THE PROBLEM OF INCOME INEQUALITY IN SOUTH AFRICA

by

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ABBREVIATIONS AND ACRONYMS

ANC	African National Congress
AMPS	All Media and Products Survey
BBBEE	Broad Based Black Economic Empowerment
BEE	Black Economic Empowerment
СРІ	Consumer Price Index
EBRD	European Bank for Reconstruction and Development
GDP	Gross Domestic Product
IES	Income and Expenditure Survey
ILO	International Labour Organisation
LRA	Labour Relations Act
MDG	Millennium Development Goal
NEDLAC	National Economic Development and Labour Council
NGP	New Growth Path
OECD	Organisation for Economic Co-operation and Development
SALDRU	South Africa Labour and Development Research Unit
SARB	South African Reserve Bank
UN	United Nations
WIDER	World Institute for Research in Development Economics
WIID	World Income Inequality Database

THE PROBLEM OF INCOME INEQUALITY IN SOUTH AFRICA

1 INTRODUCTION

South Africa has an official unemployment rate of 26%, a poverty rate¹ estimated at approximately 50% and one of the most severe measures of income inequality in the world. Therefore, despite levels of investment and economic growth achieving the fastest increases in decades, South Africa faces substantial challenges in addressing poverty, income inequality and unemployment (Samson, MacQuene & Van Niekerk, 2006:1).

A recent study conducted by the Development Policy Research Unit (DPRU) of the University of Cape Town found that, "...South Africa is now the most consistently unequal economy in the world. Critically, the persistent and increasing levels of [income] inequality have been acting as a constraint to ensuring that South Africa's economic growth results in significant declines in household poverty levels." (Bhorat, Van der Westhuizen & Jacobs, 2010:2).

Reducing poverty and income inequality is a fundamental challenge for South Africa. International experience suggests that human development, economic and employment goals of the government may otherwise be hindered (May, 1998:45). For this reason, the 2010 Development indicators report states that, "deliberate programmes that will optimally reduce [income] inequality need to be driven on all fronts and by all social partners." (National Planning, 2010:25).

In this context, this study aims to contribute to the debate seeking to identify factors contributing to the persistently high income inequality levels, specifically within the context of the labour market.

1.1 BACKGROUND

The analysis of poverty and income inequality in South Africa has a long history. The First Carnegie Inquiry on poverty in 1922 focussed on the "poor white" problem which fed into the subsequent policy framework for the eradication of poverty amongst whites. Years later, in 1983, the Second Carnegie Conference examined poverty amongst South Africa's black population and highlighted the appalling conditions in the rural areas and townships of South Africa (May, 1998:1). In addition, the narrowing of income inequality and the reduction of poverty have been consistent themes of the democratic South African Governments since 1994 (Hunter, May & Padayachee, 2003:4).

¹ The poverty line used in calculating the poverty rate is not mentioned in the policy brief.

From the abovementioned facts and Table 1 below, it is clear that income inequality has been a national problem for many years. This theme, however, gained renewed interest in 1993 when the national survey on living standards was undertaken by the South African Labour and Development Research Unit (SALDRU). The SALDRU study provided the first data of the extent and distribution of poverty across South Africa (May, 1998:1). This renewed interest gained even more prominence in South Africa with the establishment of the Millennium Development Goals (MDGs), the first of which is to eradicate extreme poverty (and hunger).

 Table 1:
 South Africa's historic income inequality

Year	1959	1960	1965	1970	1975	1980	1985	1987	1990
Gini	51.70	54.00	58.13	51.00	47.00	49.00	47.00	45.00	63.00

Source: World Institute for Research in Development Economics (WIDER)

Income inequality and poverty are different phenomena but although separate, obviously linked (Landman, Bhorat, van der Berg & van Aardt, 2003:4). Therefore, even though the first MDG does not directly target income inequality *per se*, poverty and income inequality are intimately bound up with one another, both as an analytic and policy issue and as such, there are severe limitations in attempting to deal with economic well-being without examining income inequality (MacEwan, 2009:1).

"South African society is characterised by extreme poverty and inequality in the distribution of income and earning opportunities. More or less a quarter of the total population lives below the international poverty line of \$1 a day." (Black, Calitz, Steenekamp & associates, 2006:214). The first target of the MDG is to halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day (South Africa, 2007:5).

The remaining sections of this dissertation cover the following:

- Section 2 reviews South Africa's economic history.
- Section 3 reviews the South African labour market.
- Section 4 covers both the theoretical and empirical literature on income inequality.
- Section 5 constructs an empirical model.
- Section 6 concludes and makes some recommendations.

2 SOUTH AFRICA'S ECONOMIC HISTORY

This section will briefly cover some key macro-economic indicators. The indicators discussed are all topical and relate directly to why South Africa should have experienced a reduction in income inequality over the past 20 years. The focus will be on three key indicators: Gross Domestic Product (GDP), Consumer Price Index (CPI) and international trade. The relationship of each to income inequality will be explained.

Economic growth, as represented by real GDP, depends on improvements in productivity and the functioning of labour markets. Well-functioning labour markets, in turn, depend upon a sustained and stable path of economic growth (CPI is used as a proxy for stability). However, labour markets are the main channels through which income inequalities may develop and persist (OECD, 2010a:14) and so, to follow up this section, a review of the South African labour market is conducted.

2.1 INCOME INEQUALITY, ITS IMPORTANCE AND MEASUREMENT

For the purposes of this study, income inequality is measured by the Gini coefficient, which ranges between "0" and "1". The closer to 1, the more unequal a society and the closer to 0, the more equal a society. Several other measures of income inequality exist, for example the Theil-index but the Gini is more readily available and is easy to interpret and understand.

The Gini coefficient measures the distribution of the national income and in a perfectly equal society, 10% of the population will receive 10% of the income; 20% of the population will receive 20% of the income and so on. The Gini coefficient for such a society would be zero. If, for example, 10% of society receives 30% of the income or 20% receives 50% of the income, the distribution is more unequal and the Gini coefficient higher. In the most extreme case of inequality, i.e. a Gini coefficient of 1, 1% of the population would receive 100% of the income (Landman *et al.*, 2003:3). South Africa currently has a Gini coefficient of roughly 0.68.

Why should South Africa be concerned by a Gini coefficient of nearly 0.7? There are several reasons (mentioned above) but these can concisely be restated as:

- No civilised country can be pleased with a state of affairs in which their fellow humans exist in conditions of absolute human misery (Todaro & Smith, 2006:207).
- Income inequality considerations are linked to the economic state of affairs and to social and political conditions (Milanovic & Ersado, 2010:1).

- At a given rate of economic growth, more unequal income distributions can be associated with lower rates of poverty reduction (Ivaschenko, 2002:2).
- Many studies (Alesina & Rodrik, 1994; Birdsall *et al.*, 1995; Deininger & Squire, 1998; Persson & Tabellini, 1994; Sylwester, 2000; Easterly, 2001 in Ivaschenko, 2002:2) suggest that an unequal income distribution might itself be detrimental to long-run economic growth.

2.2 GROSS DOMESTIC PRODUCT

Not only does South Africa have a New Growth Path (NGP) (discussed later) but Figure 1 below shows that South Africa's growth path, as measured by GDP (at constant 2005 prices), has been rising steadily for the period 1990 to 2009.



Figure 1: South Africa's annual GDP at market prices (constant 2005 prices) for the period 1990-2009

Source: South African Reserve Bank (2011)

The growth rates of real GDP and GDP per capita for the 1990 to 2009 period are provided in Table 2 and Table 3 respectively.

1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	
-1.02	-2.14	1.23	3.23	3.12	4.31	2.65	0.52	2.36	
1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008
4 15	2.74	2 (7	2.05	1 55	5 20	5 60	5 57	2 50	1.

Table 2:Real GDP growth rates

Source: Own calculations on South African Reserve Bank (2011) data

Positive growth in South Africa is clearly portrayed, starting in 1992. A study conducted by the Organisation for Economic Co-operation and Development (OECD) found that economic growth increased steadily in real and per capita terms. Between 1993 and 2008, real GDP grew by almost 3% per year and GDP per capita increased by 1.2% while shrinking by 2.7% in 2009 (due to the global economic crisis). This economic growth consistently outpaced population growth between 1993 and 2008: real GDP grew by 68% and total population grew by 22%, thus an increase of 36% was realised in GDP per capita (OECD, 2010a:212). This growth in per capita terms can be seen in Figure 2 below.



Figure 2: GDP per capita (constant 2005 prices) for the 1990-2009 period

Source: South African Reserve Bank (2011)

1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99
-3.07	-4.16	-0.86	1.09	0.98	2.14	0.51	-1.58	0.24
1000/00	2000/01	0001/00	2002/02	2002/04	2004/05	2005/06	2006/05	2005/00

1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
2.07	0.78	1.86	1.34	3.08	3.85	4.25	4.30	2.41	-2.72

Source: Own calculations on South African Reserve Bank (2011) data

Strong economic growth occurred in the post-Apartheid period, as is shown above and yet the labour market did not have a positive impact on poverty because of its failure to pull individuals from poor households into employment. Due to the number of no-worker households actually increasing by 3% over the last 15 years, the number of households relying on social assistance as their main form of income has also increased. "... in general, the improved aggregate poverty situation is due to increased support from social grants, and not from the labour market." (OECD, 2010a:229).

Bhorat *et al.* (2010:11) point out that the rate at which grants are paid out is unsustainable and it would be reckless for Government to increase the number of beneficiaries at the going rate. Although the reasons for this are not explicitly stated, the article does mention the following:

- Grant provision accelerated after 2000.
- Grant expenditure increased from R20 553 million in 2001/02 to R51 927 million in 2005/06. This represents a 26.1% growth in social assistance expenditure by the South African Government.
- The number of grant beneficiaries increased significantly over this relatively short period (2001 to 2005) from 3.61 million to 9.40 million.

"While all grants experienced a significant increase in the number of beneficiaries between 2001 and 2005, the number of Child Support Grant recipients increased from 975 000 in 2001 to 5.6 million in 2005. This surge was due to both the increased public awareness of the grants and the extension of the grant to children up to the age of 14 years". (Pauw & Mncube, 2007 in Bhorat *et al.*, 2010:10). A key aspect of the post-Apartheid fiscal expenditure pattern has therefore been a widening and deepening of South Africa's social security system and this is perhaps why Bhorat *et al.* (2010) feel it is unsustainable. Furthermore, Samson, MacQuene and van Niekerk (2006:1) point out that the amounts paid have increased significantly in real terms since 2001. Furthermore, the Life Cycle Hypothesis predicts that the higher the proportion of dependent people in the economy, the greater is the pressure applied on the budgets of the working members of the family, thereby leaving less scope for saving. As this pressure increases, aggregate demand, economic activity, income and employment decrease (Modigliani, 2005:118).

Government must, therefore, consider implementing complementary policy measures to social grants, such as strengthening labour market policies, and addressing the skills gap. This will make it easier for labour market entrants to find employment and in turn will make it easier to wean the South African society off the social security system on which it so desperately depends. This is echoed by Van der Berg (2010:19), "Fiscal redistribution through the grant system has had some success in reducing poverty. However, fiscal and state capacity sets limits to such redistribution and makes this an inauspicious tool for future change. The fiscal capacity constraint arises from the fact that grant spending already constitutes a high proportion of GDP and that such grants need to compete with other public spending. The state capacity constraint relates to the fact

that social delivery has been greatly constrained by the limited ability of the public sector to convert spending into improved outcomes for the poor. Transfers also cannot really affect [income] inequality much. Their overall magnitude is too small, even in South Africa, to have a great effect on [income] inequality measures, despite good targeting."

Considering the viewpoint of Landman *et al.* (2003:7-8) and the explanation by Alderson and Nielsen (2002:16) in section 2.5 below, it is plausible that income inequality will have worsened as a result of this growth, or economic take-off. At the same time, Landman *et al.* (2003:11) maintain that to "roll poverty back", the South African economy needs to create an additional 3 million jobs. In other words, the South African economy requires the labour market to become roughly 25% bigger. This requires a consistent growth rate in real GDP of about 4% per annum over the next 10 years. At the same time, it is vital that any economic growth in South Africa also creates employment if income inequality is to be reduced.

Economic growth, including an improved labour market, is clearly needed in South Africa. Initially, income inequality may worsen to some degree but in the long run, it will improve. Naudé and Coetzee (2004), as well as Landman *et al.* (2003), emphasise the importance of the labour market. Not only is it an important transmission mechanism but the growth of the labour market is essential to reducing levels of income inequality.

2.3 CONSUMER PRICE INDEX

Inflation targeting was formally adopted in February 2000 as the monetary policy framework that would be best suited to achieving price stability (van der Merwe, 2004:1). The two horizontal lines in Figure 4 indicate the target range (3% to 6%). The target was set for 2002 because changes in interest rates take between 18 and 24 months to influence the underlying rate of inflation in South Africa (Rossouw & Padayachee, 2008:24). Figure 3 below shows the inflation rate for South Africa since 1990.

Figure 3: Annual inflation in South Arica for the period 1990-2009



Source: International Monetary Fund (IMF) - International Financial Statistics

South Africa initially chose to target the CPIX in metropolitan and other urban areas due to it being readily understandable. The CPIX excludes any direct effects that changes in the repurchase rate could have on prices but includes a wide array of products, making it a broad index. However, such a broad measure has the disadvantage that it could be affected by exogenous shocks over which monetary policy has no control (van der Merwe, 2004:5).

Economic stability can be measured by the value of and volatility in inflation, with the Consumer Price Index (CPI) currently being considered as the best indicator thereof. In October 2008, owing to a rebasing of the CPI with effect from 2009, it was decided that changes in the CPI, rather than changes in the CPIX, would be used for inflation targeting purposes as from January 2009 (Rossouw, 2009:6).

Deviations above and below this range are expected since exogenous shocks, as mentioned by Van der Merwe (2004), can occur at any time. Spikes are therefore not an indication of instability since actions taken by the South African Reserve Bank (SARB), i.e. adjusting the interest rate, often take effect 18 to 24 months after.

Stability in a country is important because it provides markets with certainty about future conditions. "Inflation volatility is one form of growth-impeding uncertainty..." (Aron & Muellbauer, 2005:2). Uncertainty in financial markets, for example, makes it harder for lenders to screen out good from bad credit risks. This lessened ability of lenders to weed out the bad from the good credit risks makes them less likely to lend, leading to a decline in lending, investment and aggregate economic activity (Mishkin, 2002:5). Aron and Muellbauer (2005:2-5) state further that effective and transparent inflation targeting will condition the inflationary expectations of the private sector and thereby influence wage settlements and pricing by firms. Inflation volatility is especially painful for the poor. In addition, higher uncertainty tends to reduce consumer demand directly and tends to dry up credit.

Why is inflation volatility so harmful to the poor? When interest rates rise, the ability of the poor to borrow money and pay interest is compromised. High inflation rates also lower a poor person's real money balances and so less can be purchased. These two notwithstanding, the additional costs that arise from inflation volatility, impose an ever increasing burden on the poor and at some point this burden will become too great for the poor to bear. And although there may not be direct implications for income inequality, a well-functioning labour market rests on stable economic growth (OECD, 2010a:14).

2.4 INTERNATIONAL TRADE

With democracy, came the rapid integration of South Africa into the world economy, which provided the domestic market with greater access to new technology, capital and financial markets (OECD, 2010a:15).

Paul Samuelson rigorously proved that factor-price equalisation does occur and states that not only is factorprice equalisation possible and probable but in a wide variety of circumstances it is inevitable (Samuelson, 1948:8). Factor-price equalisation is the tendency for the relative and absolute prices of productive services to equalise in the different regions caused by the free mobility of factors of production between these regions (Samuelson, 1948:1).

Samuelson goes on to mention the specific instances in which this occurs (taken from Samuelson, 1948:8-9):

- "So long as there is partial specialisation, with each country producing something of both goods, factor prices will be equalised, absolutely and relatively, by free international trade.
- Unless initial factor endowments are too unequal, commodity mobility will always be a perfect substitute for factor mobility.
- Regardless of initial factor endowment even if factors were mobile they would, at worst, have to migrate only up to a certain degree, after which commodity mobility would be sufficient for full price equalisation.
- To the extent that commodity movements are effective substitutes for factor movements, world productivity is, in a certain sense, optimal; but at the same time, the imputed real returns of labour in one country and of land in the other will necessarily be lower, not only relatively but also absolutely, than under autarky."

South Africa's major trading partners are relatively capital abundant (think of the European Union and America) and South Africa is relatively labour abundant (comparative advantage tests reveal that South Africa is abundant in unskilled labour relative to high- and middle-income economies – Dunne & Edwards, 2006:10). Therefore, the South African wage rate, which was initially low during Apartheid, will have risen to some degree with democracy due to factor-price equalisation occurring.

South Africa's transition to democracy should therefore have set in motion the process of factor-price equalisation. In other words, the unskilled labour sector in South Africa should have seen a steady increase in their wage rate (Markusen, Melvin, Kaempfer, & Maskus, 1995:108-109, 114-115).

2.5 SOUTH AFRICA'S INCOME INEQUALITY FOR THE 1990-2009 PERIOD

A Gini coefficient (a measure of income inequality) of 0.6 or above indicates extreme income inequality (Black *et al.*, 2006:214). Research into the Gini coefficient of South Africa for the 1990 to 2009 period indicates that South Africa maintains a Gini coefficient of above 0.6 – this can be seen in Table 4, as well as Figure 4 below.

The most recent figures for South Africa's Gini coefficient come from the Development indicators report of 2010, with the General Household Survey estimating it to be 0.702 and 0.683 for income and expenditure respectively (National planning, 2010:25). The average of the three most recent estimates yields a Gini coefficient of 0.688. This figure is in line with the averages below yet slightly higher than the 2008 figure and therefore the 0.688 seems like an acceptable estimate for 2009.

Year	1993	1994	1995	1996	1997	1998	1999	2000	
AMPS	0.672	0.665	0.674	0.678	0.674	0.683	0.685	0.678	
IES			0.640					0.680	
									-
Year	2001	2002	2003	2004	2005	2006	2007	2008	2009
Year AMPS	2001 0.685	2002 0.670	2003 0.686	2004 0.680	2005 0.683	2006 0.685	2007 0.660	2008 0.666	2009

Table 4:South Africa's Gini coefficient for the period 1993-2009

Source: National planning (2010:25)

Calculating averages from the above table reveals the following:

- The All Media and Products Survey (AMPS) estimates South Africa's average Gini coefficient to be 0.675.
- The Income and Expenditure Survey (IES) estimates the average Gini coefficient to be 0.674.





Source: National planning (2010:25)

Figure 4 is a graphical representation of the AMPS data found in Table 4, with the estimated figures of 0.644, 0.658 and 0.688 for 1991, 1992 and 2009 respectively, included. The figure for 1990 comes from the WIDER database, as in Table 1. The two vertical lines indicate the implementation of BEE and BBBEE in 2000 and 2003 respectively. The figure shows that the Gini coefficient has been erratic – at no point has there been a downward trend lasting for longer than one year. There have even been periods of increase post 2000 and 2003. Not only have there been periods of increase but for the 1995 to 2006 period, *all* South Africans (total of all population groups) experienced rising income inequality (Bhorat *et al.*, 2010:8). Clearly, the level of income inequality has remained extreme despite the BEE policies initiated by government.

South Africa's transition from Apartheid to democracy and the associated growth and development may explain the levels of income inequality since democracy. Citing a Kuznets article of 1955, Alderson and Nielsen (2002:16) explain the relationship observed between income inequality and development. This relationship stresses the dualism that emerges between the agricultural and non-agricultural sectors of a developing country. A nation at an early stage of development is characterised by the co-existence of a small modern sector, characterised internally by high productivity and wages on the one hand and a large traditional agricultural sector, characterised by low productivity and wages on the other. With development, an increasing proportion of the labour force shifts from the low-income agricultural sector to the high-income modern sector. During this shift, income inequality will, solely on the basis of these average differences between sectors, increase, peak and then decrease. This point will be referred to again in a later section.

This cause of income inequality, which can be attributed to the differences in average income between sectors, is called sector dualism. "Sector dualism is a function of the difference in average income between sectors and the relative size of the sectors." (Alderson & Nielsen, 2002:16). Taking "sector dualism" into consideration, it seems that South Africa might simply have experienced a rise in income inequality due to a shift from the agricultural sector to the so-called "modern" sector. Sector dualism may thus be a significant predictor of income inequality in South Africa (Alderson & Nielsen, 2002:16).

2.6 WHY IS SOUTH AFRICA'S INCOME INEQUALITY SO HIGH?

It is common to ascribe South African income inequality to racial discrimination and Apartheid. This, however, offers only a part of the explanation. South Africa's highly dualistic economy is as a result of the nation's history: being a poor pre-colonial society, then a colonial settlement and finally the mineral discoveries. South Africa's economy was, therefore, highly inegalitarian from the outset. Racial discrimination distributed the spoils of economic growth along racial lines. This laid the foundation for patterns of further development and privilege in a society stratified by race (Van der Berg, 2010:3).

Against this background, Professor Julian May cites that South Africa's income inequality can be attributed to a few specific causes. Firstly, Apartheid stripped people of their assets – especially land – distorted economic markets and social institutions through racial discrimination and resulted in violence and destabilisation. Secondly, the asset bases of individuals, households and communities were undermined through ill health, over-crowding, environmental degradation, the mismatch of resources and opportunities, race and gender discrimination and social isolation. Lastly, a disabling state, which included the behaviour and attitudes of government officials, the absence of information concerning rights, roles and responsibilities and the lack of accountability by all levels of government (May, 1998:4), had an impact.

These triggers shaped the nature of poverty in South Africa. More importantly though, these triggers have the potential to ensure that poverty persists in South Africa even though many other aspects of the political economy are being transformed (May, 1998:4).

Although income inequality remains at persistently high levels, the nature of it has changed: inter-racial income distribution has improved considerably since democracy but income distribution within groups worsened. The racial dimension of income inequality has thus been softened. Exacerbating the high levels of income inequality within the black population is the rapid growth of the black middle class, a rise too rapid and large to be solely ascribed to BEE policies (Van der Berg, 2010:19).

2.7 MEASURES TAKEN TO REDUCE INCOME INEQUALITY

The approach taken thus far by the South African Government to reduce poverty and income inequality recognises the specific history of the country. The policy measures that are being adopted can be divided into three general categories (taken from May, 1998:45):

- "promotional activities that aim for an improvement of endowments, exchange entitlements, real incomes and social consumption;
- preventative measures that try to avert deprivation; and
- protective activities which are essentially safety net and disaster management measures which provide relief from deprivation."

The three categories target the forces that perpetuate the vicious circle of poverty at one extreme, while encouraging income, wealth and opportunity to be amassed at the other (May, 1998:45).

2.8 SUMMARY

Sections 2.2, 2.3 and 2.4 highlighted three of several key variables which prove that the South African economy was "making history" until 2006 (Frankel, Smit & Sturzenegger, 2008:2). In the second quarter of 2006, the Bureau of Economic Research (BER) reported that South Africa's economic prospects presented with some very outstanding facts (Frankel *et al.*, 2008:2), those being:

- Real GDP growth averaged 4.9% in 2005 the fastest growth rate since 1984.
- The current business cycle upswing was running 79-months long.
- The lowest inflation rates in 37 years were recorded in 2004 and 2005.
- Early in 2005, long-term interest rates registered a 35-year low of 7.3%.
- The budget deficit was estimated at 0.5% of GDP for the 2005/6 fiscal budget, which was the lowest in 25 years.
- The financial account of the balance of payments recorded an inflow of R98.4 billion the largest ever.

In addition to this already impressive list of facts, there were additional and important long-term factors that made the South African economy stronger than the typical emerging market economy, such as a well-developed financial sector, no "original sin" in the currency denomination of inflows, world-class corporations, a central bank with strong credibility, low-budget deficits, low public sector debt levels and a successful political transition towards a democratic government (Frankel *et al.*, 2008:2).

According to Van der Veen (2011), a country needs three simultaneous policy results in order to initiate the turning point to economic take off. The three results are:

- 1. Macroeconomic stability,
- 2. Economic freedom, i.e. the right to choose for oneself, and
- 3. Rural bias and spending of public finance, i.e. the government must be "pro-poor".

If one considers the above list of facts, it appears that the South African economy experienced the desired and required conditions to not only improve income inequality (and poverty) but to actually begin a period of economic take-off. And yet, no lasting improvement occurred in respect of income inequality. What prevented South Africa from improving income inequality?

3 LABOUR-MARKET NEXUS

Each of the variables considered in this section relate to the "labour-market nexus", as created by Seekings and Nattrass (2005:5), in Figure 5 below. As such, each variable forms a cog within a mechanism that - if working together - can help diminish income inequality.



Figure 5: The labour welfare nexus and key components of a distributional regime

This labour-market nexus affects the distributional outcome directly, through incomes and opportunities and indirectly, through the growth path which ultimately affects the level and distribution of income (Seekings & Nattrass, 2006:5).

In the following sections, this dissertation will show that all the pillars of the labour-market nexus, bar one – the employment and wage-setting institutions/policies – were in place in South Africa over the 1990 to 2009 period. The inability of the employment and wage-setting institutions/policies pillar to perform is therefore postulated as the reason why income inequality in South Africa remains high.

3.1 THE SOUTH AFRICAN LABOUR MARKET

This study does not disregard the influence of the three causes of income inequality, as identified by May (1998) but simply proposes that since South Africa's income inequality is not showing steady improvement, an additional cause, which could be a more critical factor, must be sought. The labour market is inextricably linked with poverty and income inequality in South Africa. In addition, the labour market plays a central role in driving income inequality. (OECD, 2010a:225, 229).

3.1.1 South Africa's labour legislation

Democracy and the new African National Congress (ANC) government brought about the rewriting of labour legislation in 1994 through negotiations that took place within the National Economic Development and Labour Council (NEDLAC). The NEDLAC's labour constituency is made up of South Africa's three major union federations: Congress of South African Trade Unions (COSATU), Federation of Trade Unions of South Africa (FEDUSA) and National Council of Trade Unions (NACTU). The NEDLAC negotiations resulted in the new Labour Relations Act (LRA) which outlined working conditions and employment standards (OECD, 2010a:233, 236). Table 5 provides a broad introduction to this legislation.

Name of Act	Key aims	Coverage		
Labour Relations Act (1995)	Orderly collective bargaining. Workplace democracy. Effective labour dispute resolution (Provision for the Council for Conciliation	All workers except the defence force, secret services and essential services.		
Basic Conditions of Employment Act (1997)	Mediation and Arbitration). Improve minimum rights for all workers. Improve enforcement mechanisms. Makes provision for the Employment Conditions Commission to advise the Minister on minimum wages in "vulnerable" sectors.	All workers, except those in the defence force and secret services, including part-time and casual labour.		
Employment Equity Act (1998)	Eliminate unfair discrimination. Ensure implementation of affirmative action.	Employees in "designated" companies.		
Skills Development Act (1998)	Devise and implement national, sector and workplace strategies to improve skills of the workforce.	Designated employers and sectors.		

 Table 5:
 South Africa's labour legislation after democracy

Source: OECD (2010a: 234) (adapted from Bhorat et al. (2001)

In addition to the above, there is also the Occupational Health and Safety Act (1993) and the Unemployment Insurance Act (2001) (ILO, 2011).

"The LRA is essentially procedural in nature, in the sense that it describes the procedures that must be followed in effecting employment and dismissals. The BCEA [Basic Conditions of Employment Act], by contrast, is substantive. It provides a minimum protective floor for workers' rights by proscribing minimum standards and conditions of employment, including minimum wages in individual economic sectors, and by regulating matters such as hours of work, overtime payments, leave, and severance pay." (Arora & Ricci, 2005:27).

3.1.2 Current policies and legislation

Amongst the policies and legislative measures taken to reduce poverty and income inequality are BEE and BBBEE, inaugurated in 2000 and 2003 respectively. These were instituted by the South African Government to reduce the levels of economic deprivation and inherited disparities of wealth and income (Vilakazi, nd:1), yet "... aggregate [income] inequality measures have shown an increase in inequality over the post-Apartheid years. The rising aggregate Gini coefficients for 1993, 2000, 2005 and 2008 ... illustrate this point, and the evidence reviewed in Leibbrandt *et al.* (2010) shows the same trend using alternate data for other years." (OECD, 2010a:225).

Data currently available for South Africa brings to light the fact that the Gini coefficient is still above 0.6 and therefore South Africa is regarded as having "extreme inequality" (Black, *et al.*, 2006:214). Serious reform of South Africa's current policies and legislation is thus required if Government is to achieve its first MDG of eradicating extreme poverty by 2015 since it is clearly evident that neither BEE nor BBBEE has been effective: nine years after the inauguration of BEE and six years after that of BBBEE, there is evidence that income inequality has, in fact, risen.

Despite current legislation and policies, income inequality has worsened. Landman *et al.* (2003:7) point out that the Gini coefficient amongst Black households has moved up from 0.49 in 1970 to 0.59 in 2000. For this same period, the Gini coefficient moved from 0.43 to 0.49 amongst Whites; from 0.42 to 0.51 amongst Indians and from 0.53 to 0.55 amongst Coloureds. This predicament of rising income inequality did not stop there... For the period 1995 to 2005, *all* South Africans (when including all population groups) experienced rising income inequality (Bhorat *et al.*, 2010:8). For the 1993 to 2008 period, the between-race component on income inequality remained very high yet when considering income inequality between racial groups as a percentage of the maximum possible level, this measure declined by 21%, with the largest decline occurring before 2000 (further evidence that BEE and BBBEE have been ineffective). However, within-race income inequality is a national problem and one the people of South Africa need to face together, regardless of race, since despite South Africa's racially segregated past and even though between-race income inequality has been declining, income inequality within races is increasingly gaining prominence (OECD, 2010a:232).

However, Landman *et al.* (2003:7-8) are of the opinion that, through a period of economic take-off, rising income inequality might be an inevitable consequence. Referring back to the point made by Alderson and Nielsen (2002:16) in section 2.5, the opinion of Landman *et al.* becomes more lucid. Perhaps, the transition from the agricultural sector to the modern sector caused income inequality to increase. However, if this is true, then according to Alderson and Nielsen (2002:16), South Africa's income inequality should have peaked and then started to decrease. The jumps evident in Figure 4 immediately seem to discount the value of this theory.

3.1.3 Concluding remarks on labour legislation

Well-intentioned labour regulations may sometimes have unfortunate and unintended consequences – this is a generally accepted fact. The key criticisms of South Africa's labour legislation have been its indirect effects on employment levels, income equality and investment (OECD, 2010a:238). As identified by Moll (1996) in OECD (2010a:239), there are three ways in which labour market rules and regulations can influence unemployment:

- i. "Wage cliffs" induce covered firms to substitute capital for labour in the short run and, hence, employ more capital-intensive technologies in the long run.
- ii. Large "wage cliffs" encourage search behaviour which results in "wait" unemployment.
- iii. An adjustment to equilibrium is retarded, as wages are left sticky in response to shocks in the labour market.

In addition, Schultz and Mwaba (1998) in OECD (2010a:239), find that not only do firms substitute capital for labour but working hours may also fall as a direct result of increases in the cost of labour.

Aron *et al.* (2008) in OECD (2010a:239), find that South Africa's labour legislation is too rigid for the kinds of unemployment conditions and labour market segmentations that currently exist. Furthermore, Bhorat *et al.* (2002) in OECD (2010a:239) find that the stringent labour legislation is causing:

- labour to be replaced by capital,
- workers to endure unemployment for substantial lengths of time, and
- firms to keep employment levels to a bare minimum.

Two more recent studies, one by Rankin (2006) and the other by Godfrey *et al.* (2007) in OECD (2010a:239), confirm the findings of Bhorat *et al.* (2002). Godfrey *et al.* (2007) found that a majority of firms are reluctant to increase the number of people they employ – due to the negative impact of the South African labour legislation. Rankin (2006) found that (after other business factors) the most frequently mentioned constraint on hiring new workers – especially the unskilled – was inflexible labour laws. This is particularly true for the hiring and firing of employees and minimum-wage laws.

To circumvent these laws, employers often make use of "atypical" or temporary workers. However, generally speaking, temporary workers are paid less and receive fewer or no benefits (even if benefits are provided, the value of the benefits will be lower), compared to permanent labour. Roskam (2007) in OECD (2010a:240) finds that "casual labourers work for wages that are well below the poverty line, often work only for a few hours a day and have no access to medical aid or retirement fund schemes." Furthermore, Roskam (2007) states that casual labourers "have virtually no job security, and the supervision of labour standards by labour inspectors is more difficult."

3.1.4 Employment by sector

In the 17th century, William Petty pointed out that each industry in a country will not grow equally in the context of overall economic progress; this observation is now known as the Petty-Clerk law (Hirano, 2004:12). It would therefore be prudent to review South Africa's industries in order to determine if unemployment can be curtailed by investing more in certain industries and thereby developing them.

Figure 6 below shows sectoral contributions to South Africa's GDP, in 2008. A study of the diagram shows that the services sector dominates substantially -68% in total, followed by manufacturing, mining and quarrying. Since South Africa has such a large services sector, perhaps all South Africa needs to do to create jobs, is to target specific industries within the services sector and perhaps within the manufacturing sector as well.

It is unlikely that the simple investing in a sector or two will solve South Africa's unemployment problem, because the problem is so severe. In addition, the South African economy has been growing steadily (shown in Figure 1 and 2). However, South Africa does need to focus on these industries in order to initiate the required expansion of the labour market by 25%.

Growth alone will, however, not solve the problem of unemployment and hence income inequality.



Figure 6: Sectoral contributions to South Africa's GDP in 2008

Source: StatsSA (2011)

3.1.5 Labour force participation

Although there was a sharp decrease between 2005 and 2008, labour force participation increased steadily from 1993 to 2005. And yet, by international standards, the level of participation in South Africa's labour force is relatively low: 55% in 2008, while the world labour force participation rate was 64.1% (ILO, 2008 in OECD, 2010a:213).

3.1.6 South Africa's unemployment

Since the end of Apartheid, most of the debate about the links between public policy and poverty or income inequality has focussed on macro-economic policy. Throughout this debate, however, both government and its critics have sidestepped or ignored the challenge of unemployment (Seekings & Nattrass, 2005:380). Moreover, Meth (2003) in Seekings and Nattrass (2005:380) finds that even sustained economic growth offers limited benefits to the poor if a country starts in a position of massive unemployment-based poverty.

"South Africa exhibits particularly high rates of unemployment." (OECD, 2010a:215). According to the OECD's economic survey of South Africa, the most striking feature of the labour market remains the extreme levels of unemployment. Not many – if any – countries have experienced such sustained high levels of open unemployment. The overall unemployment rate peaked in 2002 when it reached 27% but more worrying is that overall unemployment has been above 20% since the late 1990s. Hence this is more than a cyclical problem. A part of the phenomenon of low participation rates is itself a function of the severity of unemployment. Discouraged workers account for roughly 5% of the working age population and hence if such individuals are included, the broad measure of unemployment exceeds 30% (OECD, 2010b:93).

Figure 7 shows the unemployment rate for South Africa and evident from the graphical representation is South Africa's unemployment peaking above 30% in 2001. Furthermore, the unemployment rate rose by three percentage points between 1997 and 2008 (OECD, 2010a:215).



Figure 7: South Africa's unemployment rate (per cent of total labour force) for the period 1990-2009

Source: International Monetary Fund (IMF) - World Economic Outlook

The present situation of the South African labour market is such that nearly one working-age person out of four is unemployed (one out of three if including the "discouraged" workers). The creation of jobs and the reduction of unemployment are thus main priorities in reducing income inequality (OECD, 2010a:23).

Evident from Figure 7 is that there has been a downward trend since 2003 and that the increases in 2008 and 2009 were, most likely, due largely to the global economic crisis.

3.1.7 The youth and unemployment

Youth unemployment is especially serious in South Africa because as with overall unemployment, South Africa is an outlier in this regard. In other middle-income emerging market economies nearly 80% of youth in the labour force were employed in 2007, whereas in South Africa the figure was only 53% (OECD, 2010b:94).

Referring to Table 6, which introduces South Africa's unemployment by age group, one can see that the unemployment rate increased considerably for the 25-54 age group over the 1993 to 2008 period. This is also true for the 16-24 age group. When combining these two groups, the most marked rise overall, was for the 21-30 year olds (OECD, 2010a:216).

The data presented in Table 6 shows an increasing trend from 1993 to 2001 across all age groups. From 2001 to 2008, however, there was a decreasing trend in all age groups.

	Age group		
Year	16-24	25-54	55-64
1993	29.9	11.2	5.5
1997	39.9	18.9	7.3
2001	53.6	25.2	10.9
2005	51.6	22.8	8.5
2008	39.4	21.5	6.8

Table 6:Unemployment by age group, 1993-2008

Source: PSLSD (1993), OHS (1997), LFS (2001, 2005) & NIDS (2008) in OECD (2010a:216)

The increase in youth unemployment is a result of labour force participants struggling to gain entry into the labour market (Burger & Woolard, 2005 in OECD, 2010a:216). To emphasise this latter point, in 1993, 51% of the unemployed reported never having had a job before and this rose to 59% in 2008. These percentages comprise the large majority of the unemployed workforce under 30 (OECD, 2010a:216).

To exacerbate South Africa's problem, much of the unemployment is long term and even worse, this is prevalent mainly among the youth. Long-term unemployment (defined as being unemployed for longer than one year) generally means that the economy is not capable of creating sufficient jobs to support the working-age population (OECD, 2010a:218).

3.1.8 Education and unemployment

A highly educated individual is as vulnerable to unemployment as an uneducated individual. As the supply of labour exceeds the demand, the better educated are increasingly finding themselves amongst the unemployed. Youth unemployment is a common trait amongst even advanced economies but in a country like South Africa, with a high skills mismatch, the inability of highly educated people to find work may be an indication of labour market rigidities (Arora & Ricci, 2005:24).

The evidence suggests that labour demand simply cannot absorb an increasing number of educated labourforce participants (OECD, 2010a: 248-249). This is perhaps the main cause behind the so called, "brain drain" and "jobless growth" because as the section on South Africa's economic history points out: South Africa was stable and growing over the last two decades and therefore educated people (if anyone) should have been able to find work.

Yet unemployment in South Africa is increasing across all levels of education and although increasing skills in identified areas will help decrease unemployment, it is unlikely to yield a sufficiently large change due to the extent of the unemployment problem (OECD, 2010a:250). This seemingly supports the viewpoint that simply growing a sector or two will not fully alleviate the unemployment problem.

3.1.9 The informal sector

A study conducted by Kingdon and Knight (Arora & Ricci, 2005:24) in 2004 found that the size of the informal sector is surprisingly low given the extent of unemployment – even when compared to other countries in Africa, Asia and Latin America.

Informal employment is any job within a business that is not registered for tax purposes, in addition to all domestic workers. And with the extent of South Africa's unemployment being so high, one would expect the informal sector to be relatively big. In reality, this is not the case; the informal sector is relatively small by international standards (OECD, 2010a:221).

Despite high unemployment rates, the unemployed do not enter the informal sector – implying some sort of barriers to entry. Informal workers, as with workers in the formal sector, face the common problem of low labour demand (OECD, 2010a:221).

The situation of the youthful unemployed is thus worse than the 41% unemployment rate suggests, since over 30% of the employed youth were working in the informal sector in 2008, implying that a meagre 29% were formally employed (OECD, 2010a:221).

The African sub-group is worst off, with 33% working in the informal sector in 2008 – the highest of all the race groups. This dominance of the African sub-group does have income inequality implications, as wages are generally much lower in the informal sector, the average wage being USD 203 (R1 291) per month in 2005 as opposed to USD 715 (R4 548) per month in the formal sector. The African sub-group is bound to have an immense impact on income inequality because in 2008 they made up 80% of the population (OECD, 2010a:222, 226).

3.1.10 The New Growth Path

President Jacob Zuma has endorsed a NGP for South Africa that will place employment at the centre of government economic policy (Government Communications, 2010:1). "The new growth path is intended to address unemployment, [income] inequality and poverty in a strategy that is principally reliant on creating a significant increase in the number of new jobs in the economy, mainly in the private sector." (Government Communications, 2010:1). The NGP's target is to create five million jobs in the next ten years. Moreover,

the NGP seeks to move the South African economy from one that is based on consumption-led growth to one that is production-led (Government Communications, 2010:2-3).

To achieve this path, government has identified two approaches: a macro-economic approach and a microeconomic approach. The macro-economic approach entails a careful balancing of more active monetary policy interventions to achieve growth and jobs targets, while the micro-economic approach involves targeting measures to support jobs and competitiveness, which in turn makes the macro-economic strategy sustainable and viable. The micro-economic approach includes reforms in policies on skills development, competition, industry, small business development, the labour market, rural development, African development and trade policy. Furthermore, the micro-economic approach calls for a major review of the operation of BEE to ensure that empowerment is integrated with growth and employment imperatives (Government Communications, 2010:3).

The South African Government states that the NGP will rely on re-invigorated social dialogue and a renewed sense of shared solidarity if it is to succeed (Government Communications, 2010:3). Therefore, given that the South African Government feels the NGP will rely on social dialogue, shared solidarity and calls for a major review of BEE, this dissertation hopes to not only clarify the truth behind BEE (and BBBEE) but also to ignite the debate that will lead to the sought after solidarity. In this context, the role of labour unions in determining wages must be addressed.

The eradication of unemployment is, however, not a new goal for Government. Hunter *et al.* (2003:37-38) point out that the South African Government has attempted to directly stimulate employment as a part of its poverty reduction strategy.

As previously mentioned, both Government and its critics have sidestepped, or ignored, the challenge of unemployment (Seekings & Nattrass, 2005:380). Even sustained economic growth offers limited benefits to the poor due to the fact that South Africa began in a position of massive unemployment-based poverty (Meth, 2003 in Seekings & Nattrass, 2005:380), a situation that has not improved. Therefore, even with government's NGP, South Africa will not be able to replicate the reductions in poverty and income inequality experienced by the East Asian tigers. The social democracies of northern Europe have historically also managed to see marked improvements in poverty and income inequality but South Africa cannot replicate the labour market and welfare policies of these nations because of the scale of unemployment and poverty (Seekings & Nattrass, 2005:380) prevailing in this country. Since South Africa cannot look to the experiences of others to inform policy decisions, it is up to South African policymakers to determine the root cause of the problem and to solve it.

3.1.11 Grants to the unemployed

Having just read about the NGP's objective to place employment at the centre of economic policy and referring back to section 2.2 and the discussion on grants, there is evidence of support for extending the cover of social assistance to unemployed persons. In fact, the support for such a scheme is both widespread and popular. As is to be expected, the strongest support came from the poor, with nearly 84% agreeing or strongly agreeing with the proposition that "people who cannot get work deserve help in the form of social grants". Support was weakest among the "non-poor" (66%) but a clear majority in favour still prevailed. The unemployed themselves also gave significant support (79%) for the proposition (Noble & Ntshongwana, 2008:5).

It appears that the South African Government is treating the symptom rather than the cause. In other words, it appears that the government is helping those that do not earn an income rather than creating work for those same people to earn an income. Government appears to be incessantly extending the social security web to cover an ever increasing number of people, as seen in the figures presented in section 2.2, the extension of the Child Support Grant to children up to the age of 14 years and the thought of extending social security to the unemployed. It is therefore not surprising that Bhorat *et al.* (2010:11) feel the rate at which grants are paid out is unsustainable and that it would be reckless for government to increase the number of beneficiaries at the going rate.

Would an unemployment grant be successful? The success of the grant would depend on the objective. If the objective were to simply aid those who do not have work, then yes, the grant would be a success. However, if the objective were to increase economic growth and development – and this is one of government's twin objectives for social security (Samson *et al.*, 2006:1) – then the grant would not be a success. Given that the greatest obstacle to finding work is the unavailability of jobs (Noble & Ntshongwana, 2008:3), government will only be providing the unemployed with an incentive to *not* work, by providing an unemployment grant. An unemployment grant will defeat the objective of creating employment through growth and development, by removing the incentive to generate income. In so doing, it will defeat the NGPs objective of addressing unemployment, income inequality and poverty.

Even the Department of Rural Development and Land Reform acknowledges that the government must be worried if the youth are walking the streets, unemployed and reliant on grants (Mohoebi in Enslin-Payne, 2011:1).

Therefore, rather than treating the symptom (extending the social security web), government should treat the cause. In a similar fashion, the Spence Commission found that "It is also not uncommon in policy debates in

developing countries to hear that the problem is on the supply side: it is a matter of weaknesses in the labour force, not the weakness of labour demand. The underemployed population lack skills, the argument goes, therefore the solution is to train them. The aim is to upgrade labour supply, rather than stimulating labour demand. There is a certain theoretical sense in which this argument is true. In principle, if workers were sufficiently educated and heavily trained, they would be worth the cost of hiring them, even with the full panoply of benefits and wages that prevail in the formal sector. But it is difficult, not to say extremely expensive, to upgrade the skills of workers before finding employment for them, partly because workers learn so much on the job. Thus, while there is no disagreement about the need for education and human capital investment, as a matter of strategy in many countries, this supply-side approach will often not be sufficient." (Spence *et al.*, 2008:46 in OECD, 2010b:111-112).

3.2 WHAT CAUSES UNEMPLOYMENT IN SOUTH AFRICA?

Clearly South Africa has a problem with unemployment and within the voluminous amount of literature that exists about why this is, three major and interrelated causes are often cited (taken from Go, Kearney, Korman, Robinson & Thierfelder, 2009:2):

- Insufficient economic growth, mostly in the tradable sectors.
- High labour cost or real wages.
- Labour market rigidities and other structural problems in the labour markets.

Regarding the three points above, this dissertation has already discussed and proved that insufficient growth cannot be seen as the cause of unemployment. The latter two points are addressed hence forth.

3.2.1 Labour market rigidities

Labour legislation and an inflexible labour market – dominated by labour unions – are considered by entrepreneurs to be barriers to formal self-employment. In addition, workers under 20 exhibit higher participation in the informal sector and this is possibly because the barriers to formal employment are higher than for other age groups (OECD, 2010a:223).

3.2.2 Labour unions and high labour costs

Considering the comments of the Spence Commission (Spence *et al.*, 2008:46 in OECD, 2010b:111-112), this section covers labour unions and their influence on the demand for labour.

Moll (1995) and Godfrey *et al.* (2007) in OECD (2010a:236) have similar views about the main agenda of labour unions in South Africa. The main agenda of labour unions is to address the effects of the inequalities created by the racially warped labour market of the Apartheid era. The agenda includes three objectives: raising wages, improving working conditions and expanding social benefits.

There is an increasing view that not only do labour unions raise the unemployment rate, by privileging the interests of "insiders" and promoting the exclusion of "outsiders" but strong labour unions exacerbate income inequality. Labour unions do this through their organisational power at the workplace but also by advocating broader institutional measures (Watt & O'Farrell, 2009:1).

In line with the above, labour unions privilege the "insiders" by fighting for the three objectives and thus create a situation in which the supply of labour exceeds the demand for labour. In other words, unemployment is created in the economy.

Labour unions bring rigidity (relates to point 3 above) into the labour market and create inequality within wages, and wage inequality is undoubtedly the leading cause of income inequality. Not only is wage income the greatest source of income but the distribution of it is highly skewed, (Bhorat *et al.*, 2010:9). Nattrass (1998) in Naudé and Coetzee (2004:14) states that wage setting should, therefore, be made *more flexible*. Not only are there gains from economic growth but the gains from international trade (which are well documented and accepted) have all been stifled by government, through allowing labour unions to control the labour market. This has thus exacerbated the problem of income inequality. This is evident when one considers that as of June 2010, there were 198 registered trade unions in South Africa (SA Department of Labour, 2011:1). Each of these unions, which in totality cover the entire labour market of South Africa (from building, transport, hospitality, leather workers, insurance and banking, aviation, clothing and textile, health, communication, mineworkers, cricket and football to agriculture and parastatal), contribute to the high level of rigidity.

South Africa is experiencing both a high unemployment rate and rising capital intensity of production, which suggests to some analysts that businesses are convinced that the costs of hiring more workers exceed the benefits (relates to point 2 above). In light of this, the solution to unemployment is the lowering of unit labour costs, in particular by reducing wages (Pollin, Epstein, Heinz & Ndlkumana, 2006:27). "The high cost of labour relative to capital has resulted in a production shift away from unskilled labour, where South Africa *does not* have a comparative advantage, and towards more skilled and capital-intensive production". (Banerjee *et al.*, 2008 in OECD, 2010a:218).

To improve South Africa's situation, a simultaneous increase in labour demand is needed if the newly educated are to avoid joining the ranks of the unemployed (OECD, 2010a:250). If wage setting becomes more flexible, the wage rate will decrease but this decrease will increase the demand for labour and in so doing will help alleviate unemployment.

3.2.3 How labour unions are directly harming the youthful unemployed

Since the youthful unemployed is the major contributor to overall unemployment, several strategies to assist the youth in obtaining a first job have been put forward, for example: a wage subsidy, a search subsidy and reduced regulations for first jobs. Policies of this nature received endorsement from the Harvard Group report (Banerjee *et al.*, 2008 & Levinsohn, 2008 in OECD, 2010a:224) and several of these are under consideration (OECD, 2010a:224).

The youth wage subsidy, for example, was first suggested in the February budget speech of 2010 and this "wage subsidy may have more potential in South Africa than in many other countries, although design is crucial." (OECD, 2010b:110). The objective of the subsidy would be to allow for more young people with no or minimal job experience to obtain employment in areas which could provide training, thereby gaining skills and experience. This would then introduce them to the labour force and increase overall employment in the country (Williams, 2010:1).

Go *et al.* (2009:13-14) calculate the effects of a wage subsidy and find that about 1.6% of households move out of poverty with the implementation of the wage subsidy (based on the USD 1 per day as the poverty line). Moreover, rural poverty and urban poverty also decrease by about 1.5% and 1.6% respectively. The employment effect also offsets the addition of a social security tax with a 1.5% reduction in the poverty rate.

In addition, the decomposition of headcount poverty ratio by population deciles shows that poorer households, on average, gain more than richer households. In fact, all inequality indicators improve. The Gini coefficient declines by about half a percentage point and a similar decline is observed at the regional level (Go *et al.*, 2009:14).

The subsidy was not implemented because sometime after the 2010 budget speech COSATU objected to the subsidy, saying that it endangered the jobs of union members (Williams, 2010:1). "Six months on, there is every indication that the wage subsidy, which Finance Minister Pravin Gordhan estimates would create 500 000 new youth jobs by 2013, is still-born because of politicking within the tripartite alliance". (Helen Zille in SAPA, 2010:1). In the February budget speech of 2011, Minister Gordhan again proposed the youth wage subsidy and still the "proposal is not cast in stone," (Rossouw, 2011:1). The subsidy has been

condemned by organisations such as COSATU, the Young Communist League and the National Youth Development Agency – even though the members of these organisations may benefit from it. The youth wage subsidy is thus to be further considered by Parliament and NEDLAC (Rossouw, 2011:1).

Mentioned in the section on youth and unemployment (section 3.1.7), is the fact that the increase in youth unemployment is a result of labour force participants struggling to gain entry into the labour market (Burger & Woolard, 2005 in OECD, 2010a:216), with 59% of the unemployed in 2008 reportedly never having had a job before (OECD, 2010a:216). Many young South Africans are thus caught in an unemployment trap due to their inability to get that first job. Furthermore, many of these young people remain unemployed for long periods of time (i.e. long term unemployment). This is representative of South Africa's serious problem of youthful unemployment. The labour market requires the youth to have experience in order to get a job but the youth need a job to gain labour market experience (Pollin *et al.*, 2006:7).

Preliminary calculations performed by Treasury show that a R5-billion youth wage subsidy can create up to 400 000 jobs for young people. Minister Gordhan feels that if every business takes on one or two extra people, the problem will be solved in no time (Rossouw, 2011:1).

With the potential benefits being so great, why has the youth wage subsidy not been implemented? The most apparent answer is because the subsidy has drawn the ire of COSATU, which says that "such a system will create a two-tier labour system in which workers will be abused by employers because employing young people by means of the subsidy would be cheaper than giving them permanent jobs." (Rossouw, 2011:1). A statement by the People's Budget Coalition makes COSATU's fear clear: "Unscrupulous employers will keep an army of young workers permanently and replace secure and better-paying full-time jobs currently held by older workers." (Rossouw, 2011:1).

"This is a great tragedy, not only for the 3.1 million unemployed young South Africans, but for everybody who is serious about reducing poverty and [income] inequality". (Helen Zille in SAPA, 2010:1).

In the section on South Africa's economic history (section 2.2), it was mentioned that to "roll poverty back", the South African economy needs to create an additional three million jobs and that it is vital that any economic growth in South Africa also create employment if income inequality is to be reduced. COSATU, by opposing the youth wage subsidy is, therefore, directly working against the objective of creating employment and hence working against the reduction of income inequality.

It appears that the strength of labour unions in South African is far too strong. Half a million jobs could have been created if this subsidy had become law, yet COSATU, opposed the subsidy and directly hindered the creation of employment.

"A wage subsidy is worthy of consideration if the level of entry wages for youth proves to be an important cause of youth unemployment. A subsidy for employers would correct a situation in which these wages are too high from the employer's point of view but it would be socially sub-optimal for these wages to be adjusted downwards. This is a hard argument to make, and such a subsidy would be hard to target." (OECD, 2010a:224). It may be hard to make this argument and this type of subsidy may very well be hard to target but government has shown a willingness to test policies on a small scale through policy trials and "this willingness to experiment is to be endorsed." (OECD, 2010a:211, 224).

Perhaps the South African Government should live up to its endorsement and implement the youth wage subsidy in a province with a high level of youth unemployment and then, should the subsidy work, prove its success to COSATU. If it works, then everybody gains and COSATU will no longer have any grounds on which to oppose the subsidy but if it is not even tested because COSATU objects, then the nation loses.

This study acknowledges that the impact of the wage subsidy is dependent on the elasticities of substitution of the factors of production as well as the structural characteristics of the labour market (Go *et al.*, 2009:16). However, these authors only make the argument for this study stronger. Given that there is much uncertainty regarding the degree of labour market flexibility in South Africa, there is also much uncertainty regarding the likely impact on employment, poverty and income inequality. Nonetheless, labour market flexibility is a crucial factor. In fact, through a combination of the wage subsidy, some marginal easing of the skills and capital constraints and of policies to improve labour market flexibility, a short-term package of measures towards the long-term problem of unemployment is fashioned. This would of course be a provisional step and any sustainable effort would require tackling the underlying factors to the unemployment in South Africa (Go et al., 2009:16).

3.3 ECONOMIC RAMIFICATIONS OF IMPROVING EMPLOYMENT

"Given that employment is the main bridge between economic growth and higher living standards, a positive employment environment is the key requirement for sustainable social transformation in South Africa. Reductions in unemployment will depend critically on growth induced increases in labour demand and on the supply of a well-educated labour force with the necessary skills to fill the jobs that are created." (OECD, 2010a: 224).

The high unemployment rate has direct and indirect economic costs. Beyond an enormous loss of potential national income, the high rate of unemployment also contributes to a range of other social problems, including: poverty, lack of social mobility, crime and HIV/AIDS. In turn, these problems then exact economic costs and can therefore be attributed to, in part, the failure to generate employment (OECD, 2010b:94-95).

In the presence of HIV/AIDS, not only is real GDP growth weaker by at least 0.3 percentage points a year but the disease also worsens income inequality and poverty (Bureau of Economic Research, 2006; Arndt & Lewis, 2000 and Quattek, 2000 in OECD, 2010b:95-96). The World Bank's Investment Climate Survey of South Africa (World Bank, 2005) estimated the costs of crime to businesses to be roughly 5% of labour costs, while the very high rates of violent crime in particular are regularly cited, even by the South African Government itself, as a factor that discourages foreign direct investment (Stone, 2006 in OECD, 2010b:96). Poverty and income inequality are in large part due to the high unemployment rates in South Africa and the extensive social grants have helped mitigate this (Leibbrandt, 2010 and OECD, 2009 in OECD, 2010b:96), but are at the same time restricting fiscal space and threatening to strain fiscal sustainability (Fedderke, 2009 in OECD, 2010b:96).

3.4 RELATING IT ALL BACK TO INCOME INEQUALITY

Aside from a slight drop between 2005 and 2008, post-Apartheid South Africa has seen a rise in income inequality and the labour market is identified as the leading driver thereof (OECD, 2010a:232).

In the left hand panel of Figure 8 below, South Africa's current income inequality is portrayed. As can be seen from the Lorenz curve in the left hand panel, there is a large deviation away from perfect equality. The further away the Lorenz curve is from perfect equality, the worse is the income distribution within a country. This deviation includes a large percentage of the population living in poverty and a very small percentage of the population considered to be "middle class".





Source: Adapted from Black et al. (2006:215)

In graphical terms, policies and legislative measures aimed at correcting income inequality thus attempt to move the Lorenz curve up toward perfect equality. In the right hand panel of Figure 8, the potential income equality of South Africa is depicted. This "potential income equality" is simply the graphical representation of a situation in which South Africa has managed to reduce the levels of income inequality. The right hand panel shows a visible reduction in the percentage of people living in poverty and a large increase in the percentage of people considered "middle class".

With the current South African labour market being ruled by labour unions, the economy finds itself in a situation like the one in the left hand panel of Figure 8. Although not the historic reason behind the high levels of income inequality, labour unions are one of the key reasons why the high levels persist. This not only has ramifications on income inequality but also on taxpayers and government itself.

In the present economic climate and with such a large portion of the economy living in poverty and/or being unemployed, the South African Government has a very small tax base, meaning that the percentage of the population paying taxes is very small. Since these taxes need to support an entire country, in terms of public goods and services and grants, taxpayers must pay rates that are higher than necessary in order to provide government with the required revenue. In addition, the revenue collected by government which is used for grants, has to be spread amongst a large portion of the population. In other words, each of the families that require a grant from government in order to survive, are in fact receiving an amount which could be much bigger.

A greater level of flexibility will be realised in the labour market if the South African Government reevaluates the power labour unions have in determining wages. In so doing, South Africa could move to a situation like the one depicted in the right hand panel of Figure 8 through increasing employment. The potential gains from such a reality, would be immense. Below is a table of the potential benefits.

Government	Population		
Broader tax base, i.e. a larger percentage of the population paying taxes.	Lower tax rates.		
Population less dependent on grants, thus more revenue available for other services.	Larger grants available to those families still needing grants.		
Welfare of the population will increase.	Less people living in poverty and improved health.		
Improved productivity and greater economic growth as result of improved health.			
Country as a whole			
Achievement of the first MDG and an improvement in	income inequality.		
Possible reduction in the level of crime.			
Higher equality producing higher levels of publicly shared goods that foster greater equality of opportunity, income insurance and greater upward mobility.			

 Table 7:
 Potential gains South Africa faces with higher employment

Source: Table compiled from Black et al. (2006:126,150) and MacEwan (2009:2-15)

As Go *et al.* (2009:16) point out, labour market flexibility is a crucial factor and any sustainable effort directed at reducing unemployment will require tackling the underlying factors in South Africa. From the evidence presented, it seems as though the very policies (BEE and BBBEE) implemented to address income inequality have not had the desired effect. Furthermore, labour unions ensure that a high level of labour market inflexibility exists in South Africa and so the South African Government, in seeking to address income inequality (and poverty), must begin with their own policies – as indicated in the NGP – but must furthermore, examine the role of labour unions.

The key criticisms of South Africa's labour legislation have been its indirect effects on employment levels and income equality (OECD, 2010a:238). It is therefore not surprising that the South African labour market, which is a transmission mechanism through which globalisation induces higher inequality, has harmed South Africa through higher unemployment, directly causing less wage income to be received by poorer or unskilled households (Naudé & Coetzee, 2004:13) and hence prevented any likely improvement in income inequality.

3.5 SOLVING UNEMPLOYMENT AND HENCE INCOME INEQUALITY

In section 3.1.10 it was mentioned that South Africa cannot replicate the achievements of the East Asian tigers or the social democracies of northern Europe. Seekings and Nattrass (2005:382-388) go on to compare

South Africa to the Netherlands and Ireland and then state that South African firms have recreated the conditions for renewed accumulation without an explicit commitment on the part of organised labour to wage restraint (this emphasises the need for a reinvigorated social dialogue and renewed sense of shared solidarity). If the South African objective is to form a stronger, more labour-demanding and less conflictual growth path, then an explicit agreement on the part of organised labour to restrain wage demands might help improve the investment climate – this was the case in the Netherlands and Ireland. Although investment has not been discussed, it is central to development and growth. South Africa, therefore, certainly has room for a more co-operative growth path that could benefit both labour and capital.

Simply put, growth of the labour market is vital to reducing income inequality in South Africa. But how can the labour market, be stimulated to grow?

Pollin *et al.* (2006) put forward a few viable alternatives which can increase the demand for workers (demand-side). The authors state that the costs businesses face when hiring workers need to be reduced. Four alternative options for doing this are available (taken from Pollin *et al.*, 2006:21):

- Workers receive lower overall compensation which must include wages and benefits.
- The industrial relations system and labour market regulations operate with more flexibility.
- Workers perform workplace operations at a higher level of productivity.
- Government absorbs some portion of the costs of hiring workers.

It would seem that the latter option is no longer viable. It was explained above that the youth wage subsidy is still-born because of politicking within the tripartite alliance, impeded primarily by COSATU (SAPA, 2010:1). COSATU is still opposing the subsidy even though Treasury has estimated that it could create up to 400 000 jobs for the youthful unemployed (Rossouw, 2011:1). It is furthermore the viewpoint of this dissertation, that the supply-side perspective on employment expansion need not be considered, since South Africa has experienced economic growth, economic stability and increased international trade over the past 20 years. Furthermore, government has actively introduced programmes like the Accelerated and Shared Growth Initiative for South Africa (ASGISA). The ASGISA is focused on expanding public investment, including labour-intensive areas. Its focus is to cut unemployment in half by 2014. ASGISA also predicts a sustained increase in South Africa's average GDP growth rate to 6% between 2010 and 2014 (Pollin *et al.*, 2006:2).

Not only this, but it was mentioned in section 3.1.8 (education and unemployment) that the better educated are increasingly finding themselves amongst the unemployed. Therefore, even though years of education and probability of being employed are highly correlated in South Africa, the evidence suggests that labour demand simply cannot absorb an increasing number of educated labour-force participants (OECD, 2010a:

248-249 and OECD, 2010b:97). Moreover, the size of the informal sector is surprisingly low given the extent of unemployment – even when compared to other countries in Africa, Asia and Latin America. Unemployment is mainly involuntary as unemployed individuals are considerably worse off than employed individuals – even if employed in the informal sector. This therefore suggests that unemployment in South Africa is mainly due to factors that limit labour demand. This conclusion is consistent with the rapid rise in unemployment – notwithstanding the initial low levels – among young people with tertiary education in the past decade (Kingdon & Knight, 2004 in Arora & Ricci, 2005:24).

One could argue additional factors that limit supply, like health – HIV/AIDS – in particular but "overall adult infection rates have stabilised and rates among younger adults appear to have declined". (Shisana *et al.*, 2009 in OECD, 2010b:99). It is true that South Africa has more people living with HIV/AIDS than any other country in the world (UNAIDS, 2008 in OECD, 2010b:99) and more than a quarter of pregnant women are HIV positive but these are due to the high direct and indirect economic costs associated with unemployment as mentioned in the section covering the economic ramifications of improving employment. This sets in place a vicious cycle in which high unemployment rates indirectly affect HIV/AIDS rates which, in turn, again affect the unemployment rate.

Notwithstanding the above, the following sections discuss the remaining alternatives from the demand-side perspective because as the authors state in OECD (2010b:100), "The greatest problems are probably on the demand-side of the labour market... insufficient labour demand has been the major part of the low employment problem."

3.5.1 The industrial relations system and labour market regulations operate with more flexibility

A valuable lesson to take from the recent global economic crisis is the need for the economy to adapt to changing economic forces. Yet, restrictions on employee hiring and firing can seriously limit an economy's ability to do so (Blank, 1997:4). In this regard, if existing labour market and trade policies in South Africa are to stay in place, then the welfare and tax regime must change. On the other hand, if the welfare system is to stay, then either trade liberalisation should be slowed down or wage setting made more flexible – or both". (Nattrass, 1998 in Naudé & Coetzee, 2004:14).

Not only is South Africa's labour legislation too rigid for the kinds of unemployment conditions and labour market segmentations that currently exist (Aron *et al.*, 2008 in OECD, 2010a:239) but the stringent labour legislation is causing the following (taken from Bhorat *et al.*, 2002 in OECD, 2010a: 239):

• labour to be replaced by capital,

- workers to endure unemployment for substantial lengths of time, and
- firms to keep employment levels at a bare minimum.

An additional two studies, one by Rankin (2006) and the other by Godfrey *et al.* (2007) in OECD (2010a:239), confirm the findings of Bhorat *et al.* (2002).

It is thus apparent that the current legal and institutional constraints in wage bargaining prevent wages from being set at market-clearing levels and thus inhibit firm managers from organising the workplace in the most efficient way (Pollin *et al.*, 2006:21-22). The stakeholder commitments of the NGP for South Africa require a national consensus on wages in order to ensure a significant increase in the number of jobs in the economy. This includes a call for shared sacrifice to shift society to the NGP (Government Communications, 2010:4).

Evidence has shown that the easing of severance restrictions in economies with historically extensive labour regulations and the increasing ability of firms to hire part-time or temporary labour are almost surely necessary changes. However, greater regulation and social assistance must come with flexibility. In other words, there must be a greater willingness to redistribute the costs of that flexibility throughout the economy, rather than forcing it to be borne by particular groups of workers (Blank, 1997:4). This is perhaps where BEE and BBBEE failed.

Through two types of policies, countries can offset the costs of on-going labour market changes (taken from Blank, 1997:4):

- Active labour market policies that raise wages (although not beyond productivity-justified levels) and aid the unemployed in finding jobs.
- Income redistribution policies that provide a social safety net.

Many countries have experimented with a variety of active labour market policies, from job placement and training programmes, subsidies and tax incentives for hiring disadvantaged workers, to public sector job creation – particularly for those in long-term unemployment and younger workers who may have dropped out of the labour market entirely. The benefits of these programmes include directly addressing some of the problems of low skills, inadequate access to jobs and also operate in redistributing some of the gains of the "winners" to the "losers" (Blank, 1997:4).

Despite the plentiful evidence that these programmes have positive effects (US Department of Labour, 1995 in Blank, 1997:5), it is important to realise that such effects are typically small. Traditionally, such programs have worked best when run on a small scale for targeted groups. In addition, most evaluations show that training and job placement programmes rarely lead to large increases in future income and they make

significant demands (in terms of participant cost and management expertise) on the public sector (Blank, 1997:5).

Labour policy should try to meld the best parts of a flexible private labour market with an effective set of active labour market and social protection policies (Blank, 1997:5).

3.5.2 Workers receive lower overall compensation which must include wages and benefits

Moll (1995) and Godfrey *et al.* (2007) in OECD (2010a:236) agree that the main agenda of labour unions in South Africa is comprised of three pillars: raising wages, improving working conditions and expanding social benefits. By allowing labour unions to influence wages with such ferocity, the South African Government is allowing the well-being of labour unions to supersede the well-being of the entire South African population.

The LRA outlines working conditions and employment standards (OECD, 2010a:233) and the legislation shown in Table 5 shows that labour unions are in effect redundant on any matter other than their influence on wages. Why is this?

Unions fight to: increase wages, improve working conditions and expand social benefits. But referring back to Table 5 and to The South African Labour Guide (2011:1), one will note that South African labour legislation covers all these areas and more, including minimum wages. Since legislation covers all the areas unions fight for, the real power of labour unions is in their ability to strike, bringing the country to a halt and in so doing, forcing employers to pay wages that are higher than the equilibrium rate. As discussed in section 3.2.2, this ultimately creates unemployment.

Labour unions are not the sole contributors to high levels of unemployment but they are a major factor to consider.

Within the above context, the South African labour market is cited as the reason behind the persistently high levels of income inequality. The labour market has historically provided and continues to provide, unequal opportunities in education and employment. These can explicitly be mentioned as contributing factors to an unequal income distribution, although the role of a skills mismatch and the concomitant unemployment problem cannot be underestimated. If one furthermore considers the labour-market nexus of Seekings and Nattrass (2006:5), the sections above show that South Africa has had good economic growth over the 1990 to 2009 period and that this growth has been stable. In addition, the transition to democracy ensured that there was, and still is, sufficient global demand for exports. Lastly, the progressive tax system and the

income re-distribution via grants, completes three of the four pillars of the nexus. The remaining pillar, the employment and wage-setting institutions/policies is the only one not in place and it is therefore this one that has prevented South Africa from achieving its distributional outcomes.

4 LITERATURE REVIEW

4.1 INTRODUCTION

Policymakers often promote economic growth as the panacea for poverty reduction in the developing world but there has been a failure to recognise that growth is a means to an end, rather than an end in itself (The Growth Report in Stuart, 2011:3).

Studies suggest that a response to the new challenges (the wake of the global economic, food and fuel crises, as well as the deadline to meet the MDGs approaches) requires making a real shift to battling income inequality. This not only means inequality of income but also of assets, opportunity and gender for example. Such inequalities are not only morally repugnant but they are holding back people from benefiting from the progress that has taken place in South Africa. "In sum, when economic growth is positive, society might be better off when compared with the past. But economic policies that simply focus on average growth rates could be dangerously naïve, especially in countries with high existing levels of inequality". (Ramcharan, 2010 in Stuart, 2011:4).

South Africa is riddled with unemployment and poverty. According to Statistics South Africa (StatsSA), unemployment for the second quarter of 2010 was stated at 25.3% (StatsSA, 2010:1). This figure has seen a recent decrease to 24% for the fourth quarter of 2010 (StatsSA, 2011:1). With an obvious link between unemployment and poverty, government should not continue with current legislation and policies, since these have been directly aimed at reducing the levels of economic deprivation and inherited disparities of wealth and income (Vilakazi, nd:1), yet have clearly misfired and missed the target. Fosu (2011:15) makes this last point vividly clear: in South Africa, both income levels and their distribution worsened, exacerbating the poverty picture for the early/mid 1990s to the present. Even South Africa's MDG Country Report states that the 2015 target of decreasing the Gini coefficient to 0.3 is "unlikely" (StatsSA, 2010:25).

In the following sub-sections a number of local and international studies of income inequality and related matters are reviewed, in an attempt to identify the principle drivers of income inequality and to empirically measure the impact of changes in these variables on income inequality, as these results may potentially be informative and useful in guiding policy recommendations.

4.2 PREVIOUS STUDIES ON SOUTH AFRICAN INCOME INEQUALITY

Previous studies on South African income inequality have focussed on several different aspects – yet income inequality remains extreme. Some examples of past research and their respective focuses are provided below to demonstrate the diverse nature of topics covered. Though so much has been researched and investigated, the problem of income inequality remains. It thus appears that a gap remains in the understanding of South Africa's income inequality and hence this study seeks to fill this gap by empirically analysing income inequality.

Some examples of the studies conducted by previous authors:

• Income inequality, employment, education and gender (Gelb, 2003).

Gelb (2003) looks at the nature of the divide between the "two nations" (the one black and the other white) and the reasons behind the limited response to this divide since 1994 and the fall of Apartheid. Gelb's paper argues that this response can be understood only through a historical analysis of the transition to democracy. Furthermore, the paper examines the composition of income inequality and poverty through analysing a number of horizontal indices, including: race, gender, region (province) and urban-rural location. It is this examination of income inequality and poverty that ties Gelb's paper to this study. Not only this but Gelb concludes by mentioning that "[a] model of 'shared growth' – one which addresses polarisation and income inequality directly – must have sustainable employment creation at its centre, if its benefits are to be spread widely enough… But the political conditions for shared growth are daunting: it requires social consensus... for this necessary condition seems to be the existence of an own (national) tradition of co-operation or compromise." (Gelb, 2003:76).

• The possibility that income inequality between races is making way for income inequality within race groups (Van der Berg & Louw, 2003).

In the abstract to the paper, Van der Berg and Louw mention that research on income distribution in South Africa has, historically, focused on the inter-racial aspect because, since the 1970s, quite dramatic changes have occurred in inter-racial income distribution patterns and this implies a narrowing inter-racial income gap. In this context, the two authors address the possibility that maldistribution of income between races is now making way for maldistribution of income within race groups. In other words, is inequality shifting from between group to within group inequality?

Section 3.1.2 shows that this might well be the case.

- The effect that BEE has had as a non-racial nation-building strategy (Iheduru, 2004).
 - Iheduru's paper evaluates the evolution and the implementation of the ANC Government's commitment to fostering a black capitalist class, using BEE as a non-racial nation-building strategy. Iheduru finds that the legitimating role assigned to the emerging black middle class, by Government, is however, threatening to turn the strategy into a nepotistic accumulation. Due to this development paradoxically threatening to re-racialise the country, widen black inequality gaps and preclude the rise of a black middle class, other equally powerful social groups have begun to challenge the prevailing strategy. This has compelled Government to explore a more accommodating strategy exemplified by the recent introduction of BBBEE.

Ineduru finds that if a less patrimonial, less racially and ethnically divisive BEE strategy somehow emerges, such a change holds prospects for the creation of a "growth coalition" capable of sustainable capitalist development and true empowerment of the black majority. And if that can be done, it would go a long way to establishing and consolidating democracy in South Africa.

- How (if at all) the labour market is a transmission mechanism through which globalisation induces higher unemployment and inequality (Naudé & Coetzee, 2004).
 This paper uses a Computable General Equilibrium model to evaluate the extent and causes of income inequality in South Africa after democracy. The authors state that the results of the paper are consistent with evidence from household and firm-level surveys in South Africa. The authors find that labour market reform, coupled with social security, can be used to achieve more equal income distributions.
- The impact of social grants, poverty and income inequality (Armstrong & Burger, 2009).

South Africa has an impressive social grants system by international standards and so Armstrong and Burger investigate the impact of social grants on poverty and income inequality. They find that social grants have a considerable impact on poverty but in terms of income inequality, it is found that social grants have a negligible impact.

• The effect of social spending on poverty and income inequality (Van der Berg, 2009).

Van der Berg's paper looks at the changes in incidence of social spending in South Africa in the period following democratisation. Since 1995, social spending grants have become a major tool of targeting resources to the poor and although the poor now get considerably more of social spending than their population share, the very skew underlying income distribution means that the post-fiscal situation is still one with great income inequality.

Of particular interest and relevance, is the paper by Naudé and Coetzee (2004). The following is a summary from the Policy Implications section of their paper (emphasis added): The labour market is a transmission mechanism through which globalisation induces *higher inequality*. This occurs through higher unemployment and less wage income towards poorer or unskilled households. Labour market imperfections contribute to allocative inefficiency (the demand for high skilled labour outstripping the supply), dynamic inefficiency (the quality of the South African labour force may be declining in relative terms) and a lack of social justice and sense of equity. These failures or inefficiencies suggest the importance of the labour market and human resource development policies as a response towards the inequality and unemployment experienced by South Africa in an era of globalisation.

Domestic labour market policies and institutions can contribute towards raising or lowering inequality. In South Africa, unionisation has reduced wage inequality, although it has also indirectly contributed to higher household inequality through lowering wage employment (Naudé & Coetzee, 2004:13-14). Nattrass (1998) in Naudé and Coetzee (2004) states that, "If the existing labour market and trade policies are to stay in place, then the welfare (and tax) regime must change. If the welfare system is to stay as is, then either trade liberalisation should be slowed down; or *wage setting made more flexible* – or both."

Despite the wealth of research that has been done on income inequality and poverty, the problem remains. A selection of international studies that empirically investigate the phenomenon of income inequality is consulted in the next section. These will form the basis for this study's empirical model specification.

4.3 INTERNATIONAL STUDIES

As Cowell (2009:17) points out, "... we want a way of looking at inequality that reflects both the depth of poverty of the 'have nots' of society and the height of well-being of the 'haves': it is not easy to do this just by looking at the income accruing to, or the wealth possessed by, two or three groups."

How does one go about modelling income inequality? In order to formulate a model of income inequality for South Africa, the functional forms of the models used by Milanovic and Ersado (2010), Ivaschenko (2002) and Alderson and Nielsen (2001) will be considered. These were chosen because the three, combined, represent a comprehensive analysis of income inequality, furthermore spanning a wide array of countries. Two of the three studies involve economies in transition as these countries typically experienced increases in income inequality following the transition from communism to democracy. It may therefore also contain lessons for South Africa in its transition to democracy in 1994.

4.3.1 Milanovic and Ersado's model

This study uses micro data from household surveys (Milanovic & Ersado, 2010:16) for 26 post-communist countries, covering the period 1990 to 2005. This study offers a very detailed analysis of income inequality because the two authors use decile shares. In so doing, a detailed picture of the changes that occur in the entire distribution is obtained (Milanovic & Ersado, 2010:16).

Milanovic (1999) in Milanovic and Ersado (2010:7) states that income inequality can increase because of transfers of the labour force from an egalitarian public sector to a much more inegalitarian private sector. Milanovic believes that ownership transformation can be a primary force behind increasing income inequality. Ivaschenko (2002) describes a similar relationship in which privatisation and structural change are linked to increased income inequality. The viewpoints of these authors seem to correlate with the viewpoint of Alderson and Nielsen (2002:16).

Building on previous studies of transition economies, Milanovic and Ersado (2010:7) estimate a country fixed-effect model. In this model, income inequality is associated with the growth rate of the economy, inflation rate, intensity of structural reforms (measured to be the un-weighted average value of nine European Bank for Restructuring and Development (EBRD) reform indices), government spending as a share of GDI and the level of national democracy (measured by the Polity database). In addition, the two authors control for the type of survey instrument used and the survey reference period (Milanovic & Ersado, 2010:7). The model specification is as follows:

$$D_{ijt} = \beta_0 + \beta_1 G_{jt} + \beta_2 INF_{jt} + \beta_3 REF_{jt} + \beta_4 EXP_{jt} + \beta_5 DEM_{jt} + \beta_6 DI_{jt} + \beta_7 DS_{jt} + \beta_8 DD_j + e_{ijt}$$
(1)

with *i*, *j*, and *t* denoting decile, country and time respectively, *D* denoting decile share, *G* real growth rate, *INF* annual inflation, *REF* the average un-weighted EBRD reform index, *EXP* total government expenditure as a percentage of GDI, *DEM* the value of the *Polity2* variable obtained from the Polity database (ranging from -10 for complete dictatorship to +10 for total democracy), *DI* the dummy variable for whether the survey is income- or expenditure-based, *DS* the dummy variable for the survey reference period, *DD* the country dummy and ε_{ijt} the error term.

After defining the variables and considering previous studies, the two authors make assumptions regarding the role of some of the explanatory variables to income inequality (taken from Milanovic & Ersado, 2010:7-8):

- Inflation is positively related, generally;
- Social expenditures dampen the rise in inequality;
- Democracy is generally anti-inequality but the evidence from earlier studies is not very robust;
- There is also general agreement that privatisation is likely to increase inequality.

The authors find that after controlling for country-fixed effects that economic reform is strongly negatively associated with bottom deciles' income share and positively with income shares of the top two deciles. Specifically, large-scale privatisation and infrastructural reform are responsible for this pro-inequality effect, while small-scale privatisation tends to raise income share of the bottom deciles. In addition, acceleration in growth is found to be pro-rich, while democratisation is strongly pro-poor, as is lower inflation. Milanovic and Ersado find no evidence that higher government spending as a share of income reduces inequality.

4.3.2 Ivaschenko's model

A less meticulous study of income inequality is done by Ivaschenko (2002). Ivaschenko's model is less meticulous because unlike Milanovic and Ersado (2010) who delve into Gini deciles and who use micro data, Ivaschenko focuses on the macro-determinants that affect income inequality of 24 transitional economies of Eastern Europe and the former Soviet Union as these economies experienced a dramatic increase in income inequality in the 1990s (2002:1). The analysis is conducted for the period 1989 to 1998. Ivaschenko's (2002:19) model is specified as follows:

$$GINI_{ii} = \alpha_i + \beta_0 GDPPC_{it} + \beta_1 GDPPC_S_{it} + \beta_2 INFL_{it} + \beta_3 ENEMP_{it} + \beta_4 CONSG_{it} + \beta_5 INDVA_{it} + \beta_6 PRIVS_{it} + \varepsilon_{it}$$
(2)
with $i = 1, ..., N$ and $t = 1, ..., T$.

where *i* represents the country index, *t* the time period, *GINI* the Gini coefficient, α_i is a country specific intercept, *GDPPC* is the PPP-adjusted GDP per capita (*GDPPC_S* is its squared value), *INFL* is the annual inflation rate, *UNEMP* is the unemployed percentage of the total labour force, *CONSG* is general government's consumption of as a percentage of GDP, *INDVA* is the value added by industry as a percentage of GDP (used as a proxy for industrial sector employment), *PRIVS* is the private sector share in GDP and ε_{ii} is the error term. All these variables enter the regressions in the natural log form (Ivaschenko, 2002:19-20).

Ivaschenko (2002:7) anticipates that the following factors will affect income inequality: the level of economic development (measured by GDP per capita), macroeconomic conditions (inflation and unemployment), government involvement in the economy (government consumption and social transfers), structural changes (economic liberalisation, privatisation and deindustrialisation) and forces outside the economic domain (political freedom and civil conflicts).

Ivaschenko (2002:7-13) anticipates the following relationships with income equality:

- negative relationship with economic development (*GDPPC*),
- positive relationship with inflation (*INFL*),
- positive relationship with unemployment (*UNEMP*),
- positive relationship with privatisation (*PRIVS*),
- negative relationship with industrial sector share in output (INDVA), and a
- negative relationship with government involvement in the economy (CONSG).

Both Milanovic and Ersado (2010) and Ivaschenko (2002) use a fixed effects model to control for unobservable country-specific effects that result in omitted-variable bias in cross-sectional studies. The outcome of Ivascheno's estimation is as follows: the relationship between income inequality, measured by the Gini coefficient and per capita GDP is shown to be positive for Eastern Europe but negative for the former Soviet Union. Economic liberalisation, privatisation and deindustrialisation are found to have contributed to the rise in income inequality in the region. Hyperinflation is also found to make the distribution of income more unequal. Furthermore, the model provides also strong support for unemployment and the size of the government affecting income distribution. In addition to the explanatory variables specified in equation (2), the author includes political control variables and finds that while civil conflicts increase income inequality, the extent of political rights and civil liberties is not found to directly affect income distribution.

4.3.3 Alderson and Nielsen's model

Alderson and Nielsen (2002) conduct a thorough and comprehensive investigation of income inequality on 16 OECD countries. This model is interesting because it examines why there has been a resurgence of income inequality in some of the advanced industrial societies. In a wide-ranging debate, the causes of this resurgence include the impact of an increasingly integrated world economy, typified by growing capital mobility, heightened competition in international markets and a swelling flow of immigrants to some countries.

Alderson and Nielsen (2002:16) start with a basic "core model", specified as follows:

$$g = f(sdu, lfa, nri, sec) \tag{3}$$

with g representing Gini coefficient, *sdu* sector dualism, *lfa* the percentage of the labour force in agriculture, *nri* is the natural rate of population increase and *sec* the secondary school enrolment ratio.

Alderson and Nielsen augment and adapt this core model, in several ways, to finally end up with 13 models in total (Alderson & Nielsen, 2002:16, 30-42). Adaptations include the addition of variables like institutional factors (the presence of unions, wage setting co-ordination and the decommodification of labour by the welfare state). Decommodification is defined as "the differing degrees to which individuals in different societies are able, given the same level of total social welfare expenditure, to opt out of the market while maintaining a 'socially acceptable' standard of living". (Esping-Andersen, 1990 in Anderson & Nielsen, 2002:22).

The results of this study indicate that total income inequality variation is principally affected by the percentage of the labour force in agriculture (sector dualism), followed by union density, decommodification and then by globalisation (Alderson & Nielsen, 2002:1). The measures for globalisation include direct investment outflows, the extent of trade between developed and developing countries and migration.

In one of the 13 models, Alderson and Nielsen identify the effects that unions have on income inequality (Alderson & Nielsen, 2002:20). The two author's state that a number of authors (for example Freeman in 1993 and ILO in 1996) have attributed a substantial part of the *income inequality upswing to the declining unionisation* that most advanced industrial countries have experienced in recent years. Since South Africa is not an advanced industrial country, it will be interesting to find out if the same is true for South Africa (Western, 1995 in Alderson & Nielsen, 2002:20).

Alderson and Nielson also make reference to the relevance of the Kuznets curve and the "great U-turn" – the phenomenon where inequality traces a curvilinear, inverted U-shaped relationship with economic development. In the course of long-term industrial development, inequality, therefore, first increases, peaks and levels off and then declines. This has implications as to what can be expected in terms of the impact of economic development on income inequality for a certain country or region.

In the following section, a model for South African income inequality is constructed, based on specifications and findings of the previous three models.

5 CONSTRUCTING A MODEL FOR SOUTH AFRICA

Based on the discussion on South African and international studies, the following model can be constructed and tested:

 $gini_{t} = \beta_{0} + \beta_{1}gdp_pc_{t} + \beta_{1}lf_manuf_{t} + \beta_{2}indva + \beta_{3}consg_{t} + \beta_{4}unionmem_{t} + \beta_{5}infl_{t} + \beta_{6}sec_{t} + \beta_{7}democracy_{t} + \beta_{8}nri_{t} + \beta_{9}unempl_{t}$ (4)

with

gini = the Gini coefficient for South Africa, obtained from All Media and Products Survey (AMPS) and Income and Expenditure Survey (IES);

gdp_pc = the real GDP per capita figure for South Africa (in constant 2005 prices) obtained from the SARB;

lf_manuf = the percentage of the labour force employed in the manufacturing sector, obtained from StatsSA;

indva = industry value added (annual percentage growth), calculated as the annual rate of growth for industrial value added based on constant local currency, obtained from EconStats.com; whose data source is the World Bank's national accounts data as well as the OECD's National Accounts data files;

consg = the ratio of government consumption expenditure to GDP, obtained from the SARB;

unionmem = the number of trade union members, obtained from the International Labour Organisation (ILO);

infl = consumer price inflation as measured by the percentage change in price level, obtained from the SARB;

democracy = measured by the revised and combined Polity score (Polity2) of the Polity IV database, which ranges from -10 to +10, with higher values indicating more democratic nations;

nri = the natural rate of population increase calculated as the crude birth rate minus the crude death rate, obtained from the World Bank; and

unempl = the official unemployment rate, obtained from StatsSA.

All variables are included in natural log form and the data sample includes 20 observations between 1990 and 2009. Table 8 contains the estimation result. The output of five models is presented, with Model 5 the preferred specification because all variables are significant at 1% and it renders the highest adjusted R^2 value (and lowest Akaike and Schwarz criteria). Model 5 is specified as:

$$gini_t = \beta_0 + \beta_1 gdp_pc_t + \beta_1 lf_manuf_t + \beta_2 indva + \beta_3 consg_t + \beta_4 unionmem_t$$
(5)

with each of the five explanatory variables being significant at 1%. Of the five explanatory variables, only *consg* (the ratio of government consumption expenditure to GDP) is found to have a positive relationship with income inequality. Thus, in order to reduce the high levels of income inequality, South African policymakers must focus on increasing:

- per capita GDP,
- the percentage of the labour force in manufacturing,
- the annual rate of growth for industrial value added, and
- the number of union members.

However, in working to increase these, Government must be wary of its ratio of government consumption expenditure to GDP.

More specifically and based on the output, economic development, as measured by the real GDP per capita measure is associated with an improvement in income inequality. More specifically, an increase of 1 percentage point in real GDP per capita may lead to as much as a 0.32 percentage point decline in the Gini coefficient. The percentage of the labour force active in the manufacturing sector (relative to the agricultural sector), however, causes the largest decrease in income inequality, with a 1 percentage point increase leading to as much as a 0.37 percentage point decline in the Gini coefficient. Having mentioned that, this increase in the percentage of the labour force in manufacturing is likely to stem from economic growth. This is consistent with the sector dualism idea, where income inequality is attributable to differences in average income between sectors. Sector dualism is a function of the difference in average incomes between sectors and the relative size of the sectors.

Industry value added, as proxy for deindustrialisation, as in the case of economies in transition (Ivaschenko, 2002:43), also has a negative relationship with income inequality. A 1 percentage point increase in the annual rate of growth for industrial value added, will decrease the Gini coefficient by as much as 0.25 percentage points.

The only variable exhibiting a positive relationship with the Gini coefficient is the ratio of government consumption expenditure to GDP. Although the government consumption expenditure variable did not prove to be statistically significant in any of the other studies, a higher degree of South African government involvement in the economy, through higher expenditure, seems to be positively related with a more unequal income distribution and so we should be far more sceptical in using government spending as a means to redistribute resources towards the poor (Milanovic & Ersado, 2010:17). Government is therefore unable to address the problem of an unequal income distribution through expenditure programs. In contrast, with government spending that appears to be unproductive in changing the income distribution, an increase in union members does seem to have a positive impact on unequal income distribution.

Ivaschenko (2002:44) finds that hyperinflation tends to make the income distribution more unequal. As South Africa's inflation was relatively contained during the period under consideration, the statistically insignificant relationship is not unsurprising.

It can be expected that a higher unemployment rate will contribute to a more unequal income distribution but the result is not statistically significant. In the Ivaschenko model, evidence suggests that unemployment may be positively associated with income inequality, however, the effect is also not robust to different model specifications (Ivaschenko, 2002:44).

Democracy enters the model through the Polity2 variable, which is used as a proxy. According to the Polity IV Project², the Polity scheme is unique because it examines concomitant qualities of democratic and autocratic authority in governing institutions, rather than discreet and mutually exclusive forms of governance. The Polity Project covers the spectrum of governing authority that ranges from fully institutionalised autocracies through mixed, or incoherent, authority regimes to fully institutionalised democracies. To capture this broad spectrum, the "Polity Score" is based on a 21-point scale, which ranges from -10 (hereditary monarchy) to +10 (consolidated democracy). In this study the variable did not prove to be statistically significant.

²Polity IV Project found at: http://www.systemicpeace.org/polity/polity4.htm

Table 8:Model for income inequality

Dependent variable: gini

	(1)	(2)	(3)	(4)	(5)
C	5 42200***	5 36560***	5 20367***	5 29425***	5 42314***
C	(5 31)	(5 52)	(3.85)	(3.57)	(5 72)
ødn nc	-0 31792***	-0 31875***	-0 30932***	-0 30403**	-0 31799***
8°P - P°	(-5.66)	(-6.04)	(-4.77)	(-2.31)	(-6.16)
lf manuf	-0.36591***	-0.38062***	-0.35385***	-0.37839**	-0.36603***
J = 1000	(-4.77)	(-5.17)	(-4.03)	(-2.95)	(-5.34)
indva	-0.24687***	-0.24526***	-0.23510***	-0.25198***	-0.24671***
	(-3.82)	(-4.68)	(-3.38)	(-3.61)	(-4.82)
consg	0.15378**	0.13935**	0.15281**	0.15633**	0.15374***
U	(2.86)	(2.48)	(2.91)	(2.74)	(3.04)
unionmem	-0.07787**	-0.06659**	-0.07439**	-0.07713**	-0.07791***
	(-2.99)	(-2.22)	(-2.57)	(-2.99)	(3.25)
infl	0.00002				
	(0.99)				
ипетр		-0.00946			
		(-0.65)			
democracy			0.00492		
			(0.23)		
nri				0.00637	
				(0.11)	
Adjusted R ²	0.8947	0.8981	0.8952	0.8949	0.9023

Note: */**/*** denotes significance at the 10/5/1% level.

The natural rate of population growth (calculated as the difference between crude births and crude deaths) is expected to affect income inequality directly, by affecting the age distribution of the labour force and thus, the supply of young and often unskilled labour. The outcome is similar to that of the Alderson and Nielson model (2001:60-63), where a small positive, yet insignificant coefficient was found, i.e. a negative impact on income inequality.

5.1 HOW DO THESE FINDINGS COMPARE INTERNATIONALLY?

Alderson and Nielsen (2001:41-43) find that direct investment, North-South trade and immigration have played roles in the determination of income inequality in the OECD nations. More specifically, the recent increases in income inequality can be attributed to:

- the labour force shifting from agriculture to the non-agricultural sectors (sector dualism),
- the demographic transition generating an inverted-U trajectory of inequality as the rate of population growth rises and falls over the course of development,

- the continuing spread of education with development,
- deunionization,
- the decline of wage setting coordination,
- the variation in the degree to which welfare states de-commodify labour and thus reduce incentives to take low wage jobs,
- the growth of female labour force participation, and
- deindustrialization generating rising inequality as a consequence of the lower average wage and greater variance in wages in the service sector.

From the work of Milanovic and Ersado (2010:17), the following six policy implications emerge:

- 1. "It is important to look at the reform process in a more nuanced and discriminating way. This refers in particular to the negative role played by infrastructural reform that might often have been often pushed onto the population too fast and too hard. The result also shows that the attempts to cushion low-income groups from the effects of such reforms have been unsuccessful.
- 2. It confirms the importance of small-scale privatization in keeping inequality in check—probably by providing much needed jobs.
- 3. It shows the crucial role played by democratization and control of inflation.
- 4. It leads us to be much more sceptical in using government spending as a means to redistribute resources towards the poorer strata.
- 5. It shows that growth is crucial for real incomes of all people including the poor, even if it tends to be (in relative terms) disequalizing.
- 6. It shows that price and trade liberalization, often regarded as detrimental to the poor, was not so in the context of post-communist transition: the effect of both is entirely distribution-neutral."

Lastly, Ivaschenko (2002:42-45) finds the relationship between income inequality and economic growth to be negative for Eastern European countries but positive for those of the former Soviet Union. In addition, Ivaschenko's empirical results indicate that economic liberalization and structural adjustments are associated with rising income inequality. Deindustrialization also had a strong impact on income distribution in both regions and although the economies of both regions have been substantially privatized during the transition, a rapidly growing private sector contributed to rising income inequality in the Eastern European countries only.

The policies aimed at facilitating the transition of workers from the public to the private sector and from the manufacturing sector to services may be of paramount importance for distributional outcomes and although there is some evidence to suggest that unemployment may be positively associated with income inequality, the effect is not robust to model specification (Ivaschenko, 2002:43-44).

Finally, the degree of government involvement in the economy through government consumption generally does not seem to have an impact on income distribution. Hyperinflation, on the other hand, makes the distribution of income more unequal. The important policy implication of this finding is that macroeconomic stabilization not only fosters economic recovery but is also beneficial in terms of distributional outcomes (Ivaschenko, 2002:44).

There is thus not much overlap in the findings of the above authors with the findings of this study. That is not to say, however, that the findings of this study are incorrect but it does seem to suggest that South Africa is a unique case.

5.2 DIAGNOSTIC TESTS FOR MODEL 5

Table 9 contains diagnostic testing results of the final preferred model (5).

H ₀	Test used	Test-statistic	Probability	Interpretation
H ₀ : Residuals are normally distributed	Jarque-Bera	JB = 0.8050	$\chi^2(2) = 0.668$	Residuals are normally distributed
H ₀ : Residuals not serially correlated	Lung-Box Q	$LB_Q = 6.0992$	$\chi^2(6) = 0.297$	No serial correlation present up to 6 th order
	Breusch-Godfrey	LM = 3.7390	$\chi^2(2) = 0.154$	No serial correlation present
H ₀ : Residuals are homoskedastic	esiduals are skedastic White $nR^2 = 0.9507$ $\chi^2(5) = 0.96$		$\chi^2(5) = 0.966$	Homoskedastic residuals
H ₀ : No misspecification	Ramsey RESET	LR = 0.2481	$\chi^2(2) = 0.883$	No misspecification
H ₀ : residuals contain unit root	EG-cointegration test	ADF = -6.4448	p = 0.000	Residuals are stationary

Table 9:	Diagnostic	testing	results
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Based on the test results the model is statistically well-specified and free from violations of the classical assumptions. More specifically, the Jarque-Bera test proves that the residuals are normally distributed, the Lung-Box Q and Breusch-Godfrey tests prove that the residuals are free from serial correlation while the White test provides evidence of homoskedastic residuals. In addition to the Ramsey RESET specification test, recursive estimates (CUSUM and CUSUM of squares tests) prove stability. The residuals are also stationary, white noise, as evident from the Engle-Granger cointegration test.

Figure 9 shows the in-sample fit of model (5), while Figure 10 is a graphical representation of the residuals.



Figure 9: In-sample fit of model for income inequality





6 CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis in the previous sections, the main determinants of income inequality include: the level of development and economic growth (measured by per capita GDP), macroeconomic conditions (including unemployment and inflation), government involvement in the economy, structural changes (democratisation, deindustrialisation and privatisation) and forces outside the economic domain (like political freedom). The result of model (5) points to the fact that an inequality-development relationship indeed exists. Economic growth and development, as measured by per capita GDP, is pivotal to improving income inequality.

Ivaschenko's (2002:42) findings suggest that South Africa is below some threshold level of development and so economic growth is associated with falling income inequality, since the relationship between income inequality and economic growth is shown to be negative. Economic recovery-promoting policies, perhaps like the NGP, may certainly have an equalizing effect on income inequality. This is echoed by Milanovic and Ersado (2010:17): overall growth is associated with an increase in real income of the bottom deciles – including the lowest, i.e. growth is pro-poor in an absolute sense. This point is later emphasised: "… growth is crucial for real incomes of all people including the poor, even if it tends to be (in relative terms) disequalizing."

Therefore, if the South African Government is serious about reducing the levels of income inequality, they should focus on growth enhancing policies. The empirical results of this study show that GDP per capita plays a pivotal role. Section 2.2 mentions that South Africa experienced the desired economic growth and yet there was no lasting improvement in income inequality. Although economic growth was good, absorption into the labour market was not. Therefore and as the empirical results further display, the percentage of the labour force in manufacturing is also a key variable and this then corroborates the postulate of the literature review that the labour market in South Africa is the key behind the persistently high levels of income inequality. By reworking labour policies, following the NGP and focussing on growth within the manufacturing sector, Government will allow the demand for labour to increase. In so doing, more workers (unskilled, semi-skilled or skilled) will be absorbed into the market and a larger middle class (as in Figure 8) will be created. If a concomitant increase in value added can be contrived in the industrial sector, with an increasing number of union members, than all the better for unemployment, poverty, income inequality and South Africa.

In striving for this though, Government expenditure must be kept at bay and be of a productive nature. According to Ivaschenko (2002:29) the size of government consumption (as a share of GDP) may have different outcomes in terms of income inequality depending on the composition of government expenditure and the progressivity of taxes used to finance expenditure.

The role of unions proves to be significant in the South African context. Although according to the estimation result, increasing the number of union members will reduce income inequality by roughly 5%, it must be kept in mind that in order to foster a stronger, more labour-demanding and less conflictual growth path and labour unions must make an explicit agreement to restrain wage demands. In so doing, average wages may fall as low-wage employment increases (hence increasing wage inequality) but it will decrease overall income inequality by reducing the number of unemployed persons. Lower average wages are thus consistent with an egalitarian strategy (Seekings & Nattrass, 2005:389).

Although unemployment, as such, does not significantly contribute to a more unequal income distribution, it certainly impacts the poverty levels and dependency ratios in the economy, placing a larger demand on social grants and government expenditure. Promoting jobs, especially in the secondary and tertiary sectors, should also be of paramount importance for government and the private sector alike. This is evident from the positive result on income inequality of the percentage of workers in the manufacturing sector as percentage of the labour force, as well as the industry value added variable.

Similarly, although inflation did not prove significant in the estimation, consistently high levels of inflation are known to harm the poor and are, therefore, detrimental to income equality. The monetary authorities should, therefore, remain cognisant of this fact and continue the practice of sound monetary policy.

Since the natural rate of population increase, measured as the difference between crude births and crude deaths, has a small positive (yet insignificant) impact on income inequality, it should be noted that a continuous increase in young and often unskilled entrants to the labour market may in the long run add to the problem of unemployment, poverty and the demand for social security and ultimately that of income inequality.

Considering the findings of this study, South Africa needs to look at the demand-side of labour and in this regard, labour unions appear to be the dominant force behind South Africa's unemployment and, therefore, behind South Africa's high level of income inequality. Since the empirical model cannot measure the political power of labour unions, only the number of members, a qualitative conclusion is drawn: union power is a significant factor as evidenced by unions being able to negotiate higher real wages – even when labour market slack is extensive (OECD, 2010b:103).

The OECD (2010b:104) found, furthermore, that South Africa might be better off increasing the degree of co-ordination of wage determination, so that the macroeconomic benefits of wage restraint can be better internalised and the role of labour market outsiders strengthened (via a government voice in centralised negotiations). It is possible that with a more co-ordinated wage setting process, private expectations could be

steered in a more forward-looking direction and rendered consistent with the SARB's inflation targeting band. A higher degree of co-ordination could achieve any given level of overall real wage changes with lower nominal increases and an improved inflation performance. Lower and less variable inflation could in turn permit the SARB to maintain lower real interest rates than otherwise, which would be supportive for growth. Increased co-ordination could be achieved by bringing social partners together at the beginning of each annual wage negotiation round and getting agreement on guidelines for increases in that year. Actual bargaining would continue to take place in the same way as it does at present but against the background of such guidelines. Government involvement in the process could help to make the trade-offs between wages, employment and unemployment clearer to social partners.

Angelucci (2003) in Arora and Ricci (2005:26) finds that after taking all other factors into account, a ten percentage point decrease in unionisation would reduce the unemployment rate by about 2%. A reduction in unionisation by 20 percentage points (equalling the prevailing levels of America and the United Kingdom in the 1990s) would result in unemployment decreasing by only four percentage points, leaving unemployment at still very high levels. This finding underpins the point that the political power of labour unions cannot be determined and so this dissertation proposes that rather than disbanding labour unions altogether, policymakers should rather focus on the three agendas labour unions fight for: raising wages, improving working conditions and expanding social benefits.

These three agendas appear to be the cause behind South Africa's labour market rigidities, hence the low levels of labour demand – especially the high wage rate – hence the high levels of unemployment and finally the cause of the high levels of income inequality. And rather than simply abolishing the right of labour unions to fight for higher wages, policymakers should ensure that the process of wage negotiation become more co-ordinated, "so that the macroeconomic benefits of wage restraint can be better internalised and the role of labour market outsiders strengthened (via a government voice in centralised negotiations). A *higher degree of co-ordination could achieve any given level of overall real wage changes* with lower nominal increases and an improved inflation performance." (OECD, 2010b:103). Thus, there is no need for labour unions to fight for higher wages. And therefore, if wages are free from the influence of labour unions and allowed to adjust freely, according to supply and demand, the wage rate will move down toward the free market rate, thereby allowing more people to work, which will cause an increase in per capita GDP and hence diminish income inequality (OECD, 2010b:104).

This decrease in income inequality might also simply come about because the historic causes of South Africa's income inequality, Apartheid stripping people of their assets and the undermining of the asset bases of individuals, households and communities (May, 1998:4), might slowly start to be reversed.

Finally, the South African Government must create an enabling state, as in (May, 1998:4) to create the environment in which this can be achieved. This can be achieved through firstly, limiting the ratio of the General Government's consumption expenditure to GDP and lastly, through encouraging social dialogue between all the stakeholders: Government, the private sector, labour unions and even the unemployed. In so doing, Government will no longer be favouring one group above another and all parties will feel that their viewpoints are heard and considered.

It may well be an arduous task in getting all parties to agree to this but the South African Government must live up to its endorsed willingness to experiment and test policies on a small scale. Current policies are not working, so take a step back and try something new.

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