Youth and Political Violence, University of Tennessee.

GHOSH, J., 2006. *Frontline*. Economy-some myths and reality. Vol. 23, Issue 10 [Online] Available: <http://www.hinduonnet.com/fline/fl2310/stories/20060602001710400.htm> (Accessed 21 September 2007).

GOODHART, C., 2001. What Weight Should be Given to Asset Prices in the Measurement of Inflation. *Economic Journal*. 111 (June), pp. 335-356.

GORDON, R., 2000. Does the "New Economy" Measure up to the Great Inventions of the Past? *Journal of Economic Perspectives*. Vol. 14, No. 4. pp. 49-74.

GUPTA, R and UWILINGIYE, J., 2009. Working Paper 2009-06. *University of Pretoria*. Comparing South African Inflation Volatility Across Monetary Policy Regimes: An Application of Saphe Cracking. [Online] Available: [https://www.up.ac.za/dspace/bitstream/2263/9113/1/Gupta_Comparing\(2009\).pdf](https://www.up.ac.za/dspace/bitstream/2263/9113/1/Gupta_Comparing(2009).pdf) (Accessed 16 December 2009).

HIRSCH, A., 2005. *The International Development Research Centre*. Season of Hope: Economic Reform under Mandela and Mbeki. [Online] Available: http://www.idrc.ca/en/ev-91104-201-1-DO_TOPIC.html (Accessed 15 April 2007)

HOSHI, T and KASHYAP, A., 1994. Japan's Financial Crisis and Economic Stagnation. *The Journal of Economic Perspectives*. Vol. 18, No. 1, pp. 3-26.

HSRC, 2009. *Human Sciences Research Council*. Skills Migration and the "Brain Drain" in South Africa. [Online] Available: <http://www.hsrc.ac.za/Factsheet-7.phtml> (Accessed 20 October 2009).

HUANG, Y., 2002. "Between two coordination failures: automotive industrial policy in China with a comparison to Korea." *Review of International Political Economy*. Vol. 9, No. 3, pp. 538-573.

HUGH, E., 2009. *British Broadcasting Corporation*. Fast Bucks: How Porsche made billions. [Online] Available: <http://news.bbc.co.uk/2/hi/business/7843262.stm> (Accessed 30 December 2009).

HUSSON, M. 2001. "The Regulation School: A One-Way Ticket from Marx to the Saint-Simon Foundation?" translated [Husson] from « L'école de la regulation, de Marx à la Fondation Saint-Simon: un aller sans retour ? » in Bidet, J. et Kouvelakis, E., *Dictionnaire Marx contemporain*, PUF, Paris.]

ITOH, M., 1994. Is the Japanese Economy in Crisis. *Review of International Political Economy*. Vol. 1, No. 1, pp. 29-51.

JOHNSON, C., 2000. *Blowback: The Costs and Consequences of American Empire*. Henry Holt, New York.

JOHNSON, R., 2009. A False Start in South Africa. *New Left Review*. 58, pp. 61-74

KAHN, B., 2008. *South African Reserve Bank*. Challenges of Inflation Targeting for Emerging-Market Economies: The South African Case. [Online] Available: [http://www.reservebank.co.za/internet/Publication.nsf/LADV/1375D655561CAD9E4225760100384B88/\\$File/Brian+Kahn.pdf](http://www.reservebank.co.za/internet/Publication.nsf/LADV/1375D655561CAD9E4225760100384B88/$File/Brian+Kahn.pdf) (Accessed 16 November 2009).

KVASNICKA, M., 1997. Inflation Targeting – Is it enough for Transitional Economies. [Online] Available: <http://www.econ.muni.cz/~qasar/papers/cilovtrans.pdf> (Accessed 1 October 2010).

KLEIN, M., 2001. The Stock Market Crash of 1929: A Review Article. *The Business History Review*. Vol. 75, No. 2, pp. 325-351.

KONTONIKAS, A. and MONTAGNOLI, A., 2006. Optimal Monetary Policy and Asset Price Misalignments. *Scottish Journal of Political Economy*. Vol. 53, No. 5, pp. 636-654.

- LAUBCHER, J., 2006. *South African Savings Institute*. National Savings Barometer. [Online] Available: <http://www.saving sinstitute.co.za/Barometer%20July%2006.doc> (Accessed 15 March 2007).
- LITTLER, C., 1978. Understanding Taylorism. *British Journal of Sociology*. Vol. 29, No. 2, pp. 185-202.
- LOAYZA, N. and SOTO, R., 2002. *Central Bank of Chile*. Inflation Targeting: An Overview. [Online] Available: http://www.bcentral.cl/eng/studies/central-banking/pdf/v5/001_022Intro.pdf (Accessed 16 November 2009).
- LOCKE, R., 2005. Japan, Refutation of Neoliberalism. *Real-World Economics Review*. Issue 30
- MBOWENI, T., 2005. *South African Reserve Bank*. How exposed is the rand to the potential outflow of hot money? [Online] Available: <http://www.reservebank.co.za/> (Accessed 6 May 2007).
- MBOWENI, T., 2006. *South African Reserve Bank*. Monetary Policy, consumption expenditure, savings, inflation targets and growth in South Africa. [Online] Available: www.reservebank.co.za (Accessed 6 May 2007).
- MBOWENI, T., 2006. *South African Reserve Bank*. Statement of the Monetary Policy Committee. [Online] Available: <http://www.reservebank.co.za/internet/publication.nsf/0/37F594AE2CCB74E542257187004459DC?opendocument> (Accessed 11 October 2009).
- MURPHY, T., 2009. Bubblenomics. *New Left Review*. 57, pp. 149-160.
- NATTRASS, N., 2000. *Macroeconomics*. Cape Town, David Philip.

NATTRASS, N. AND SEEKINGS, J., 2005. *Race, class, and inequality in South Africa*. London: Yale University Press.

O'HARA, P., 2003. Deep Recession and Financial Instability or a New Long Wave of Economic Growth for U.S. Capitalism? *Review of Radical Political Economics*. 3, 3: pp. 18-43.

PANITCH, L and GINDIN, S., 2005. Superintending Global Capitalism. *New Left Review*. 35, pp. 101-123.

PALLEY, T., 2002. *Globalization Reform Project Open Society Institute*. Why Inflation Targeting is Not Enough: Monetary Policy in the Presence of Financial Exuberance. [Online] Available: <http://www.thomaspalley.com/docs/research/MoneyControlPosenSubmission.pdf> (Accessed 2 October 2010).

REICH, R., 2009. The Auto Bailout Is Going Off the Road. Robert Reich's Blog. [Online] Available: <http://robertreich.blogspot.com/2009/04/auto-bailout-is-going-off-road.html> (Accessed 15 December 2009).

SEEKING ALPHA., 2009. *Seeking Alpha*. The Global Housing Boom: It's a Small World After All. [Online] Available: <http://seekingalpha.com/article/124306-the-global-housing-bubble-it-s-a-small-world-after-all> (Accessed 23 November 2009).

SOUTH AFRICAN RESERVE BANK., 2006a. *South African Reserve Bank*. Quarterly Bulletin. March 2006. [Online] Available: [http://www.reservebank.co.za/internet/Publication.nsf/LADV/B1E5D401AC67DC6042257133004EAB9E/\\$File/QB032006.pdf](http://www.reservebank.co.za/internet/Publication.nsf/LADV/B1E5D401AC67DC6042257133004EAB9E/$File/QB032006.pdf) (Accessed 30 July 2009).

SOUTH AFRICAN RESERVE BANK., 2006b. *South African Reserve Bank*. Quarterly Bulletin. December 2006. [Online] Available: <http://www.reservebank.co.za>

/internet/Publication.nsf/LADV/8490A6AC904836244225723C0039DE01/\$File/QB122006.pdf (Accessed 30 July 2009).

SOUTH AFRICAN RESERVE BANK., 2007a. *South African Reserve Bank*. Quarterly Bulletin. June 2007. [Online] Available: [http://www.reservebank.co.za/internet/Publication.nsf/LADV/9439341919D1EDD0422572FE0041DF65/\\$File/QB062007.pdf](http://www.reservebank.co.za/internet/Publication.nsf/LADV/9439341919D1EDD0422572FE0041DF65/$File/QB062007.pdf) (Accessed 30 July 2009).

SOUTH AFRICAN RESERVE BANK., 2007b. *South African Reserve Bank*. Quarterly Bulletin. September 2007. [Online] Available: [http://www.reservebank.co.za/internet/Publication.nsf/LADV/9C79676EF55CDEB4225735300518942/\\$File/QBSept07.pdf](http://www.reservebank.co.za/internet/Publication.nsf/LADV/9C79676EF55CDEB4225735300518942/$File/QBSept07.pdf) (Accessed 30 July 2009)

SOUTH AFRICAN RESERVE BANK., 2009a. *South African Reserve Bank*. Quarterly Bulletin. September 2009. [Online] Available: [http://www.reservebank.co.za/internet/Publication.nsf/LADV/F58C9120364DBE604225762600277D0E/\\$File/QBSept09.pdf](http://www.reservebank.co.za/internet/Publication.nsf/LADV/F58C9120364DBE604225762600277D0E/$File/QBSept09.pdf) (Accessed 23 November 2009).

SOUTH AFRICAN RESERVE BANK., 2009b. *South African Reserve Bank*. Inflation Rates. [Online] Available: www.reservebank.co.za (Accessed 10 September 2009).

SOUTH AFRICAN RESERVE BANK., 2009c. Balance of Payments: Exports, Free on Board. [Online] Available: www.reservebank.co.za (Accessed 17th December 2009).

SOUTH AFRICAN TREASURY., 2009. *South African Government*. Growth Employment and Redistribution. [Online] Available: <http://www.treasury.gov.za/publications/other/gear/all.pdf> (Accessed 11 October 2009).

STATSSA., 2009. *Stats South Africa*. Consumer Price Index – Key Changes in 2009. [Online] Available: <http://www.statssa.gov.za/cpi/documents/CPI%20booklet%20-%20final%2016%20Oct%2008.pdf> (Accessed 7 October 2009).

STIGLITZ, J., 2009. *Mail and Guardian*. Stiglitz slams Inflation-Targeting. [Online] Available: <http://www.mg.co.za/article/2009-07-09-stiglitz-slams-inflationtargeting> (Accessed 7 October 2009).

SWENSON, P., 2002. *Capitalists against Markets: The Making of Labour Markets and Welfare States in the United States and Sweden*. New York: Oxford University Press.

SYKES, T., 2003. *Reserve Bank of Australia*. Tulips from Amsterdam. [Online] Available: <http://www.rba.gov.au/PublicationsAndResearch/Conferences/2003/Sykes.pdf> (Accessed 12 November 2009).

TAN, A., 1999. International Monetary Fund. International Debate on the East Asian Crisis. [Online] Available: <http://www.fas.nus.edu.sg/ecs/pub/wp/previous/AHTAN1.pdf> (Accessed 7 December 2009).

TAYLOR, B., 2005. *Stanford*. Lessons Learned from the Implementation of Inflation Targeting. [Online] Available: <http://www.stanford.edu/~johntayl/LessonsLearnedInfTargetTaylor-01-09-06.pdf> (Accessed 1 October 2010).

TRIEGAARDT, J., 2007. *Development Bank of South Africa*. Reflections on Poverty and Inequality in South Africa: Policy Considerations in an Emerging Democracy. [Online] Available: [http://www.dbsa.org/Research/Documents/Reflections%20on%20Poverty%20and%20Inequality%20in%20South%20Africa%20-%20\(3\).doc](http://www.dbsa.org/Research/Documents/Reflections%20on%20Poverty%20and%20Inequality%20in%20South%20Africa%20-%20(3).doc) (Accessed 1 May 2007).

WADE, R. and VENEROSO, R. 1998. "The Asian Crisis: The high debt model versus the Wall Street-Treasury-IMF complex." *New Left Review*. 228, pp. 3-22

WADE, R., 2003. What Strategies are viable for developing countries today? The World Trade Organization and the shrinking of 'development space'. *Review of International Political Economy*. Vol. 10, No. 4, pp. 621-644.

WADE, R., 2008. Financial Regime Change? *New Left Review*. 53, pp. 5-21

WEEKS, J., 1999. Working Paper. Growth in Low Gear. *The Cambridge Journal of Economics*. Vol. 23, No. 6, pp. 795-811.

WELLER, C, E., 2006. *Center for American Progress*. Consumer Debt: A Christmas Story. [Online] Available: http://www.americanprogress.org/pressroom/releases/2006/11/christmas_debt.html (Accessed 14 October 2007).

WHITE, E., 1990. The Stock Market Boom and Crash of 1929 Revisited. *The Journal of Economic Perspectives*. Vol. 4, No. 2, pp. 67-83.

WOLFSON, M., 2000. Neoliberalism and International Financial Instability. *Review of Radical Political Economics*. Vol. 32, No. 3, pp. 369-378.

